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EUROPEAN OIL & GAS

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Staffing the future

David Spencer-Percival discusses the importance of attracting new talent to the industry

Time for a change
What a changing industry means for offshore service companies

Bridging the globe
The complexities and challenges of business travel in the global oil and gas industry

THIS ISSUE: Risk management

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> If we are to secure a profitable future for the industry we need to be putting staffing initiatives in place now"

Recruitment

. It's a topic that we can't get away from in the oil and gas industry, and one that presents one of the biggest challenges to companies over the coming years. There is much debate over the how and why of the recruitment challenge, but there is one certainty that we can all agree on: the industry as a whole must work harder to ensure it can continue to meet increasing energy demand in the future.

"We are in a phase of rapid change in the energy industry. But while it's an amazing time to be working in it… we have to be careful not to be swept along in the excitement and forget about long-term planning." This is what David Spencer-Percival tells us in our lead feature in this issue.

As CEO of global recruitment agency Spencer Ogden, David is well aware of the challenges, warning that: "If we are to secure a profitable future for the industry we need to be putting staffing initiatives in place now. If we don't a number of companies will find they are unable to meet the demands of projects, and the whole industry will suffer as a result." Turn to page four to read David's advice on how to prepare to meet the challenge.

EDITORS LIBBIE HAMMOND & MATT HIGH

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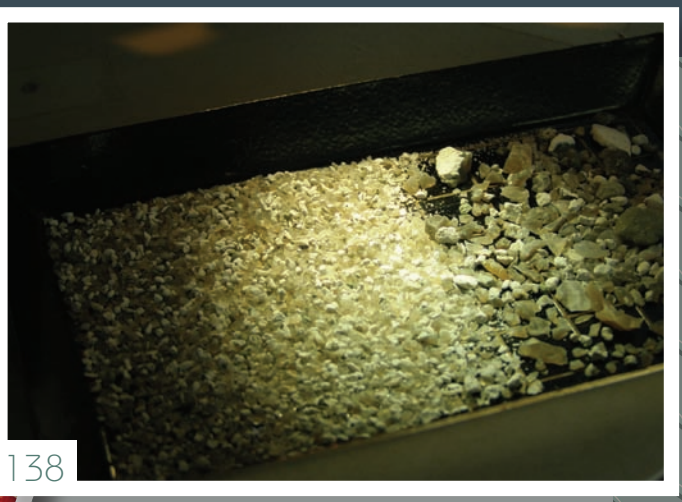


Staffing the future

BY **DAVID SPENCER-PERCIVAL**, CEO OF SPENCER OGDEN, A GLOBAL ENERGY RECRUITMENT AGENCY

It's a hectic time for the energy industry; we know this because we work in it. But recently it seems the rest of the world has become aware of it too. Oil and gas, as well as other energy sources such as wind, nuclear and smart are the route of much debate within government, and seemingly every day national media outlets broadcast new opinions or announce new initiatives and projects. In the UK specifically, fracking continues to dominate column inches as people debate the positive and negative implications of drilling.

For those of us working within the skills sector of the energy recruitment industry, the near constant flow of news about upcoming projects suggests exciting times ahead, and we are watching developments with eagle eyes. But it's also a daunting time. It is widely reported that the entire industry is facing a staffing shortage and it seems that trouble may be around the corner; senior managers are approaching retirement age, and a mid-tier management space is emerging as a result of the crisis of late early 90s. Organisations are beginning to consider who will step in to fill senior management's (and consequently mid-management's) shoes. At the same time there is a growing struggle to recruit workers at lower levels as students increasingly choose careers unrelated to their degree specialism.

It is now the role of the industry, recruiters and employers alike, to focus on plugging emerging gaps, especially those where mid- to senior-level positions or highly skilled technical staff are required. How we manage this will likely vary from project to project, but to be successful we need to start by attracting new talent.

Beating the education system

Much of the mid-tier skills crisis that is expected to emerge in coming years is down to difficulties faced in the 1990s. Back then, projects were struggling as the oil and gas industry, along with others, faced a global dip in prices, and subsequently recruitment levels dropped. Compounding this

was the prevailing image of energy as a dirty or unglamorous career choice. Courses in the technology, computing and media sectors were on the up and these snazzy career choices had greater success appealing to the latest generation of university graduates.

This last point is a problem that is still faced today. It's not necessarily that energy is seen as dirty, but that it is not attracting the right graduates to enter into it. Key engineering-based colleges and universities such as Southampton, Birmingham, Plymouth and Aberdeen are only converting a small fraction of their engineering graduates to roles in energy, and this will eventually make it hard to meet the demands of the market.

Solving the problem relies on the industry as a whole – operators, consultancies, EPCs, vendors and recruiters – pulling together to communicate the value of a career in energy to graduates. While employers should be encouraged to approach universities and colleges on a yearly basis, participating in career fairs and making themselves available through career services, recruiters need to be ready to hit the phones. It's the industry's job to promote the values of the oil and gas sector from the moment of graduation – if not before.

As part of this it might be necessary to extend the search for graduates away from just those with first class and high second-class degrees from Russell Group universities. While these students represent the ideal target market, the value of graduates from other universities shouldn't be disregarded.

Keeping them at home

Turning our attention specifically to gaps that open up in the UK, we can be honest and admit that the climate here can make it a less attractive region to work in than others like Australia or the Americas; most young people without family ties will choose a job in Dubai over the North Sea. This is especially relevant for anyone looking for a role that calls for him or her to spend a lot of time outdoors.

When professionals are young, travelling abroad to work in a warmer climate for a higher pay packet than they can

get in, say, the UK is an attractive prospect. It's why so many of our skilled workers are heading to Australia, the US and Singapore. In fact PwC predicts that the number of British energy workers accepting international roles will increase by as much as 50 per cent over the next ten years.

To prevent a skills gap emerging in the oil and gas industry, it is our responsibility to market local positions as more attractive than other openings further afield. From the perspective of the recruiter, part of this – the pay packet – is out of our hands. We make our clients aware of global pay scales and the need to remain competitive, it is then down to the hiring company to set pay scales. It's a simple fact that higher or competitive wages will attract a larger pool of candidates, yet some companies in the European market still offer comparatively low wages.

We should also be actively encouraging skilled talent to emigrate away from sunnier climes, into Europe. While the UK may not be as attractive as Australia, it should be more appealing to those working in regions with smaller energy industries. Of course, when negotiating with local skilled workers and attempting to persuade them that a job in the UK is the right one for them, we can aim to offset the disappointment of lower wages and cooler weather, by explaining the complication and cost of acquiring foreign work visas.

Many organisations prefer to only hire local workers, but should these dry up they will face difficulties. It is important to allay these concerns and educate managers about the benefits of bringing in expertise from outside of the EU – this will open the doors to thousands more skilled staff.

Innovation, innovation, innovation

It's been noted that the image of the energy industry as not 'tech-savy' in the early 90s, drove some graduates away from pursuing careers in the sector. But while the 'dirty' image has been partially repaired, working for a high-tech and innovative business continues to be important to workers.

It's only natural that employees are most attracted to those working for companies that have a reputation for being innovative and technologically advanced. Certainly on the face of it, these are the ones that offer the brightest, most exciting and lucrative careers. The opportunities at these businesses seem endless. Unfortunately the separation between such 'innovative' companies and those considered more 'conservative' risks compounding the skills gap. As senior management retire and engineers are promoted,

conservative companies are finding that their staff are being poached by head-hunters from organisations that are seen as more innovative or who pay higher wages.

To prevent this, and to level the playing field, all companies need to place a greater emphasis on innovation and pay. However this isn't a realistic suggestion. The answer therefore lies in talent management and in providing incentives designed specifically to retain staff. Whether that's holiday perks, bonuses, an excellent training programme or some other initiative, if a staff member feels well looked after and valued, the chance that they will move elsewhere is reduced.

Appealing to Generations Y and Z

In-house hiring managers and external recruiters have, on the whole, become adept at using the internet to search for potential talent. But while the act of recruitment has largely moved online, a number of companies are still resting on their laurels by thinking that LinkedIn is as far as they have to go. They are wrong.

Businesses need to be accessing and making the most of all social networks. Most people under the age of 35 have at least one social profile – though not necessarily on the same platform. Companies must therefore research where their target market congregate online, and then make the most of this space, whether by interacting directly or by using social advertising.

As smart phones have grown in popularity and mobile networks have increased in speed, workers have also become increasingly mobile. They no longer use computers to search for roles; they use their phones. Businesses need to adapt to this and at the very least should be optimising their website and job search function for mobile. Better still, they should work on creating dedicated, attractive and functional apps for their company and recruitment.

The need for apps and websites that are accessible by mobile users is growing, especially so in energy where its importance is amplified by the number of workers that travel regularly. For these people, mobile may be their only way of getting online and finding out about job openings. Add the intermittent or slow internet connections in many territories and you see why an app is even more vital. While most apps can load and populate content from previous data, when no internet connection is available, a mobile site is rendered useless.

If we can't communicate and appeal to workers we face a losing battle keeping them and will be unable to plug troublesome gaps.

We are in a phase of rapid change in the energy industry. But while it's an amazing time to be working in it, whether that is an engineer, project manager or recruiter, we have to be careful not to be swept along in the excitement and forget our long-term planning. If we are to secure a profitable future for the industry we need to be putting staffing initiatives in place now. If we don't, a number of companies will find they are unable to meet the demands of projects, and the whole industry will suffer as a result. O&G

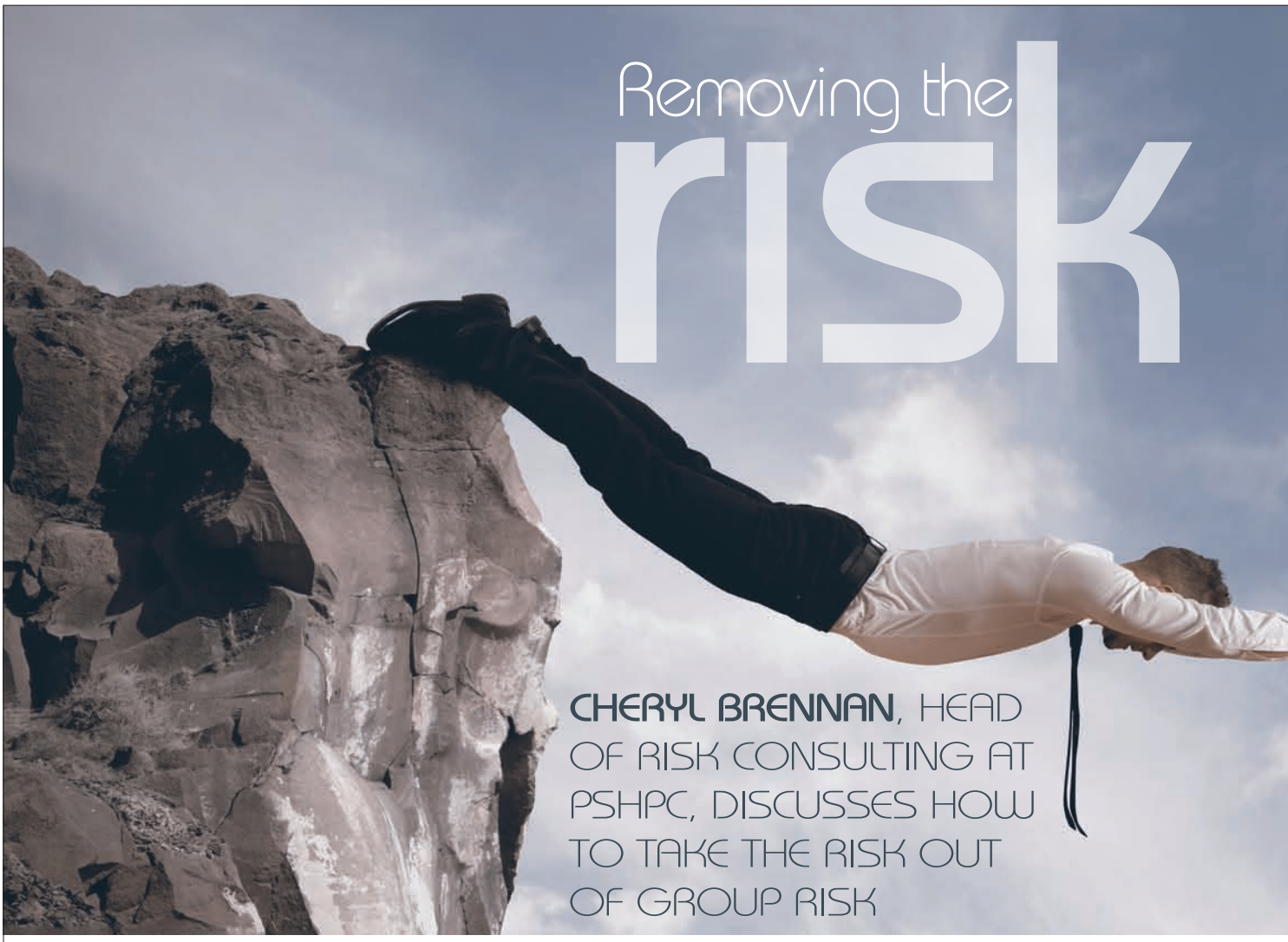
SPENCER OGDEN & DAVID SPENCER-PERCIVAL

David Spencer-Percival's recruitment career spans over 15 years and has involved working internationally with global companies providing recruitment services. David was a founder of recruitment giant Huntress Group where he was a group board director and managed the technology division, as well as developing the now coveted graduate academy. When Huntress Group was sold for £52 million in 2007 to Nomura private equity it was one of the leading, award winning recruitment businesses in the UK with 500 staff and 27 offices.

In 2010 David co-founded Spencer Ogden, a specialist energy recruitment agency, with Sir Peter Ogden. Turning over £4 million in its first year, the company recently announced a third year turnover of £32.5 million. It has a projected £50 million turnover this year. Spencer Ogden has eight offices globally and works within the energy recruitment market in oil and gas, renewables, nuclear, mining, power, smart, and trading and finance.

For further information please visit:
spencer-ogden.com

Removing the risk



CHERYL BRENNAN, HEAD OF RISK CONSULTING AT PSHPC, DISCUSSES HOW TO TAKE THE RISK OUT OF GROUP RISK

Group Risk benefits are extremely valuable both for employers and their employees. They develop engagement and trust whilst promoting financial planning, protection and security – all vital considerations for high-risk roles, such as those in the oil and gas industries. These benefits are also motivating factors for recruitment and staff retention, and can help reduce absenteeism by providing access to effective rehabilitation programmes.

However, considering all the risks associated with these benefits as well as increasing costs, it's understandable that employers are keen to find more robust risk management solutions or failing that, remove the benefits themselves.

Managing your risk

Most organisations are sitting on potentially huge uninsured losses but are unaware of them simply because problems often don't come to light until an insurance claim is rejected. Punter Southall Health & Protection's (PSHPC) 2013 research revealed that each company with 500+ staff has an estimated £9.36 million-worth of uninsured liability[1]. Of those companies surveyed, 74 per cent had at least some data error issues that could possibly leave staff uninsured should they need to make a claim. On average 78 out of every 500 staff (15.6 per cent) were not correctly insured.

Generally these errors are due to straightforward, easy oversights by HR departments – omitting an employee circumstance change perhaps, or not updating a record due to a 'technicality'. However, when it comes to claiming, the insurance provider invalidates their assessment of the risk as it was based on incorrect data and subsequently rejects the claim. Irrelevant of the reason, if an employer provides wrong data, no insurance company is ever obliged to pay up.

Below
Cheryl Brennan, head of risk consulting at PSHPC

Knowing your risk

By combining our research and experience, PSHPC has compiled a 10 ten list of typical Group Risk 'problem' areas that employers should be aware of and pay extra attention to:

1. Long-term sickness

This is the single biggest reason why insurance companies reject claims. If you have a member of staff that is even under suspicion of being signed off for long-term sickness absence (defined as absence of more than 90 days), insurers need to be advised.

This may kick-start interventions that could see the absence cut to below the long-term level in the first place. But even if it doesn't, the insurer needs to know.

Currently, employers are only required to update their employee information for insurers once a year. But if you leave it that long and several staff are 'off sick', insurers get a nasty surprise. Omit this information at the time you provide your update (easily done, as staff are still on the payroll as

employees), and the insurer may decline the claim when it filters through and may also withdraw your previously agreed terms.

2. Overseas staff

Insurers base their risk calculations and the cost to employers on a whole raft of data. The risk may well increase if a worker is overseas, for instance working in a remote area, many hours from medical support; or simply because a different country has different illness/accident incident rates. Insurers should therefore always be told about any employees not on the UK payroll, or based overseas.

Most insurers do not have limitations on where they will provide cover as generally no countries are specifically excluded (unless the Foreign and Commonwealth Office advise against travel), so this isn't the issue. Instead the main impact comes from correctly calculating the risk of employees working in high-risk locations. Therefore the data that employers provide insurers for pricing purposes must be exact.

In addition, if there are significant location alterations once the policy is implemented, such as an increase in numbers or moving staff from one location to another, the insurer must be advised. Failure to confirm these changes could result in invalid cover.

Another caution applies to offshore workers - amends to working patterns must be notified to insurers on a 'real-time' basis - don't wait for the annual data provision.

The other main consideration for overseas staff is the Event Limit. Most Group Life schemes are subject to a cap which dictates the maximum benefit payable in each location should a catastrophic event occur – a terrorist attack or oil rig explosion for instance.

Constant monitoring of the insured risk against the Limit is vital to ensure that location shifts don't lead to insufficient limits and uninsured liabilities if an Event was to occur. This is critical for offshore and high-risk locations with significant concentrations of staff.

3. Location changes

It may sound antiquated, and even unfair, but insurance policies are still based on statistical (and not necessarily accurate) assumptions and calculations based on data analysis of health and mortality rates. For instance, historically, employees on lower wages, living in more deprived geographies (such as the north and north-east, parts of London and the west) will be viewed as having shorter life expectancies.

The pricing of your scheme's 'risk' will be based on where your employees work and the spread of risk. As with overseas employees and Event Limits, insurers need informing about significant location spread changes so that they can reassess your policy. Failure to do so may result in invalid cover for your staff. O&G

4. High earners

All insurance policies have 'free cover limits'. If a high earner joins and they are entitled to benefits in excess of the free cover limit, you must disclose this immediately. Forget it and they won't have the cover they need.

5. Late entrants

It's important for employers to encourage individuals to join the company Group Risk schemes as soon as they first become eligible to and whether eligibility is linked to pension scheme membership or not. This avoids administering a separate set of terms and conditions.

If an employee elects to receive life assurance cover at a later date (perhaps indirectly as a result of declining pension scheme membership which is linked to life assurance eligibility, and then later deciding to join the pension scheme), then this employee must be identified to the insurer as a Late Entrant.

Your insurer then reserves the right to apply specific rules and conditions, including medical underwriting, to Late Entrants. Also, cover is not guaranteed until the insurer confirms it.

6. Maternity pay

More than 800,000 babies are born every year – a process that caused maternity pay to be introduced. However, you'd be surprised just how common it is for mothers on maternity pay not to be correctly inputted into their HR and payroll systems. Sometimes their salary details are changed to the percentage of salary that they will receive during their maternity period. Sometimes their salary is registered at zero. This would be catastrophic in the case of a claim as the wrong salary, and therefore its multiple, is applied by the insurer. The same often happens to those on sick leave or taking sabbaticals.

7. Correct salary definitions

Many insurance policies have definitions of salary that are not simply base pay. At PSHPC we have over 30 different ways to calculate salary for insurance purposes. So employers must make sure that the data they send to insurers matches the correct definition.

8. Occupations

In the same way that all insurers require age/sex/location details, they also need employers to disclose correct occupations. Someone who is predominantly office-based, but who may suddenly switch roles and may, for example, be travelling by helicopter to an oil rig, is statistically a higher risk employee. It is vitally important that occupations are correctly recorded and disclosed.

9. Salary changes

It may sound unlikely in these tough economic times, but it's still highly possible that during an insurance policy year, some employees will receive pay increases that suddenly

exceed the free cover levels and may need to complete medical underwriting for their cover to be approved. It could be that executives all get ten per cent rises, or simply that a number of employees just under the threshold have a small rise that takes them over. Changes above the free cover threshold need to be immediately disclosed.

10. TUPE transfers

All insurers require TUPE transfer groups to be separately identified on membership data. If not, it can cause problems when it comes to settling a claim.

Despite all these complexities, the emphasis still sits with the employer to regularly, manually check all these items and report on an ad-hoc basis if any of these circumstances occur. The employer only has the opportunity to validate and check that the data is correct once a year when the insurer and intermediary complete the annual data check. Even then it still seems to remain the overriding responsibility of the employer to ensure this data is correct. Should anything be missed, nine times out of ten it will still be the employer's responsibility and ultimate liability.

The 'once a year' provision of this data requires an activity 'sweep up' to ensure all necessary actions and uninsured

> Most organisations are sitting on potentially huge uninsured losses but are unaware of them simply because problems often don't come to light until an insurance claim is rejected

risks are dealt with. Further delays in this process are seen through the time it takes for the insurer and adviser to check this data and take the necessary action.

Due to this annual need, many companies don't continually monitor and maintain their employee data accordingly and when they have to provide it, the process is often a very time consuming exercise. This often leads to late provision of data, inaccuracies and omissions of key information. All of which can lead to uninsured liabilities, withdrawal of terms from the market and over inflated pricing due to providers taking a 'worst case scenario' position on pricing.

At PSHPC our clients can avoid the hazards of the traditional annual membership snapshot by using Gladis, a super-intelligent, self-service IT platform that analyses employee data monthly. It uses sophisticated proprietary 'checker' software, which highlights any data inconsistencies as soon as they need correcting, updating or amending, to ensure staff are covered in the event that a claim is made.

Due to the certainty of employee data that Gladis helps achieve, insurers can calculate premiums that more accurately represent a company's risk rather than a worst-case scenario one. The result being that the 'cost' of (rather than availability of) insurance cover can be substantially reduced, leaving you time and money to review and reflect on your entire benefits portfolio, rather than being unnecessarily consumed by risk. O&G

[1] *Assuming average staff salary of £30k, and 4x salary life assurance*

PSHPC

Cheryl Brennan is head of risk consulting at PSHPC, a subsidiary of the £100 million turnover Punter Southall Group, which has grown considerably since its launch in 2010 and is now one of the most innovative and strongest health and protection advisers in the UK. Defined business areas of protection, healthcare, wellbeing and online benefits, led by industry specialists, provide complete benefits solutions for its 600 corporate clients. In February 2013 PSHPC launched Gladis, a unique online self-service platform used by companies to reduce the widespread risk and cost issues of managing protection insurances for their employees. In March 2013 PSHPC acquired Enrich Reward Limited, the well-established employee benefits consultancy. In October 2013 the company won the award for the Best Healthcare Trust Intermediary at the Health Insurance Awards.

For further information please visit:
pshpc.com
puntersouthall.com

Above: New president, North Sea at EnQuest, Neil McCulloch

A new quest

EnQuest PLC is pleased to announce the appointment of Neil McCulloch as president, North Sea, with effect from 1st April 2014. Neil has held a number of senior positions in the oil and gas sector, and joins EnQuest from international oil and gas company OMV AG, where he had the global role of senior vice president production & engineering.

Amjad Bseisu, chief executive of EnQuest said: "I am delighted to welcome Neil as head of our North Sea business. With his wealth of technical and management experience in the oil and gas industry and in the UK North Sea in particular, I am confident that Neil will be an excellent member of EnQuest's senior management team and will make a valuable contribution to the growth and development of EnQuest over the coming years.

"The Board and I would also like to express our sincere gratitude to David for his contribution to EnQuest in our formative years; his leadership, knowledge and experience have been key to many of EnQuest's successes and achievements, and have helped us to build a world class organisation in Aberdeen. I look forward to continuing to work with him in his new role with EnQuest in focusing on strategic initiatives for the company."

Above: Men at work at Zilift's Bakersfield facility

Breakthrough development

Zilift Ltd has announced a breakthrough for the oil and gas industry, as its revolutionary TorqueDrive™ technology delivered a successful first operational field trial in the US.

After extensive examination of the industry, the groundbreaking TorqueDrive technology began development three years ago at Zilift's Aberdeen, Scotland headquarters before it was deployed for field trials in Bakersfield, California during 2013.

TorqueDrive has now exceeded initial field trial targets, having exceeded 150 days running and counting; an industry first and looks set to transform heavy oil artificial lift operations globally.

This is the first known practical demonstration of a magnetic torque converter in a downhole environment and TorqueDrive is powered by the smallest downhole artificial lift motor to be successfully installed in an oil well worldwide.

Iain Maclean, CEO of Zilift said: "We believe that TorqueDrive is the most significant advancement in downhole electrical machine design for 30 years. We have designed a product that, among other benefits, significantly reduces lifetime lifting costs and extends economic production life. The Zilift team are delighted that this revolutionary product has exceeded major targets in initial field trials and are proud to be pioneers in the sector."

Educating for the future

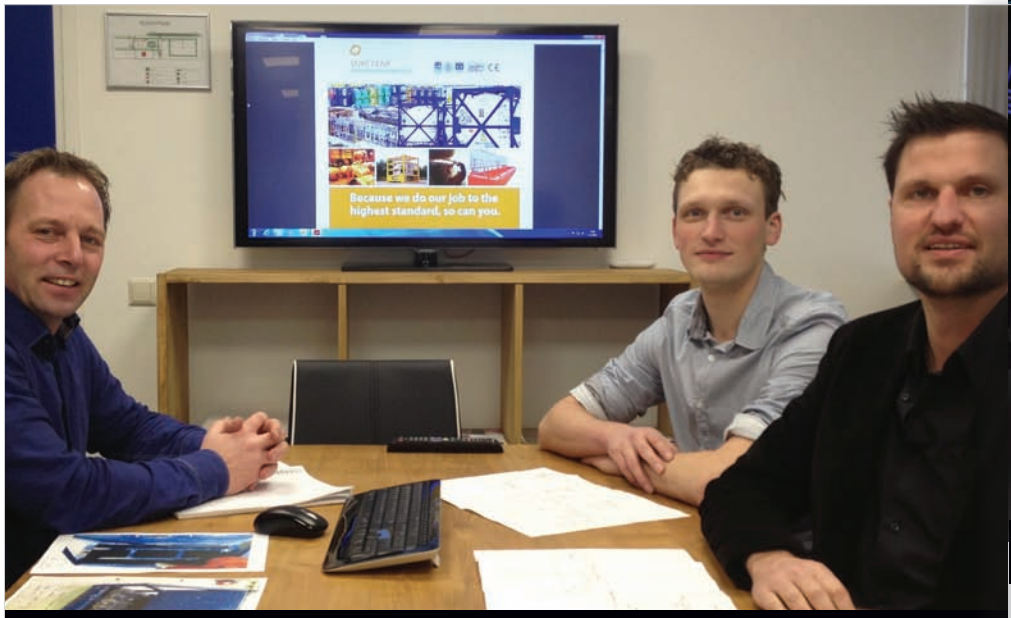
Offshore service specialist Viking SeaTech has brought its successful Mooring Schools scheme to the UK for the first time on Thursday, February 6th, 2014.

The Mooring Schools were spearheaded by the company's employees in Perth, Australia, to help give clients a broader understanding of mooring systems and their importance during the planning and implementation of offshore drilling activities.

The Mooring Schools scheme was the brainchild of Viking SeaTech Australia employees Jamie Lynch, Gopi Chillamcharla and Gavin Crossan.

Business development manager Jamie said: "We set up the schools after hearing feedback from our clients that they would like to gain a more rounded understanding of the mooring services Viking SeaTech can offer. It was always our intention to grow the scheme overseas and we hope the success will be replicated in Aberdeen.

"During the sessions we give a brief introduction to Viking SeaTech before explaining in more depth our engineering services and our equipment and associated services. We have also recently added a brief introduction to survey and positioning to the presentation. It's been really successful. Our clients are very positive about the services we already provide to them and this is a great way to find out whether we have more we could be offering their business."



Above: From left to right: members of the Suretank Netherlands team, Bart Schenk, Johan Meester and Sil Klaver

Surefire success

Suretank, the world's leading provider of engineered solutions to the offshore oil and gas industry, is pleased to announce that it has entered into a formal agreement with long-term Dutch partner Stainless Equipment Works (SEW), to launch Suretank Netherlands.

Suretank Netherlands will act as an agent for Suretank, providing valuable engineering and sales support to further strengthen Suretank's market position in the Dutch offshore industry.

The relationship between SEW and Suretank began in 2000 when SEW started designing and manufacturing UN portable tanks, transport containers and customised frames for the offshore industry. Since then the two companies have worked in partnership on various new design projects, including the development of a new elliptical UN portable tank.

Bart Schenk, general manager at SEW said: "This is an exciting development for SEW and we are proud to represent Suretank, which is the leading manufacturer of offshore transport containers. Both companies are known for their innovative spirit. We have a successful track record of working together, pooling our resources and expertise. The team responsible for Suretank in the Netherlands is highly skilled and looking forward to this exciting new chapter with Suretank Netherlands."

The sensible option

OptaSense, the global leader in Distributed Acoustic Sensing (DAS), has contracted with Petroleum Development Oman (PDO) to provide the industry's first multi-well 4D DAS vertical seismic profiling (VSP) system.

OptaSense will deploy its industry proven DAS fibre-optic technology to monitor and map the performance of up to 12 steam-injected oil wells in a brownfield development at South Oman Salt Basin. The service contract for time-lapse measurements is for three years, with a further two optional years and scalable scope of work, for deployment in multiple production settings.

OptaSense will record seismic signals from fibre-optic cables attached to each well's production tubing, permanently installed and linked to a surface data gathering centre. The final processed data set will be integrated into PDOs reservoir models, and assist in the determination of fluid substitution through production and hence contribute towards the positioning of infill wells.

Vertical Seismic Profiling (VSP) in 3D is a recognised alternative to surface seismic data acquisition in challenging environments of accurate subsurface imaging. Weighed against the use of geophones, OptaSense's DAS technology provides benefits in 3D VSP which include: Low-cost on-demand acquisition, non intrusive, synergies with other systems and retrofitting capabilities, full vertical coverage, and simultaneous VSP acquisition of multiple contiguous wells, without the need to repeat surface source effort.

Above: Steven Gray, managing director at ROVOP

Industry recognition

The business success of subsea specialist ROVOP has been industry applauded after the company won the New Enterprise accolade at the Subsea UK business awards.

Subsea UK's coveted New Enterprise award, which represents the fourth industry accolade that ROVOP has won, recognises the success of the business in the subsea sector including overall vision, commercial performance to date and market differentiation.

ROVOP, an independent company which is 100 per cent focused on providing remotely operated vehicle (ROV) services to the oil and gas and offshore wind industries, has experienced exceptional growth since its inception with its team growing to more than 70 people within three years and more than 80 per cent of business being overseas during 2013.

Steven Gray, managing director at ROVOP, said: "To receive such acclaim from industry body Subsea UK is extremely rewarding because while we did not set out to win awards, it is a great endorsement of what the team at ROVOP has achieved.

"We set out to do something a bit different after recognising a gap in the market for a specialist provider of ROV services focussing on providing the best service, using the best equipment operated by the best people. The awards we have won demonstrate that we're standing out and making a significant impact on the subsea sector."

Time for a change

BILL BAYLISS FOCUSES ON OFFSHORE MOORING, AND DISCUSSES WHAT CHANGE MEANS TO OFFSHORE SERVICE COMPANIES WORKING IN DIVERSE INTERNATIONAL MARKETS

As the international oil and gas industry matures so do offshore mooring technologies. Professionals must be alert to changes, whether they come with industry regulations, political or cultural dynamics or new operational challenges. To survive in the long-term, businesses must be both adaptable and aware.

The employment of support contractors in the US was affected by the recession, combined with Deepwater Horizon 2010, according to figures released by the US Energy Administration in 2013. For two years, between 2007 and 2009, there was a steady rise in the number of people working in support positions. The same trend was evident in both drilling and extraction. But, the tide turned.

Support positions fell throughout 2009 and into 2010 because of the financial restrictions and a post-Macondo moratorium on drilling. They sharply recovered by 2011 and in 2012 employment reached 286,000, an overall improvement of 102,000 compared with five years earlier.

Although this is an extreme example, with a rare industry disaster as a contributing factor, industry thinking has changed. Trade association Oil and Gas UK also reported tightened belts across the North Sea sector, with operating costs down six per cent in only 12 months.

Current factors often fuse with market conditions to dictate how an individual business is operated. At Viking SeaTech we remained alert throughout the global recession and changed dramatically. Our growth strategy saw rapid diversification of services and expansion into world regions.

But now, in 2014, we have established ourselves as a market leader. The league we are playing is at a higher level and more competitive. We have achieved our target of investment for the future by becoming part of the Actuant Corporation. Our change signals new opportunities, a chance to once again draw on our skills, expertise and strengths to provide the best for customers and us.

Taking stock of trends

Significant progress is being made by start-ups and oil majors the world over. In many cases expansion has arrived as a result of steady oil prices. OPEC's World Oil Outlook 2013 predicted that the price of oil would remain almost constant

from now until around 2020. This provides a settled picture and an environment where business can grow.

The mature North Sea province is a prime example. Oil and Gas UK figures show an average of 21 wells drilled between 2009 and 2012. But, between 2013 and 2015, 130 wells could potentially come online. Operators are moving some of their biggest assets from as far afield as Brazil and West Africa to take advantage of the buoyant European market. As an offshore services company, this is exciting news.

As a company of circa 160 employees we will ensure our global presence is felt where it is needed and at the right time. This confidence comes from having a strong structure in place. Any building designed to stand the test of time is not only aesthetically pleasing but has integrity too. It has a strong core and a thriving company must have the same. Viking SeaTech's people are committed to our values. These are to be safe, united, ethical, customer-orientated, accountable, people-focused and performance-driven. This has contributed to us feeling free to enter new locations internationally. We echo the stability of current market conditions within our own walls.

Creating opportunities

Offshore mooring is about solving problems and winning confidence. The first part comes through research and development. The North Sea is an ideal testing ground. Since the origins of exploration and production (E&P) on the UK Continental Shelf (UKCS), energy industry companies have invested in possibilities. The area provides harsh weather and sea conditions, close links to academia in Aberdeen and access to hundreds of energy companies in and around the city.

Years of trials and implementation in the UKCS gave companies experience that could not have been gained in any other way. These systems and products have been exported to the far reaches of the Americas, Africa and Asia. Some techniques that were developed had to wait for technologies to catch up and market conditions to change. Only now are some of these commercially viable.

Finding the right tools

Viking SeaTech's drive to make industry-wide differences keeps us at the forefront. Our specialist pre-set mooring strategies have been designed to overcome offshore O&G

challenges in some of the deepest, most complex and remote subsea locations worldwide. This involves working with a specific country's infrastructure and weather conditions. The logistics of moving heavy state-of-the-art equipment and deploying it on time in adverse conditions takes forward-planning and talented people.

An example of the company's forward thinking is its Mooring School initiative. It was the brainchild of three staff members and was designed to help educate clients about the importance of safely positioning an oil and gas rig. The classes give clients full information on how the mooring system works and why it is critical during the planning and operation of offshore drilling activities. The school was first launched in Australia and was provided free of charge. Drilling engineers, superintendents, marine and logistics experts and graduate engineers are some of those who have taken advantage of the sessions to date.

To cope with a spike in activity we have invested heavily in our stock of equipment. We already had an extensive fleet of spooling machines but chose to increase it for anticipated demand. Two 75-tonne tension spooling machines, a 150-tonne tension spooling machine and an eight tonne tension coiling unit were acquired. Our existing inventory has also been subject to an overhaul through a heightened maintenance programme to comply with the latest European regulations.

Our approach results in a complete service, where expertise and equipment function as one. Having a range of mooring systems on standby can help mitigate adverse occurrences, including tightly packed subsea infrastructure, extreme weather and restrictive quay moorings. Mooring solutions are varied including catenary, taut leg, composite and inverted catenary, using chains and increasingly strong polyester rope. These have been deployed for MODUs, FPSO vessels, jack-up rigs, drilling barges, floating accommodation units and renewable structures.

Vital global relationships

In Viking SeaTech's operational locations we partner with local suppliers to deliver projects more accurately. This is beneficial because it gets the job completed more efficiently and feeds into the economy of the country in which we are working. Support comes from internationally recognised, tried and tested systems. Our integrated approach is understood by our employees and is appreciated by customers in our regions from Europe and Africa, to Asia Pacific and the Americas.

We have proven ourselves in multiple operations. When we combine skills from one or more of our marine engineering, equipment supply and rental, positioning, mooring and inspection, maintenance and manpower departments we can increase customer uptime. We work closely with our logistics providers, suppliers and clients to ensure each step of the mooring process is smooth and methodical.

Viking SeaTech aligns itself with sustainability in the regions

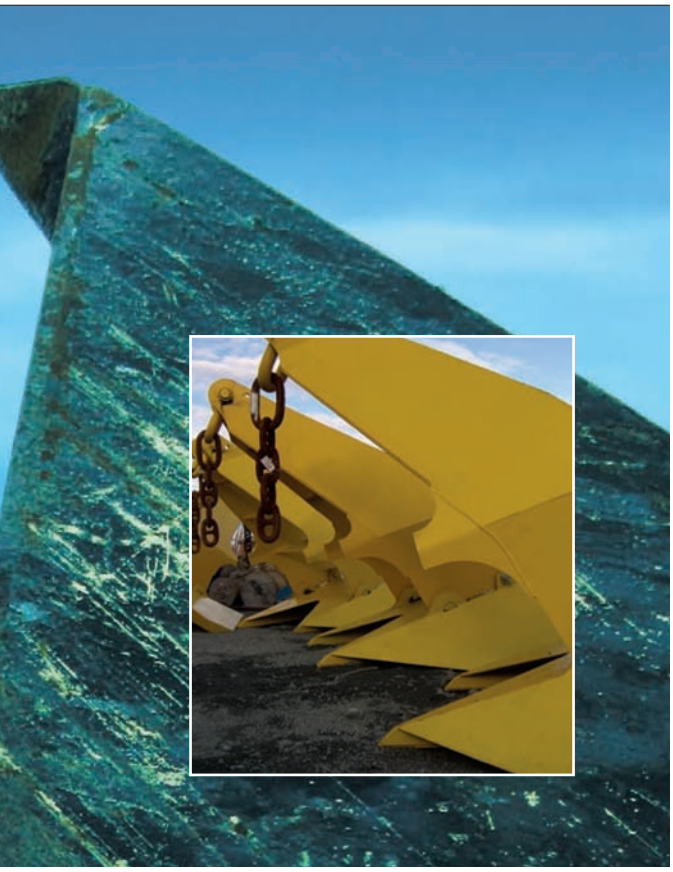
it operates. We believe in creating relationships that last. We have proven our commitment to local supply chains by linking with partners in locations where it does not yet have its own facilities, such as in Takoradi, Ghana. New chances have arisen since international diversified industrial company, the Actuant Corporation, purchased Viking SeaTech.

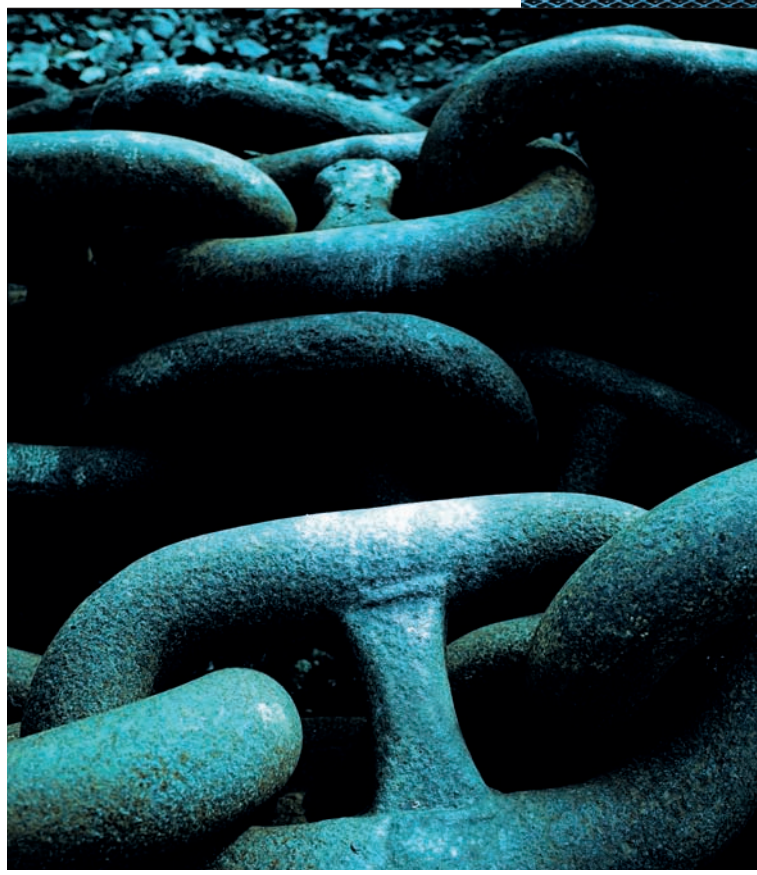
The company is exploring new procurement opportunities worldwide. The Actuant Global Sourcing (AGS) route will allow Viking SeaTech to negotiate better quality and cost-reducing deals. Collaboration in new business streams will create new opportunities. Integration with Actuant has created sister companies for Viking SeaTech. This can only strengthen clout in competitive world markets.

Viking SeaTech linked with partners in Asia-Pacific and West Africa to deliver mooring expertise. These locations were viewed as challenges but steady progress was made. A strategic mixture of offices and operational bases opened in Indonesia, Western Australia and the US to maintain momentum. Using 30 years of experience in the design and installation of mooring systems Viking SeaTech has made its mark. Relationships have been strengthened around the world and contract wins have become frequent.

Follow the leaders

The International Institute for Environment and Development (IIED) reported that high prices in established international locations drove oil majors into sensitive world environments. The research body explained that with such diversification came greater political, social and technological risks. Up to 70 per cent of oil and gas industry activities are contracted out to service providers and subcontractors according to the IIED organisation. The Deepwater Horizon





incident in the Gulf of Mexico drew the world's attention to potential difficulties posed by relationships between operators, contractors and sub-contractors.

Many UK companies are using what they know to become the best in the world. In the midst of recession, there was hope for growth. Oil majors continued to explore opportunities in remote locations, including Australia, India, Indonesia, Russia and West Africa. Many of these opportunities have come to fruition over the last 18 months. Offshore service specialists must be aware of movement and be ready to support the latest projects wherever they begin.

The BRIC countries, of Brazil, Russia, India and China, have opened to increased business over the last decade. Now, the MINT countries, of Mexico, Indonesia, Nigeria and Turkey, are being explored. We have interests in many of these regions as they progress on the world stage.

By working closely with operational leaders in the industry our work has become well known. We abide by signals of change but don't drive forward without care. Even though change occurs, it might not always be right for our business. To date, we have moved to places we perceive best for both client connections and our own business growth.

Onwards and upwards

As a company working internationally, it is essential to maintain a desirable position on the curve of progress. The life of oil and gas exploration and production in the North Sea showed us that there could be a gap between the development of sound techniques and technologies and the right time to use them. The price of oil had to rise for many of today's expensive deepwater systems to become viable and the costs associated will only increase. Much of the world's remaining energy reserves are locked in hard-to-reach pockets or in remote outposts. It is up to the best thinkers and engineers to embrace change and develop problem-solving solutions for the decades of work ahead. Viking SeaTech has plans to be a big part of this.

The future means business

Pioneers are making discoveries geographically and scientifically. These oil and gas industry changes should be looked upon as opportunities. North Sea professionals have experience from 50 years of UKCS highs and lows. We have been part of this exciting chapter and will not forget our roots.

But, today we can enjoy international success. We've moved further into Asia Pacific and the Americas in recent years. We always strive to prepare for the unknown; ready to move to the new frontier wherever it may be. We do this by finding and holding on to the best people. Ultimately, they will make the breakthroughs we need. OEG

VIKING SEATECH

Bill Bayliss joined Viking SeaTech as group chief executive in September 2011 and works closely with his leadership team and investors to drive change and business growth. Viking SeaTech supplies a comprehensive range of equipment and services to the offshore oil and gas industry. A seasoned North Sea support specialist with over 20 years of experience in the world's harshest offshore environments, the company operates internationally in Europe, Africa, the Asia Pacific region and North America.

For further information please visit:
vikingseatech.com
actuant.com

Bridging the globe

DAN HÅKANSSON HIGHLIGHTS THE COMPLEXITIES OF BUSINESS TRAVEL IN THE OIL AND GAS INDUSTRY

Below
Dan Håkansson is vice president, general manager for the Nordic region at travel management company American Express Global Business Travel

Business travel is a necessity for many industries, and this is especially true for the energy sector, due to the time-critical nature of the business and the diverse and remote locations that need to be reached. Due to rising fuel prices, drilling and exploration in extreme sites has become even more popular and, as a result, employees ranging from executives and engineers to geologists and deck handlers have to travel even more extensively.

Effective travel management is therefore of the highest importance, to ensure the smooth running of a company's operations. However, the oil and gas industry poses many unique challenges for moving employees safely around the globe.

Special requirements

As oil industry employees are not permitted to carry mobile phones on oil rigs this can make communication between companies and their travellers difficult. In this instance, American Express Global Business Travel plays an important role in helping provide real-time updates to companies about its travellers' locations. We have a number of tools that facilitate this, including our proprietary traveller data feed which gives clients aggregated travel data in real-time.

As a travel management company that works in this space, we understand the procurement process followed by energy companies and what is expected of their suppliers. Since energy companies secure their travel arrangements in the same way as they do equipment, using a specialist

travel team ensures companies receive a highly targeted and relevant service that remains compliant with their processes.

Global operations

With oil-producing countries on nearly every continent, the industry's travel needs are varied. For example, employees travelling within the UK or to Europe and North America have very different needs than those travelling to locations such as Nigeria or Saudi Arabia.

As the energy industry involves travel to all corners of the world, including increasingly remote locations, travel managers need to be on call 24/7 and work in all time zones. It is therefore advantageous to work with a business travel provider that has a global presence; so that travellers get the service and support they need working away from home.

Travel is often project-driven and price-sensitive and whole crews can be recruited to work on a project in a relatively short timeframe. We have found energy clients value end-to-end journey planning, which includes booking air fares, organising ground transportation and providing consolidated reporting, allowing clients to gain greater visibility of total spend.

Employees from across the globe may be required to fly in to the same location – this can involve complex itineraries with multi-sector flights. For example, this could mean flying rig workers from Kazakhstan and supporting workers from the Philippines to a central hub in Stavanger, Norway and then co-ordinating helicopter transfers for these groups to oil rigs located in the North Sea. The often harsh weather conditions at destination locations can make the management of these logistics even more difficult. At times when rig workers are unable to reach their helicopter transfer due to weather conditions or other factors we arrange accommodation, meals and transfers.

Travel managers should consider the benefits of mandating a provider that can offer both transient and specialist travel. This increases visibility of spend through global consolidated reporting and can help travel budgets go further. Managing costs remains a high priority, despite the complicated and highly specialised travel requirements.

Industry knowledge

Communication is key and it is important to work with providers that understand your client's business as a whole. Last-minute changes to travel plans are common but have a large impact on operations, so it is vital that all parties understand the impact this has and take these into account.

Due to the complex nature of employees' travel, there is often the need for complicated visa arrangements and this is another area where a dedicated team with specialised knowledge of the processes involved can prove vital. There can often be urgent visa requests at very short notice. Consider taking advantage of providers who offer visa processing services that facilitate the most complicated of travel arrangements in a short amount of time – agents can meet clients at the airport to hand over visa documentation and obtain a passport in as little as 24 hours if needed.

Safety and security

Traveller security and duty of care have become heightened priorities due to the increasingly varied and high-risk areas employees in this industry have to travel to and work in. There is an increased focus on traveller security and compliance, particularly following events such as the terrorist attacks in Algeria earlier this year. It is more important than ever that travel policies incorporate these issues and your business travel provider should have specialist teams that support clients wherever their travellers work. American Express Global Business Travel has developed proprietary tools to help locate travellers in times of traveller disruption or crisis, helping travel managers to remove them from the impacted location quickly and help them return home safely.

When a crisis does occur, it is important to have the means to determine which employees will be affected as quickly as possible. There are various technologies that allow companies to locate their employees and some of these tools also allow travel managers to contact those employees within a moment's notice of an emergency situation. For example, American Express Global Business Travel's AX CONNECT solution can pinpoint travellers impacted by travel disruption in seconds with real-time booking data, communicate with them directly, and manage and prioritise responses. It also delivers security and travel alerts directly to the travel manager via email.

This is an industry unlike any other and each booking demands a bespoke solution. There are many factors to consider, but by working with a specialist travel team with a great understanding of the industry, companies can ensure effective travel management and smooth operations, wherever in the world their employees need to be. OEG

Pump of the future

ENVIRONMENTAL PROTECTION WITH SPX GAS CONDENSATE PUMP MARKS A CONSIDERABLE DEVELOPMENT IN PUMP TECHNOLOGY

The SPX CombiSumpMag pump provides an environmentally sound solution to the oil and gas industry for pumping condensate from a sump or storage tank and was specifically developed for this application at Nederlandse Aardolie Maatschappij B.V. (NAM) natural gas production sites. The pump provides hermetically closed magnetic couplings to assure a high level of containment and reliability.

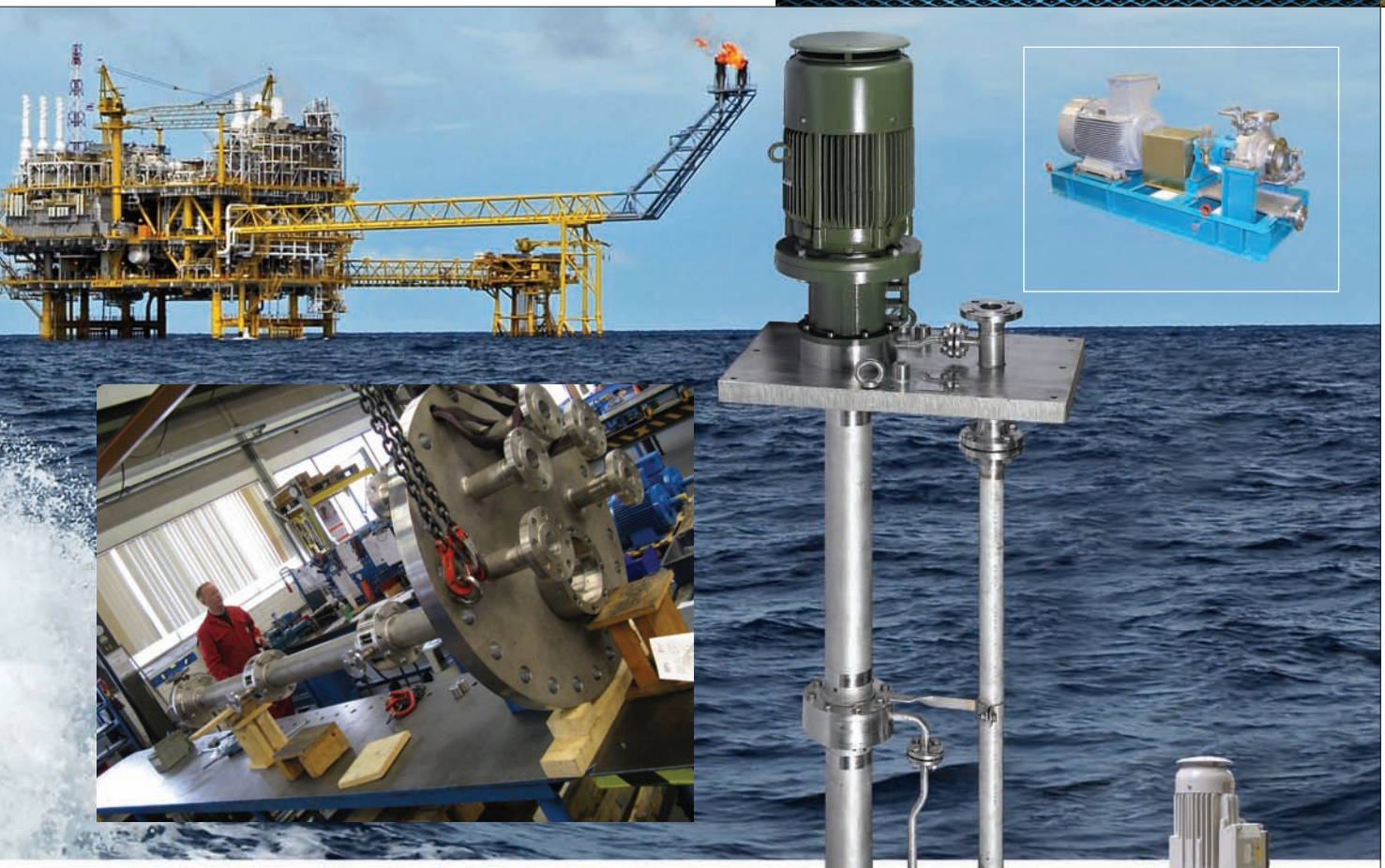
Formed by Shell Nederland B.V. and ExxonMobil Holding Company Holland LLC, NAM is by far the largest natural gas producer in the Netherlands and has a mission to sustainably produce oil and gas from within the Netherlands and Dutch section of the Continental Shelf. When extracting gas from a well, certain amounts of 'waste' products also need to be handled along with the gas. These include water and condensate but can also incorporate other environmentally harmful products. These products are held in a temporary storage tank or sump prior to further processing and their efficient and reliable handling is an important part of the gas production process. A submersible centrifugal pump is used to pump the condensate from the tank or sump into a pipeline.

Traditional pumps for this application have used packed gland or double mechanical seals. The packed gland has obvious issues with leakage and the double mechanical seals add complexity to the pump. A magnetic coupling has the advantage of eliminating leaks with a hermetic seal in a relatively simple pump configuration. The SPX Johnson Pump brand offers a wide range of pumping solutions and has vast experience in engineering solutions ideal for specific applications. It developed a solution for this application based on its well-proven and reliable CombiSump centrifugal pump with closed magnetic couplings. Known as the CombiSumpMag, the pump ensures leak-free operation and environmental protection from the waste products within the storage tanks/sumps.

The CombiSumpMag pump meets the environmental requirements for high-level containment along with appropriate explosion proof ratings. For installation inside the storage tank or sump it meets ATEX Group II/Category 1, Zone 0, temperature class T4. On the NAM sites the pump is utilised as a vertical submersible pump driven by an electric motor above the base plate. The magnetic coupling transmits power from the motor to the shaft and hermetically seals the shaft through the base plate. The tank or pit is hermetically sealed by a stationary gasket between the base plate and pit/tank entrance to prevent any leaks into the environment. SPX has also engineered the pump to provide a direct replacement for the existing, older pump arrangements for easy installation at the NAM sites.

The pump is designed for high reliability and is installed with a minimum submersible depth, which ensures the highly effective silicon carbide axial and radial bearings are permanently lubricated by the pumped liquid. The radial bearings further ensure precise positioning of the inner rotor on the shaft. Pump depth is varied to meet individual site requirements using multiple pump shafts fitted with intermediate bearings, which are lubricated via the discharge nozzle from the pump casing.

The CombiSumpMag is designed for reliable and safe operation within this hazardous environment. A Pt100 sensor measures the temperature of the liquid and the measurement obtained can be utilised to set up a process interrupt when a pre-set temperature limit is reached. The power factor for the pump is also monitored to identify problems with low flow or failing torque transfer. Failing torque results in non-synchronous rotation of the inner and



outer rotors and creates a rapid rise in temperature. The signal from the power factor (CosΦ monitor is, therefore, used to protect against unacceptable temperature rises within the ATEX environment with immediate pump shutdown.

Through its Johnson Pump, Bran+Luebbe, ClydeUnion Pumps and Plenty brands, SPX has significant experience in supplying pump solutions to the oil and gas industry. In addition to developing the CombiSumpMag to meet the needs of the NAM application, it has also supplied OH2 (API 610 & API 685), OH3 & VS4 pumps over a number of years for utility packages for the Offshore Industry, particularly for the Norwegian market where the pumps supplied used components sourced from NORSOK approved suppliers and NORSOK approved painting procedures.

The application at NAM is another example of how SPX works in partnership with its customers to deliver solutions that bring real benefits. The design of this specific solution guarantees simple replacement of the old pumps for reduced overall cost of installation. For NAM's mission for sustainability, the CombiSumpMag pump ensures the environment is protected from leaks while the unit delivers safe, reliable and efficient operation for pumping the condensate for the future.

SPX Flow Technology

The SPX Flow Technology segment designs, manufactures and installs highly engineered solution used to process, blend, meter and transport fluids, in addition to solution sfor air and gas filtration and dehydration. The segment supports global food and beverage, dairy, pharmaceutical, oil and gas, energy, and industrial markets. OEG

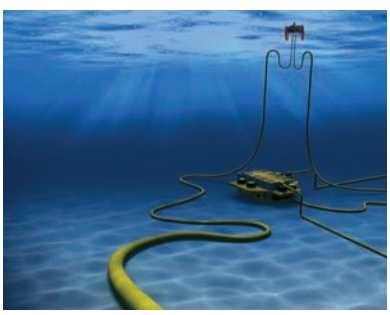
SPX

Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global Fortune 500 multi-industry manufacturing leader with over $5 billion in annual revenue, operations in more than 35 countries and over 15,000 employees. The company's highly-specialised, engineered products and technologies are concentrated in flow technology and energy infrastructure. Many of SPX's innovative solutions are playing a role in helping to meet rising global demand for electricity and processed foods and beverages, particularly in emerging markets. The company's products include food processing systems for the food and beverage industry, critical flow components for oil and gas processing, power transformers for utility companies, and cooling systems for power plants.

For further information please visit:
spx.com

Sharing the knowledge

This year's annual Subsea Tieback Forum & Exhibition is due to take place at the Henry B. Gonzalez Convention Center in San Antonio, Texas, US between the 4th and 6th of March. With more than 3000 attendees and over 200 exhibitors expected to visit and participate, it is yet another industry event that you can't afford to miss.



Indeed, each year provides visitors with new levels of exhibition space, conference programmes and technical sessions, and opportunities to network with industry leaders, with the event truly becoming the premier occasion for one of the fastest growing sectors in the oil and gas industry. In 2013 for example, Subsea Tieback Forum & Exhibition attracted 2673 attendees and 241 exhibitors. With the key conference theme of 'Take it to the Limit', the two days between the 5th and 7th March 2013 saw sessions held by expert speakers, who shared their knowledge and experiences, addressing key aspects of the subsea industry such as quality, safety and economics.

Building on this success, this year's event theme is 'It all ties back to here', reflecting on the fact that as the subsea sector develops the sharing of knowledge and collective experiences is becoming increasingly crucial to improving

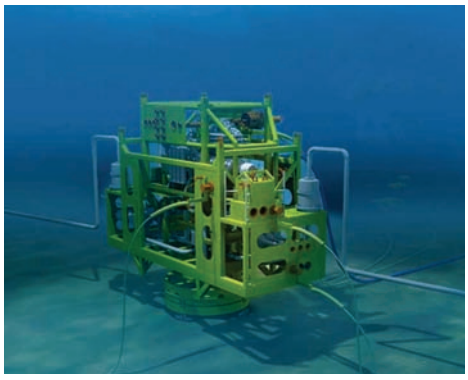
quality, safety and the economics of the subsea tieback industry. As with all major industry events, these topics will be addressed through the conference programme, which remains the fundamental foundation upon which Subsea Tieback Forum & Exhibition has been built.

The conference theme for 2014 has been set as 'Sharing the Knowledge', and over the two days of Wednesday and Thursday key sessions led by expert voices will be held looking at new operational issues, challenges, and solutions associated with global deepwater subsea operations. With an audience consisting of field supervisors, engineering staff and operational planning personnel, dialogue is facilitated through focused presentations, extended Q&A sessions, and networking opportunities.

The technical sessions this year consist of:

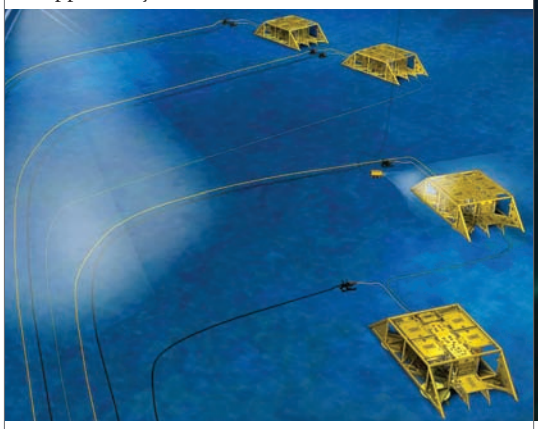
- Flowlines, Risers and Umbilicals
- Innovations, New Technology
- High Pressure and High Temperature - Round Table Discussion
- Subsea Processing
- Inspection, Maintenance and Repair
- Project Learnings

Each of these key sessions holds a number of smaller discussion topics held by leading speakers from the industry. For example, session 1 - Flowlines, Risers and Umbilicals is divided into sessions on LLOG's Mandy project Development Selection, Macedon 20" Subsea Pig Launcher, and Long Tiebacks - Learning from Pipeline Design Challenges. The latter addressing the fact that many more recent long tieback pipeline projects have experienced significant increases in the challenges related to engineering design cycle, testing duration, installation cost, and a wide range of uncertainties. It is problems and potential challenges like this that make events such as Subsea Tieback so important to the industry.



Of course, as a rapidly advancing market sector, innovations and new technology are a key aspect of the conference sessions at this year's event. Developments up for discussion include Papa-Terra TLWP Well Conductor Driving Operation, Islay Subsea Tieback - High Efficiency Electrically Heated Flowlines, Overcoming the Challenges of a Sub-Arctic Subsea Tieback, Innovation Multi-Function Pipeline System, and the challenges of high pressure and high temperature (HPHT).

While the conference represents the ideal opportunity for visitors to learn about the industry's 'hot topics', the annual exhibition at Subsea Tieback is a great way of viewing the latest equipment and technology on offer from pioneering companies. More than 200 companies are expected to take a place in the exhibition hall, providing opportunities to make important connections that can aid future success in the growing subsea market. For companies that choose to exhibit the benefits are numerous, including the chance to increase brand awareness and build brand value, build new customer relationships, meet key decision makers in direct communication, and source new suppliers for future development.



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Alongside the conference and exhibition, Subsea Tieback Forum & Exhibition 2014 features a wide range of specialised events and networking opportunities designed to encourage communication between key companies and industry decision makers. These range from the more serious networking receptions that take place on the exhibition floor, delegate lunches and special conference sessions, to more leisurely events such as a golf tournament in Houston.

Whether you work in the subsea industry directly, or are involved in the oil and gas market at large, Subsea Tieback Forum & Exhibition 2014 is an event that you cannot afford to miss. O&G

Subsea Tieback Forum & Exhibition 2014

Subsea Tieback Forum & Exhibition 2014 takes place between the 4th and 6th March 2014 at the Henry B. Gonzalez Convention Center in San Antonio, Texas, US.

For further information please visit: subseatiebackforum.com

Guiding the industry

THE INTERNATIONAL MARINE CONTRACTORS ASSOCIATION (IMCA) PROVIDES AN AUTHORITATIVE VOICE FOR ITS 900+ MEMBERS, AS **CHRIS CHARMAN**, CHIEF EXECUTIVE, EXPLAINS

Above
A frame before ROV intervention

Below
Chris Charman, chief executive at IMCA

I am delighted to be asked to write this introduction to the section of *European Oil & Gas Magazine*, which has a strong link with the marine contracting sector. The International Marine Contractors Association (IMCA) represents the offshore, marine and underwater engineering industry with governments, regulatory bodies and clients worldwide, and has well over 900 member companies in more than 60 countries.

Between them it is estimated that they collectively turn over in excess of $150 billion annually and employ well over a quarter of a million staff across the world. What's more, their vessels account for four per cent of the global shipping fleet. Without their innovation and dedication it is a salutary thought that little or no offshore oil or gas would reach markets.

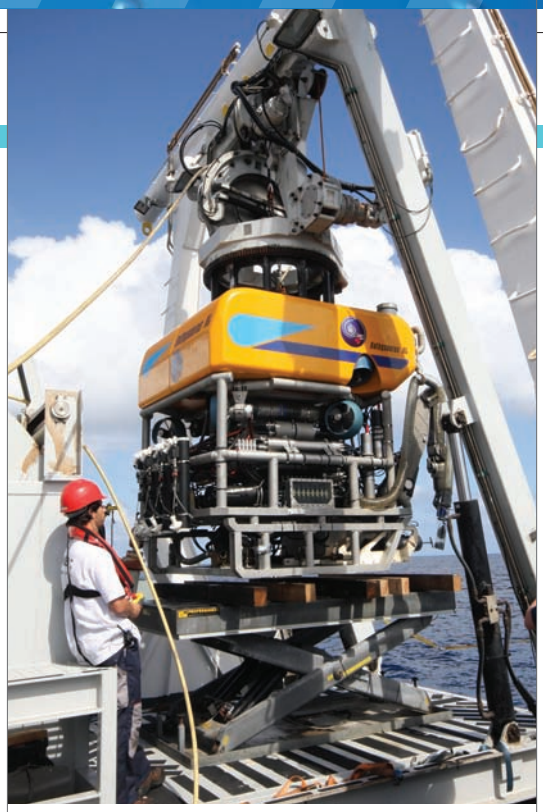
We work with our members in a collegiate and inclusive style to deliver safer working practices, pool knowledge and learn from each other in order to reduce risk, losses and damage to the environment.

IMCA does not set standards or regulations. It is not a legislative body. Our approach is that safe and efficient operations must be coupled with a good risk culture, guidelines and attitudes.

We therefore provide our members with guidance, allowing them to self-regulate rather than look to clients or governments for setting rules and procedures. While governments legislate on a range of issues in the public interest, they cannot produce legislation for every part of an industry's operations – nor may that be desirable. A key benefit of industry guidance is that it can be implemented and updated more quickly than legislation. This is vital in an industry such as ours with its rapidly advancing technology. Naturally, as a trade association we must also comply with international competition law (competition, antitrust and similar laws).

Our stated aims include our commitment to strive for the highest possible standards with a balance of risk and cost in health and safety, technology, quality and efficiency, and environmental awareness and protection. We also aim to help our members achieve equitable contracting regimes; and provide the framework for training, certification, competence and recruitment to support and sustain the industry globally. We seek to promote our members' common interests, to resolve industry-wide issues, and to provide an authoritative voice for our members.

Our members have made a conscious decision to set the most challenging goals possible, with the 'holy grail' being 'zero incidents' – after all, they are protecting their most valuable asset, their workforce. The objective, as an industry, is



to become the best we can at what we do, and motivate a process of continuous improvement.

IMCA has four technical divisions covering marine/specialist vessel operations; offshore diving; hydrographic survey; and remote systems and ROVs (remotely operated vehicles).

We also have five regional sections – Asia Pacific; Central and North America; Europe and Africa; Middle East and India; and South America. These sections enable members to address issues specific to their region and local area, and ensure the global applicability of the association's worldwide activities. Regular meetings bring members together to discuss current topics and initiatives, often with guest speakers and opportunities for those interested in membership, clients, regulators and other interested parties to join members for presentations and briefing. We are very much an organisation serving the interest of our members; with member committees determining our technical work programme undertaken by our strong technical team headed by our technical director, Jane Bugler.

IMCA has two core activities – Competence & Training; and Safety, Environment & Legislation (SEL). Our Competence & Training activities include the provision of guidance on competence assurance and assessment. This guidance provides members with a framework for creating their own in-house schemes for assessing and recording the competence of people working in safety-critical and other roles. It is especially designed for members who need to demonstrate the competence of their staff to clients and regulators, and to adhere to standards such as ISO 9001. Certification by industry-recognised third parties, as well as our own initiatives in this area, gives IMCA members access to a global training and competence development framework.

SEL, our second core activity, promotes the sharing of experience and safety-related information among members with the aim of reducing incidents by continuously reinforcing good practice. We offer good practice guidance to industry by way of documents, seminars (our Annual Seminar is held in the late autumn and our Safety and Environmental Seminar in the spring) and dialogue.

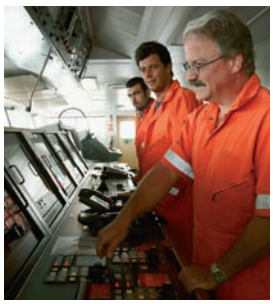
The sharing of information on incidents and near-misses is a powerful enabler for IMCA members to achieve safe, reliable and efficient operations. Details of potential hazards at the worksite and lessons learned from follow-up investigations are collated, anonymised, circulated to members and posted online to create a growing database of invaluable information. The IMCA database on dynamically positioned (DP) incident reports dates back over 30 years.

Occasionally incidents do happen, and that's when the IMCA safety flash system provides a fast, vital communications channel for the industry and helps prevent recurrence of the situation.

IMCA publishes some 200 guidance notes and technical reports. The vast majority are available for free downloading by members and non-members alike and, where applicable, are published in a range of languages. They are a definition of what IMCA stands for, including widely recognised diving and ROV codes of practice (often cited in clients' tender documents); DP documentation; marine good practice guidance; the Common Marine Inspection Document (CMID) – available electronically as eCMID; safety recommendations; outline training syllabi; and the IMCA competence (competence framework) guidance. In addition to the range of guidance documents, IMCA also produces safety promotional materials including pocket safety cards, posters and DVDs.

The international marine contracting industry is a strong and friendly 'family', mostly working at the cutting edge of an exciting and critical industry. There is no greater pool of collective knowledge of our sector than ours on the planet. We constantly share knowledge – to add depth to that pool – to improve the way those in the industry work and the quality of the service they are able to deliver. O&G

> Our members have made a conscious decision to set the most challenging goals possible, with the 'holy grail' being 'zero incidents' – after all, they are protecting their most valuable asset, their workforce. The objective, as an industry, is to become the best we can at what we do, and motivate a process of continuous improvement



Top
ROV Uso in action

Middle
Bridge of a dynamically positioned vessel

Bottom
Dive support vessel

For further information please visit:
imca-int.com

A versatile partner

As the world's demand for oil and gas continues to grow, operators increasingly face greater technical challenges in the exploration of new fields and the exploitation of ever more remote energy sources. Nowhere is this truer than in subsea operations, where harsher environments, remote locations and deeper waters has driven the development of increasingly advanced ROV systems.

Headquartered in Aberdeen and operating as a fully autonomous division of Subsea 7, i-Tech is a world leader in the supply and operation of ROV and subsea intervention tooling to the global energy market. In addition to the provision of core services, i-Tech also offers bespoke offshore engineering solutions to meet individual client needs. The division was established in 2006 as an independent business unit of Subsea 7 and shortly thereafter launched the Centurion QX as its new flagship work-class ROV. Today, building on the industry experience from Subsea 7's heritage, which has included numerous mergers and acquisitions, i-Tech continues to deliver world-class customer service and industry-defining ROV design. This is evidenced through the successful QX system evolving to the class-leading Centurion SP, which was launched in 2013.

Globally, i-Tech has over 1000 personnel including its own management team and equipment pool to fully meet its clients' needs. It has provided ROV systems and services to all of the industry's best-known super-major and independent operators. Operating a fleet of over 100 work-class ROV systems, i-Tech has a large global footprint with regional offices in Aberdeen, Houston, Rio das Ostras, Brazil and Perth, Australia. The company can also

Above
Centurion SP load testing onboard the Toisa Coral Vessel

Below
i-Tech senior commercial manager, Brian Reid

ZETECHTICS

i-Tech are extensive users of Jupiter subsea control systems and in order to offer the best possible service to their clients have also committed to training their tooling techs to the highest possible standard. Zetechtics provided i-Tech Brazil (via SMD Ultra ROV integration), with our latest and most technologically advanced Jupiter 2 Dual Tool Control system supported also with the dual API17D & Petrobras standard 'subsea torque verification systems'. We would like to thank i-Tech for their continued trust in our products and wish them all the very best for the future.

count on the support of its satellite offices, which are located around the globe for example, Equatorial Guinea, Egypt and Mexico. These dedicated offices allow i-Tech to deliver a strong, targeted service to clients.

For i-Tech the biggest growth area over the past five years has been in Brazil, where challenging environmental conditions and the demands of the 'pre salt' ultra-deepwater areas has helped to drive the development of ever more advanced and powerful ROV systems. i-Tech has earned a renowned reputation and market-leading position in Brazil, driven by the award in May 2010 by Petrobras of the biggest ROV contract ever awarded globally, for ROV and intervention tooling. This included supplying ROV's to 30 drilling rigs. The contract value was in excess of $400 million and called for the provision of the ROV systems and a fully trained crew of nearly 200 over the course of the three-year mobilisation period. This opportunity allowed i-Tech to build on its reputation for ROV provision and design, as Clovis Galdino, general manager of i-Tech Brazil explains: "The award was based on a new ROV design to specifically meet Petrobras specifications whilst offering proven reliability, easy maintenance and operation and compatibility with our existing fleet. It was a major factor in our being awarded the work. Despite the fact that the design of the system was similar, each rig mobilization was different from an engineering perspective. In addition, given that we were mobilizing one ROV spread every few months, our supply chain and logistics processes had to be efficient. With this large contract we became the market leaders in the region. We are now expanding into the vessel side of the business, undertaking inspection, repair and maintenance (IRM) operations. This will differentiate us further in the market place."

In October 2013, i-Tech announced that it had won another major project with Petrobras valued at around $60 million. The project will

MICRON EAGLE HYDRAULICS LTD

For over 20 years Micron Eagle Hydraulics Ltd, operating out of centres in Aberdeen, UK and Houston, US, has provided specialised hydraulic engineering support to organisations across the globe.

We offer a full range of services from consultancy to manufacturing and component supply backed up with full hydraulic workshop and test facilities.

We are proud of the excellent business relationship built up with i-Tech a division of Subsea7, manufacturing systems to the very high standards demanded by the industry, supplying hydraulic components and equipment and completing service and repair work.

BOWTECH PRODUCTS

Bowtech Products Ltd is an underwater vision specialist, supplying visual inspection systems, cameras, lights, emergency relocation strobes, custom moulded cable assemblies, pan and tilts, electrical and fibre-optic connectors, fibre-optic multiplexers and slip rings for use in hazardous areas or underwater, to any ocean depth. Bowtech's products are deployed in the most severe environments in the ROV AUV, oil and gas, defence, oceanographic, nuclear and leisure and marine science industries.

Top
UK Energy Minister Michael Fallon visits i-Tech's Rio das Ostras base. Pictured with Clovis Galdino, general manager, i-Tech Brazil

> The SP is one of the most powerful ROV's on the market at the moment, with a horsepower of 230 and a bollard pull of 1200 kilos, making it a class-leading ROV

Below
Centurion SP about to be launched to undertake trials of class-leading bollard pull performance

call for the provision of ROV and underwater positioning services on board the platform supply vessel (PSV) Far Saga, offshore Brazil for an initial six-year term with further options to extend this for a further six years. Furthermore, the operation will see the deployment of i-Tech 's newest ROV, the Centurion SP. In a press release confirming this award, i-Tech managing director Bruce Masson announced: "This contract will see the first deployment of our new generation Centurion SP work class ROV on board the PSV. The Centurion SP vehicle is one of the most powerful ROV's currently available in the market, offering a high thrust to weight ratio which is important when working in areas of high currents."

The SP is a further evolution of the successful Centurion brand and is the product of a collaborative relationship with its ROV supplier, Soil Machine Dynamics (SMD). i-Tech senior commercial manager, Brian Reid elaborates: "i-Tech has had a long-term relationship with SMD (based in Newcastle), for the construction of ROV systems. This has enabled us to continue to develop leading ROV solutions, which continue to win the company contracts globally. The Centurion SP is i-Tech's answer to the next generation of ROV system, this is a continuation of the Centurion brand. We have used the Centurion name for some time now, firstly with the Centurion HD, which evolved into the QX and now the SP.

"The SP is as close to a new design that we have ever commissioned," he adds. "It has a new propulsion system and it is very much upgraded as far as its overall capability is concerned. It is an industry leader in terms of bollard pull and vertical thrust. That has been a key focus during the development of the SP; to develop maximum thrust and minimised surface sail area."

Elaborating further on the advantages provided by the innovative new ROV, Clovis observes: "The SP is one of the most powerful ROV's on the market at the moment, with a horsepower of 230 and a bollard pull of 1200 kilos, making it a class-leading ROV. It is able to operate at conditions of four knots of current, which is important because in the new fields that Petrobras is currently developing, the currents are very strong. The standard machines that are in operation in the market today are not capable of dealing with such conditions."

With the inclusion of the Centurion SP ROV within its equipment portfolio, i-Tech has gained a versatile tool that joins its existing fleet, expert pilots and collaborative global support network. This will help the company meet the challenges as it continues to evolve throughout 2014 and beyond. O&G

NEXANS

Nexans Norway is a proud longstanding supplier of ROV cables to i-Tech. We would like to congratulate i-Tech on its success, and we look forward to continuing to design and supply this innovative company with our tailor-made underwater cables in the future. Nexans is an established supplier of dynamic underwater cables for the international ROV market. Our cables are proven and recognised in the industry for their reliability, durability, and mechanical characteristics

MARINE ELECTRICAL SERVICES

We at Marine Electrical Services are proud to be associated with the continued success enjoyed by i-Tech. We have supported i-Tech operations both on and offshore over the last ten years and would hope to continue this enviable relationship in the long-term. Going forward, we are currently developing touch screen control systems for the ROV power systems; this will enable the ROV technicians to monitor and supervise the performance of the ROV and associated equipment. Marine Electrical Services wishes to congratulate i-Tech on its achievements and wishes the company every success in the future growth of its global operations.

NCS SURVEY

As a leading company specialising in offshore positioning and survey services worldwide, NCS Survey has enjoyed a long-standing relationship with i-Tech, providing dedicated survey personnel and equipment to compliment i-Tech's ROV teams. Most recently this has included an 18-month partnership on board the Bourbon Peridot, where NCS Survey supplied all survey personnel, surface and subsea positioning, digital video systems and LBL metrology services.

i-Tech
interventiontechnology.com

Services
ROV provision and support

DAMEN OFFSHORE WIND

WALK2WORK VESSEL

NEW DESIGN: WHY? BECAUSE THE MARKET TOLD US SO!

As energy recovery from renewable and fossil fuel sources pushes farther offshore, keeping maintenance staff comfortable is a key challenge. Damen Shipyards' high performance 'Walk-to-Work' vessel addresses the expectations as set by the industry.

The vessel has on-site work and storage facilities, plus accommodation for up to 40 maintenance personnel and management and a crew of 20. It will be able to stay out at sea for voyages of up to one month duration, feature dynamic positioning (DP2) and a telescopic, motion-compensated transfer gangway to allow for transfer of maintenance teams to walk between vessel and the offshore structure.

DAMEN

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Strong foundations

Established in 2005, Almaty headquartered Caspian Offshore Construction LLP (COC) has witnessed steady growth over the last eight years to become a leading provider of marine fleet operation and management services in the North Caspian Sea. With the Caspian region today one of the world's most integral sources of oil and gas production, COC has strategically opened offices in Aktau, Astrakhan, Ashgabad, Bautino and Turkmenbashi over the years to develop a presence close to the three giant offshore fields: Kashagan, Hazar and Filanovsky.

With some major North Caspian offshore oil and gas discoveries, the boom in activity has resulted in company revenue increasing 20 times since 2005 and reaching $130.50 million in 2013. "Today COC is made up of more than 600 people in total, with over 500 personnel operating as crew mariners. Our core activity is marine fleet operation and management services, which has been carried out in serving giant oil and gas discoveries since 2005. We offer a comprehensive portfolio of services, from technical operations, purchasing, maintenance, procurement, diving support and the provision of international standard offshore catering services," explains Stanislav Belov, Aktau branch director at COC.

Following the acquisition of living quarter barges in 2004, the company delivered a fleet of six new build vessels, including five class 1B tugs and one fast crew boat in 2006-2007. These vessels were constructed at highly respected yards such as IHC, DeHoop Lobith and Damen in Holland. Later, in 2009, COC further expanded its fleet with an order to build three plus two ice breaking tugs at STX's shipyard in Braila, Romania, under Bureau Veritas classification regulations. Elaborating on the firm's fleet, Stanislav states: "We decided to expand our activities and construct custom made boats, which we did with our fleet in Holland before our contract with STX. The design of our ice breaking tugs came from Finland based, globally-known ice-class vessel specialist Aker Arctic of Finland."

He continues: "The majority of our fleet is in Kazakhstan, where under COC management we operate 21 vessels belonging to agip kco, the present operator of Kashagan Oilfield.

This is our main project driver as it is where we started from; we deliver the whole cycle of operations for agip kco, but due to the downturn in Kashagan activity we are looking to expand our company throughout the Caspian Sea. The fleet under management includes, ice breaking tugboats, emergency evacuation vessels, floating hotels, crewboats, sewage waste management vessels, and barges. As the owner of leading accommodation vessels we can accommodate approximately 450 persons, however taking into account third party floatels the number would rise to around 870. We also use a local contractor for our offshore international standard catering services."

Since its inception, the Kazakhstani firm has been aware than ongoing success relies on attracting and retaining high quality professionals. However, facing the challenge of being based in an area that is not centred on the marine industry, COC began the development and training of local people through its corporate crew nationalisation programme. "Because we are mainly operating in Kazakhstan, we are focused on developing the skills of locals rather than other nations. A nationalisation advisor who constantly reports to top management supervises the programme, which also involves the use of special marine software STORM's Delta-Test. This software enables us to assess the knowledge of our personnel and view a track record of crew development," says Stanislav.

Having obtained a license to perform onshore/offshore oil spill response (OSR) operation in October 2012, the company is building up its OSR capacity, starting with the acquisition of its Kazakhstan flagged ultra shallow draft oil spill and macrowaste collecting craft 'Tungysh'.
This small vessel is capable of cleaning 10,000 square metres of hydrocarbons film per hour, as well as collecting macrowaste. In addition COC has mobilised the fleet of aluminum ultra shallow landing crafts supplied with Lamor designed equipment to combat oil spills in shallow waters.

Furthermore, COC has a targeted delivery of two medium sized, twin-engine hovercrafts in mid 2014, which will also operate in the ultra shallow areas of the Caspian Sea. "We would like to use these vessels to patrol the pipelines, for crew changes, ecological inspections and surveying in ultra shallow locations," says Stanislav. "As a company with a largely unconventional fleet we aim to develop into an offshore focused fleet with more platform supply vessels so we can continue to grow in the local offshore market and across the entire Caspian, including Azerbaijan and Turkmenistan. This development will also benefit us as members of IMCA."

These plans will take COC into the next stages of expansion, as it looks to take advantage of its strong reputation in a competitive market. "It will be interesting to see how the company will grow over the next few years, as I see a lot of companies moving into Kazakhstan because of the oil and gas activities going on, but we have an advantage as a local firm. This is a great market if you enjoy the competition but ultimately the most critical priority for us is to operate with a focus on health, safety and environment." O&G

SEALAB

Sealab performs design, assembly and commissioning of Autronica integrated fire and gas detection systems. It is certified by DnV, LRS, RMRS and SIL2. The company installs IFG systems on oilrigs, PSVs, LNG ferries and gas compressor stations.

TRIQUA INTERNATIONAL

Triqua has supplied total wastewater solutions in the Caspian Sea since 2001. The company builds complete made-to-measure, wastewater treatment plants in modules, and places the plants in containers or as packages, depending on the space requirements allotted on the barge.
Triqua recently received an order for the procurement of two 'next generation' sewage treatment plants from Caspian Offshore Construction LLP (COC), which are to be installed on the f-o-vessels 'Shkotov' and 'Caspian Princess' during an overhaul at the yard in Astrakhan (Ru). The sewage treatment units from Triqua will be installed complete with the main tanks and sludge treatment and will purify wastewater from each vessel individually.

Caspian Offshore Construction LLP
coc.kz

Services
Marine fleet operation and management

Equipped for the future

Above
Grand opening of new workshop in January 2013 (from right to left: Mr. Duc Nguyen, chairman of Seahorse Services Corporation, Mr. Ngo Thuong San, former chairman & CEO of Petrovietnam, and Mr. Tran Le Dong, former general director of Vietsovpetro

Below
Test pool

Established in 2006 in Vung Tau City, Vietnam, Seahorse Services Corporation (SSC) offers a broad spectrum of services to clients within the oil and gas industry through the operation of its seven remotely operated vehicles (ROVs) and associated equipment. Speaking to *European Oil and Gas Magazine*, chairman and founder Duc Nguyen begins: "After six years of selling spare parts for ROVs I decided to open up my own ROV operations company in Vietnam in 2006. I am the first ROV dealer in Vietnam and the first to set up training for my personnel, including the training of the country's first ROV supervisor. Although we started with nothing, I had the most knowledge of ROVs in Vietnam at the time and knew how to tackle the market; with these two critical factors satisfied, the company grew from nothing to today having seven ROV systems in operation."

With a mission to provide high quality, safe ROV operations, provide cost effective maintenance and refurbishment services and to deliver well skilled, competent and efficient manpower to the ROV industry, Seahorse Services has the experience to meet and exceed customer expectations throughout the full lifecycle of a project. As the owner and operator of a diversified fleet of work class (WROV), light work class (LWROV) and observation class remotely operated vehicles (OBSROV), the company has experience in advanced inspection, IRM, site survey, drill support and subsea construction services. Furthermore, it provides ROV suitable tools such as 3D sonar, underwater

hydraulic grinder and cutter, sonar profiler scan, VX ring removal, PH meter and boom camera to the offshore oil and gas industry.

Mainly operating in Vietnam's domestic market, Seahorse Services has approximately 40-50 returning customers, the majority of which are also involved in joint ventures with Petrovietnam; a state-owned organisation that implements the exploration and production of oil and gas with the aim of meeting domestic and export demand. "Approximately 90 per cent of our clients are related to the Government, as most foreign oil and gas companies work as a joint venture with Petrovietnam; these are the partnerships that we chase," says Duc.

Despite being faced with the challenge of operating in a competitive market, Seahorse Services champions the maintaining of fair prices for high quality services. "Foreign companies tend to come over here and offer a very low price, which makes it difficult for us to compete against major firms. However, we have been able to continue expanding our operations due to our 10,000 square metre facility that is located in close proximity to all of the oil and gas projects in Vietnam. This gives us a big advantage to save cost and times when it comes to mobilising and demobilising," says Duc. "On top of this, we speak the local language and can interface easily with infrastructure and logistics, which is a major advantage when it comes to developing customer relations and keeping prices reasonable."

In a competitive environment, SSC has the

> Seahorse Services has the experience to meet and exceed customer expectations throughout the full lifecycle of a project

Above
Main office building

tecpro by Canford

tecpro.co.uk

Intercom for ROV operations

MS741 MASTER STATION

- Headset free operation
- Simultaneous operation of inbuilt speaker and microphone without feedback!
- Clear, intelligible communications
- Two independent intercom circuits
- Powers up to 22 BP511 Beltpacks per circuit
- Compact 1U format

BP511 BELTPACK

- Virtually indestructible ABS construction
- Resistant to harsh environments
- Easy to operate, even wearing gloves
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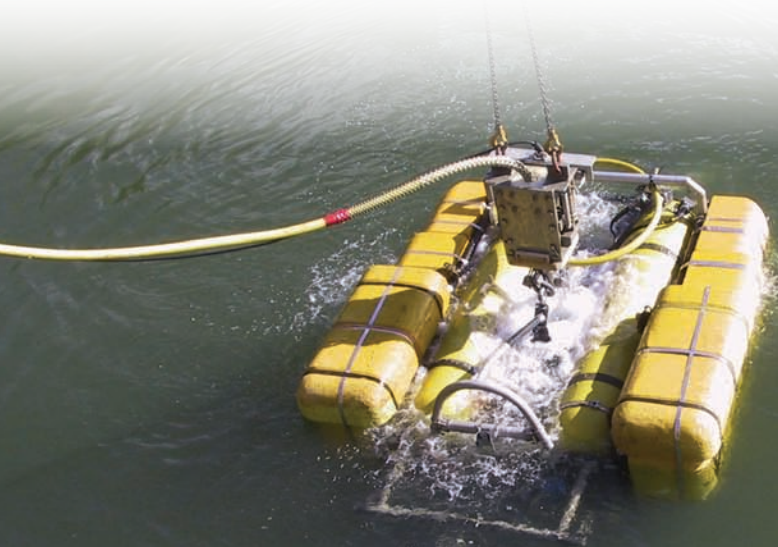
HEADSETS

- Single or dual earpiece versions
- Very robust, flexible construction – almost unbreakable
- Clear, intelligible audio – no misunderstood instructions
- Noise cancelling dynamic mic for noisy environments
- Soft, comfortable ear cushions for reduced fatigue



For More Information

Tel: +44 (0) 191 418 1040

Email: info@tecpro.co.uk

facilities, equipment and expertise to confidently offer high quality ROV refurbishment and maintenance services to customers. Benefiting from a European manager with more than 25 years experience in ROV engineering, the company also has 30 experienced engineers and 15 technicians at its workshop with a 10,000 square metre facility that boasts a wide range of equipment and tooling such as lathe, milling, electronic workshop, hydraulic test bench and buoyancy modification.

"I am very proud of our facility," enthuses Duc. "Compared to other workshops in Asia ours is easily one of the biggest. We have one 600 square metre shop for the light work class and observation class ROVs and an 800 square metre ship with a 20 tonne crane for the work class ROVs. On top of this, we have a test pool, which is 12 meters long and eight metres wide; this is a unique strength for us as it has a three-knot current to test ROVs under real working environments. We have everything in-house, including a paint shop, machine shop and electronic shop so we can refurbish ROVs to be as good as new."

Working to quality standards in accordance with ISO9001: 2008, ISO14001:2004 and ISO18001:2007, the company has not had a single accident since its formation in 2006, which is due to its compliance of IMCA operation/maintenance procedures. "From day one of operations SSC has been a member of IMCA; we follow its procedures every day and appreciate the insight and knowledge the organisation has provided us to operate ROVs. It is my opinion that IMCA is worth every penny of its annual fee; without membership gaining projects would be very difficult because it is a requirement to follow IMCA regulations for most existing and potential clients in Vietnam and Asia," says Duc.

Nevertheless, the company's impressive safety record and reputation for quality has not been easily accomplished. "The engineers and technicians in the third world have a different mind set because they mainly come from an agricultural background and therefore have very little concept of accuracy. With this in mind, our main focus has been not only on following IMCA's training syllabus but also going beyond this by offering more simulation and real-time training in our test pool to ensure our staff have a comprehensive understanding of industrial quality. This has proven challenging because, even though we have an advantage from low cost labour, we do spend time and money on training and also end up with a lot of damaged sophisticated hardware. This is a challenge we have faced for the last seven years," explains Duc.

Below Simulation training

With a business plan in place throughout 2014, SSC will continue focusing on the training of its personnel while also searching for mutually beneficial partnerships with diving and construction firms in neighbouring countries around South East Asia. "We have a steady flow of ROV leasing contracts in place, so 2014 will be business as usual with our clients. However, over the next three to five years I believe our big achievement will be our people and we hope to have three or four homegrown supervisors over this time frame. Sometimes we hire supervisors from employment agents, but due to lack of regulations within the ROV industry people can say there are a supervisor when they can't even pilot an ROV. We want to develop fully trained, high quality staff that have the capabilities to take on this role; this is our major goal," Duc concludes. O&G

TECPRO

Tecpro intercom products are UK designed and manufactured and are in constant use by many of the leading ROV operators. Its MS741 Master Station is installed in ROV control cabins worldwide where ROV pilots benefit from its ability to simultaneously operate its inbuilt loudspeaker and microphone without feedback, providing clear communications to technicians outside on deck without the need to wear headsets inside the cabin.

For on deck use, Tecpro's BP511 beltpacks with their virtually indestructible ABS construction are easy to use, even when wearing gloves and can endure the harsh offshore environment. Tecpro headsets are available with single or dual earpieces and combine clear, intelligible audio with comfort when worn over long periods.

Spare parts are readily available and the company offers a speedy repair service if required. It is proud that Seahorse Services has chosen Tecpro intercom products to enable its skilled operators to communicate together safely and reliably.

Seahorse Services Corporation
rov.vn

Services
Repair and maintenance of surface/subsurface structures

Collaboration is key

The decommissioning industry in the North Sea, although still a relatively new business, is continuing to grow at a considerable rate, with projected costs of between £30 and £35 billion estimated between 2010 and 2040. The key to ensuring that decommissioning in the North Sea succeeds is collaboration and co-operation between operators and contractors in order to promote knowledge transfer and minimise risk.

At the core of this ongoing growth in the UKCS is Decom North Sea (DNS), the dedicated North Sea decommissioning forum that was established in 2009 to represent the market by developing models, standards and guidelines for the sector, improving efficiency, containing costs and ensuring economic benefits, and promoting collaboration and the sharing of experience and learning. Today, the organisation, which was last featured in *European Oil and Gas Magazine* in January 2013, has a membership that has grown to over 200 members from the UK, Denmark, Germany, Norway, the Netherlands, and the US.

Previously, Brian Nixon, chief executive at Decom North Sea, highlighted a number of important initiatives that the organisation was spearheading, and as we recently discovered, the last year has continued to be busy. "There has been a lot of activity in terms of responding to the developing market conditions and ensuring that the efforts and emphasis of Decom North Sea are as targeted and effective as possible," he pointed out.

"Alongside this there has been a general increase in activity across the decommissioning sector, as there is a growing awareness of the inevitability of the necessity of decommissioning. Its not going to go away and companies, whether they have a direct responsibility to decommission a particular asset or are a business that can add value to a project, are reaching the conclusion that they really have to seriously start focusing on planning, preparing and investing in North Sea decommissioning.

"On this note, one of the trends we have witnessed since the last time we spoke is a growing number of operators understanding the necessity of making serious progress with the planning and preparation for their decommissioning programmes," he explained. "One of the first things they are doing, thankfully, is approaching us for assistance, guidance and to learn the models and standards that are available to help them understand the broad spectrum of what is actually involved in a decommissioning project."

It is this that reflects one of the key factors of the decommissioning industry thus far -

collaboration and the sharing of knowledge and skills. It is a cornerstone of Decom North Sea's role and something that Brian believes is vital for success, telling us previously that "In our role as a facilitator at DNS we see that in the decommissioning industry there is a strong desire and willingness to share ideas and experiences." This collaboration has already helped drive a number of successful initiatives, including the development and introduction of a standard template for decommissioning programmes that is now used by operators to obtain approval for all decommissioning projects in the North Sea sector.

"One important development at Decom North Sea over the last year has been our introduction of training courses, one of which we are running at the moment," Brian said, highlighting DNS' ongoing promotion of knowledge sharing and learning. "They are proving extremely popular and are attracting interest from across the entire industry from operators and big contractors through to consultants. The course itself is a two-day programme that is run by three recently retired veterans who between them have more practical hands-on experience of offshore decommissioning that anyone I know in the entire industry.

"The course covers the full spectrum of a typical decommissioning project, which can have ten or 11 phases of activity overall, and if we're talking about a major Northern North Sea platform then those phases are stretched over a ten to 12 year period. During that timeframe an enormous amount of work of varying kinds takes place with numerous challenges, so the training courses are designed to cover the overall exercise looking at regulatory issues, possible environmental regulations, project stages and so on to assist all parties involved. We're really happy with how successfully they have been received and we hope that they can evolve depending on the requests and needs of our members, encompassing more specific aspects of a project like well plugging and abandonment in more detail."

The positive response to the training courses and to Decom North Sea's continuing dedication to the industry is a reflection of how important decommissioning will come over the coming years. "There's little doubt that growth will continue," said Brian. "Particularly having seen the latest economic survey from the industry, which demonstrated that the overall projected cost of the decommissioning programme over the next 25 to 30 years has grown from the previous estimate of around £31.7 billion in 2013 to £40.6 billion. I think there is an important message there that as each operator gets into more detail and understands the challenges and complications that they face they are realising that there is much more to the decommissioning process than they may have originally thought. So, each year there is a growing awareness of the challenges and complexities.

"Of course, we will only be successful in the North Sea and in the international markets if the industry as a whole becomes more efficient, cost-effective and innovative, and builds on this somewhat unique attitude to collaboration and co-operation that we have. From our perspective we have built DNS steadily and very effectively over the last four years. Naturally we're under no illusions that we have a considerable challenge ahead of us, which means that if anything our overall engagement with the industry will have to increase further. It's important to remember that this will extend beyond the UK. We're a European organisation and although a large majority of our members are from the UK we have Norwegian, Danish, Dutch, French and US members, and we are very serious about engaging with our European partners to ensure a strong and effective decommissioning industry for the future."

"Of course, we will only be successful in the North Sea and in the international markets if the industry as a whole becomes more efficient, cost-effective and innovative, and builds on this somewhat unique attitude to collaboration and co-operation that we have

DECOM North Sea

Decom North Sea

For further information please visit decomnorthsea.com

Spanning the market

Since its beginnings in 1955, AKD Engineering has been a name that its customers have come to rely upon. With the backing of its parent company, Camellia Plc, the business has been able to make heavy investment to progress its position as it moves forward. Having recently appointed a new managing director, Andrew Quayle, the outlook incorporates a promising vision on an ever-nearing horizon.

In an interview with Denise Farr, sales and marketing manager, addressing the direction of the business, she comments: "We intend to continue with our work with the long-standing clients that attribute to the core business surrounding framework agreements. Additionally however, over the past two years, we have been developing our business in preparation of entering the Norwegian market, and it is a key focus that we intend to move forward with. We hope to secure future fabrication and new build packages, which is a completely new direction for AKD."

Martin Jolley, managing director of Camellia comments: "Alongside supplying to the Norwegian sector on upstream projects, we have secured new dockside facilities which have already seen topside skid packages being fabricated and assembled ready for load out. We have also provided investment growing our machining capabilities, which can produce a broad spectrum of components." Through natural business progression, the company has adapted its approach to dealing with a range of contracts. "Historically, we wouldn't deal directly with Shell but recently they placed a large order with us for the Bacton Rejuvenation Project. The contract is going to continue until at least Q2 2014 with an extension for more pipework and structural work that will take us through to Q1 2015 at least, so the project could look to double," adds Denise.

The business has increased its employees alongside its expansion to additional dockside facilities in Lowestoft, UK. The crewing up of staff has come as a response to the new Bacton project, as Denise says: "We class Bacton as a special project, and we have crewed up directly for that, but as we continue to tender for future special projects we aim to establish the employees as a more permanent fix. We are not looking to just hire and fire as and when it suits."

Aimed at steady and continuous growth, AKD has established longstanding framework agreements with Aker Solutions, operating out of Aberdeen. The agreement fulfils interests in the provision of subsea components, and with the capacity to bring in a lot of work into the east of England, the business additionally works with the global company GE Oil and Gas amongst others. "We are looking forward to securing contracts in Malaysia, providing fabrication in the UK, with export to Malaysia, and we are still working off the west coast of Africa for Rolls Royce and Total. For a relatively small company we work with a lot of key players within the industry and because of our philosophy in treating clients well, we benefit from their return with repeat business," explains Denise.

As clients begin to focus on aging assets, the decommissioning of nine platforms has been sanctioned, and on three the client is seeking the decommissioning to be complete by the end of 2015. Commenting on one particular tender, Denise says: "It is an ambitious time frame, but well within our capabilities if we have involvement from an early stage. We have already had a presence on the platforms in surveying and we are in the process of confirming a schedule with the clients. Having already carried out feed studies, we are fully aware of the full scope of the project. If our tender proves successful, our scope of supply

will focus on topside. We feel positive about the project but it's still a long way off.

"We have had experience in the southern North Sea with AF Decom, and Shell, and we have since completed cost analysis and feed studies for Shell surrounding potential decommissioning interests. One of our key strategies is to become involved in projects as early as we can to be ready to develop a comprehensive and competitive tender. Our business actively plays a supportive role with key clients in pricing the removal of their assets."

In respect to these contracts, Martin adds: "The partnership with AF Decom was a great success and the client was particularly satisfied. The outcome can be attributed to a high-level of expertise and clear lines of communication."

It is experience in the decommissioning sector that puts AKD in a competitive position, as Denise highlights: "Our engineers have worked on several decommissioning projects, and through looking after our employees we have been able to ensure that we have held on to the valuable experience. We have a training budget set aside and we invest a lot of time into our employees and give support to anyone who wants to further their career in a specific direction."

Supporting the drive, Martin explains: "I personally feel the lack of skilled engineers will play a challenge to future projects in the industry in general. It is this challenge that is the drive behind holding onto our core team of engineers, who have played key roles in decommissioning projects in the past."

Statistically, ten per cent of the company's workforce consists of apprentices training at Lowestoft College. Explaining the method behind ensuring a bright future for the business, Denise concludes: "We work from an early stage with the schools to inform pupils about the opportunities available to begin a future in engineering. Each apprentice on their fourth year is offered long-term employment, and many of the employees we have today have developed through this path." O&G

> Our engineers have worked on several decommissioning projects, and through looking after our employees we have been able to ensure that we have held on to the valuable experience

AKD Engineering Ltd
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Services
Engineering, manufacturing and offshore services

Integrating expertise

Leading the way as the largest provider of brownfield services to the oil and gas industry, Wood Group PSN was formally established in April 2011 as a result of a merger between the production facilities segment of engineering specialist Wood Group and independent brownfield contractor PSN. Today boasting a global network of more than 29,000 people in over 40 countries, Wood Group PSN is involved in 60 per cent of North Sea deepwater projects and is globally renowned for its decommissioning services.

Previously in *European Oil and Gas Magazine* in May 2012, Willem van Es, decommissioning manager of Wood Group PSN discusses the division's recent developments: "The biggest change over the last few years has been an increased focus on more collaboration between the various divisions of Wood Group. Our CEO Bob Keiller is keen to have Wood Group Kenny, Wood Group Mustang and Wood Group PSN working more seamlessly to develop a more unified vision. We have also integrated the legacy decommissioning capability of Wood Group Engineering and Production Services Network into one combined, integrated group known as the decommissioning centre of excellence. We have housed this new team in an office in Aberdeen so they are based next to the decommissioning services contract (DSC) for Shell."

Cementing the group's commitment to all phases of decommissioning activity, the decommissioning centre of excellence will bring all of the services relevant to this sector into one strategic location, a move that will offer customers increased efficiency and more innovative solutions as personnel operate in an environment of learning and constant improvement. "We are striving to push these developments further so we can provide a single point of access to our clients, meaning they can access the decommissioning expertise of Wood Group PSN, Wood Group Kenny and Wood Group Mustang," adds Willem.

Wood Group PSN delivers a comprehensive portfolio of brownfield asset lifecycle services that spans hook up and commissioning through to shutdown and decommissioning. With offices spread across six global regions, Wood Group PSN moves its people to areas of demand to ensure customers get expert help when it comes to maximising the lifecycle of their assets as well as boosting the potential returns during said lifecycle.

Offering major benefits such as improved safety, increased production, field life extension, significant reduction in operating costs and downtime, it is clear to see why Wood Group PSN has such a dominating presence in the North Sea. An example of its drive to find innovative cost-effective solutions is a ground-breaking piece of technology and North Sea first that reduced wellhead pressure and doubled production rates, all while delivering a return on the cost of the project in a mere two months. Following a successful trial of this technology, the business now aims to introduce it across all of its customers' assets in the future.

No stranger to game-changing solutions, Wood Group PSN has a long-term contract with Shell UK for decommissioning work on the Brent Field platform's topsides. The Shell Brent field decommissioning project, which includes the four platforms Alpha, Bravo, Charlie and Delta, began in the final quarter of 2011 when Brent Delta ceased production. Services have since involved taking the Brent Delta from production, through cessation of production,

> The other area of focus for us is our close working relationship with Decom North Sea and Oil and Gas UK; the intention behind this work is to come up with efficiency gains in four key areas of decommissioning alongside other operators and service companies that are a part of Oil and Gas UK

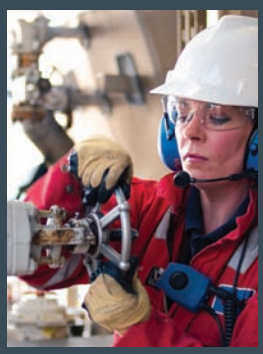
engineering down and cleaning in preparation for the platform's removal. In 2013 Shell announced its plan to remove the Brent Delta with a single lift vessel option.

Discussing the massive project, Willem highlights: "We are helping Shell to prepare the topsides of the Brent installation as they reach the end of their producing life, then prepare them and ensure they are safe for removal so they can be brought back onshore to be reused, disposed of or recycled. We are currently working on the Brent Delta installation while also providing operations and maintenance support to Shell, which has led to a need to split the team. Now we have moved our operations and maintenance personnel up into the Shell asset with the Brent Alpha and Brent Bravo asset teams to share some of the lessons learned on the Brent Delta to ensure more efficient decommissioning of these installations in the future."

He adds: "Shell announced last year that the Brent Delta will be removed with a single lift vessel option; to do this we will use a new Allseas vessel that is currently being constructed. This is a game changer for the industry because these big installations were previously removed in a reverse installation fashion where all of the modules were taken off separately. We are now working closely with Shell to prepare the underside of the installation to allow this new vessel to come in and lift it up for removal to onshore; this is an interesting project to be a part of."

With a productive and successful two years behind it, Wood Group PSN is focused on further embedding the decommissioning centre of excellence into its business while also working closely with its clients such as Shell, BP and Fairfield throughout 2014. "Once we can provide this service globally we can then attempt to share our decommissioning knowledge to oil and gas companies around the world because we are conscious that it is a fairly young industry, particularly in regards to large offshore oil and gas installations. There is also some cross learning that has to happen from the Gulf of Mexico for the smaller, more shallow installations in the Southern North Sea, so it is really important to try and share experiences across the world to ensure we apply the right solutions to the assets we are attempting to remove," says Willem.

"The other area of focus for us is our close working relationship with Decom North Sea and Oil and Gas UK; the intention behind this work is to come up with efficiency gains in four key areas of decommissioning alongside other operators and service companies that are a part of Oil and Gas UK. The focus is currently on plugging and abandonment of Wells, project management, facility owner's costs and removals. Ultimately we want to try and share experiences of operating in the decommissioning industry through collaboration," concludes Willem.



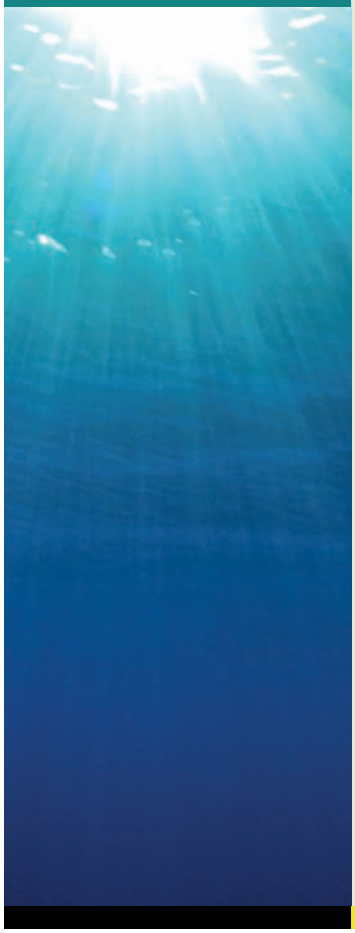
HPF ENERGY SERVICES

HPF Energy Services is a specialist supplier of pipeline components to the oil and gas, petrochemical, and offshore engineering and construction sectors and is part of the Marla Group, with a combined turnover of over £120 million. We are proud to be a preferred supplier to Wood Group PSN, and we look forward to a continued strong relationship and wish Wood Group PSN every success in its decommissioning activities.

Wood Group PSN
woodgroup-psn.com

Services
Decommissioning, support services

AgustaWestland



AgustaWestland has seen its presence in the oil and gas operations market constantly growing with a 56 per cent market share in the last five years thanks to a wide and complete range of dedicated models that have achieved significant, and in some cases, unequalled success among prime operators and in key regions. Bristow Group has become a critical partner to AgustaWestland and one of the most important customers for its offshore-dedicated products worldwide.

The excellent lesson learned through the intermediate twin AW139 has been key to further expanding the already impressive AgustaWestland product range, launching the new generation AW169 light intermediate and the AW189 8-tonne class twin-engine models.

The AW169 10-seat is the only new generation aircraft in its class in decades and offers outstanding flexibility and technology solutions. The AW189 18-seat has been designed to meet the latest and future long range, high endurance requirements and features a first ever 50 minutes 'run dry' capable main gear box, 20 minutes more than the current certification standards, offering unprecedented levels of reliability and safety.

All of those three models, based on the same design philosophy, share several commonalities and modularity solutions. This Family concept approach allows maximised effectiveness in helicopter fleet management for operators introducing at least two out of three types from the Family.

Various customers have already welcomed this unique opportunity with orders for the Family. Among them, Bristow itself will soon operate 17 AW189s (of which six are for offshore missions) together with the 15 AW139, and will benefit from the unprecedented advantages of having both types in its fleet.

High flyer

With more than half a century of experience in providing exceptional, first-class helicopter transportation and related services to the offshore oil and gas industry, Bristow Group is the largest helicopter service provider in the market, with global operations encompassing helicopter transport services as well as search and rescue (SAR) services in the Netherlands, Norway, Trinidad, Cyprus, Dutch Antilles, Russia, Brazil, Australia, and Canada.

The company was the first civil helicopter transport company to work in the oil and gas industry, and since this time it has grown alongside the sector, earning an unrivalled reputation for safety and excellence in transporting both people and material to and from oil rigs in often harsh or unpredictable environments. Bristow's aircraft support energy companies from facilities around the world, representing a modern, state-of-the-art fleet that provides an operational and geographic flexibility that is unmatched in the helicopter industry. The business has operated in Europe and the UK for nearly 60 years through its subsidiary Bristow Helicopters, offering crew transport services to offshore platforms and

production facilities in the North Sea from six bases in the UK, one in the Netherlands and four in Norway.

The company provides a vast range of services encompassing helicopter transportation to offshore oil and gas installations worldwide, search-and-rescue (SAR) services, and aircraft support services such as aircraft maintenance, modification and repair, and aircrew and ground crew training. For clients in the oil and gas sector Bristow maintains a significant fleet of helicopters that can provide offshore transport, onshore transport and VIP transport, between on and offshore facilities, bases and other locations.

Whilst this is a well-established market for Bristow Group in which it is a world leader, the business has been focused on expanding its SAR services in recent years, with the ambition of becoming the main provider of such services in the UK and UKCS markets. Globally, Bristow has been a world leader in SAR services for many years and as such has an established SAR presence in a number of regions including Brazil, Russia, Australia, Trinidad, Norway and the Netherlands, and Canada.

The business has been providing SAR services to offshore clients in the UK since the early 1970s, during which time it has accumulated more than 44,000 operational hours and rescued more than 7000 individuals. This experience and its reputation for excellence saw Bristow Helicopters be awarded the Department for Transport UK Gap SAR contract for Northern Scotland in 2013. This four-year contract involves the provision of SAR services to the region in conjunction with the Maritime and Coastguard Agency, operating four Sikorsky S-92 aircraft out of Sumburgh and Stornoway.

These helicopters, which are relatively new additions to the fleet are an ideal platform of SAR operations due to their featuring the latest state-of-the-art technology that will provide unprecedented search and rescue capabilities. For example, the S-92 is the first to be certified for night vision goggle (NVG) technology and offers forward-looking infrared (FLIR) and thermal imaging camera technology for better searching capabilities. They are also the first aircraft in Europe to be fitted with Trulink wireless capabilities for communication between aircraft and crew.

Speaking previously to *European Oil and Gas Magazine* regarding the UK Gap SAR project, Mark Duncan, senior vice president of commercial, who manages Bristow's Original Equipment Manufacturer (OEM) relationships, said: "The award of the UK Gap SAR contract is something that we are very proud of, and represents a major milestone both commercially and operationally. We are able to provide the most technologically advanced helicopters – especially critical in Northern Scotland's adverse weather conditions."

Operations for this contract are due to commence in 2015 and run through to 2026, with Bristow operating from ten SAR bases that are strategically located at airfields near areas of high incident rates. As part of this contract new facilities will be established at Inverness, Manston, Prestwick, Caernarfon, Humberside, Newquay and St. Atahn, while the current base at Stornoway will be refurbished and modernised. As an example of Bristow's reputation, this represent that largest ever SAR contract awarded by the UK government, equating to approximately $2.5 billion in revenue and representing a considerable endorsement of the company's capabilities in the field.

Alongside development in its SAR operations Bristow continues to secure work in the oil and

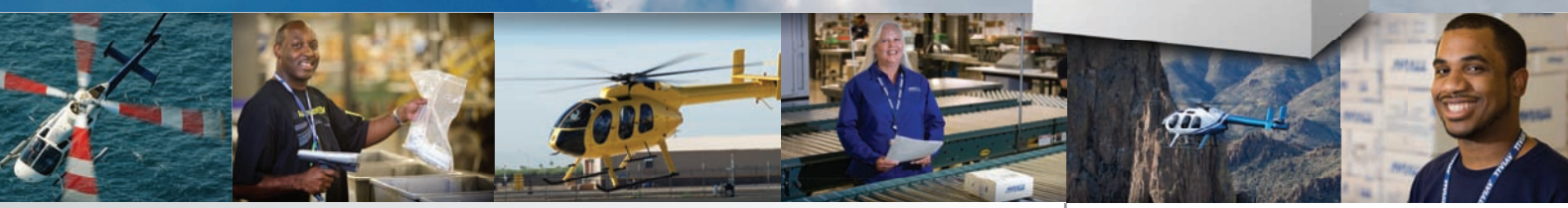
ROCKWELL COLLINS

Aviation history was made on April 9th, 2008 when a Super Puma helicopter operated by Bristow Helicopters departed from Aberdeen Airport with a Rockwell Collins Traffic Alert Collision Avoidance System (TCAS II) operational.
This was the first time that a helicopter was taking off with the same level of enhanced safety that TCAS II has provided to fixed wing aircraft for many years.
In continuing with historical events, Bristow Helicopters as launch customer of the AgustaWestland AW189, will take delivery of Rockwell Collins' advanced cockpit display system including HeliSure applications (Synthetic Vision, Terrain Awareness and Warning System) as well as TCAS II.

300

300 is the number of Aviall customer service professionals deployed around the world who can help helicopter operators and maintenance providers save money with Aviall's LIFT program.

No other aviation parts provider works harder to serve helicopter operators. **Aviall Delivers.**



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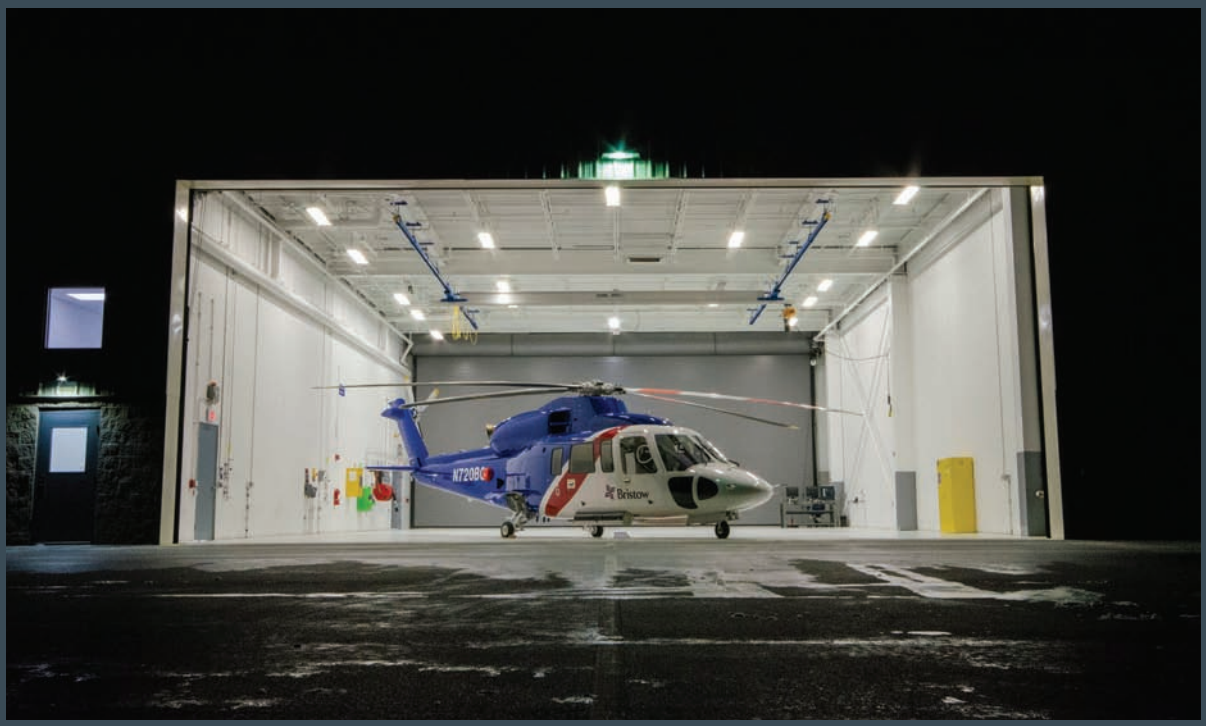

SIKORSKY AIRCRAFT CORP. AND BRISTOW GROUP, INC.

In December 2013, Sikorsky Aircraft Corp. delivered its first fully configured S-76D helicopter, the latest in the long and highly successful Sikorsky S-76 commercial aircraft family, to the Bristow Group Inc.
The delivery followed an announcement in March 2013 that Bristow would acquire up to 26 S-76D helicopters to transport oil rig workers to and from offshore platforms.
"We share a 40-year relationship with Bristow which is based on a culture of safety and quality," said Carey Bond, president, Sikorsky Commercial Systems and Services. "We are thrilled to have delivered the first completed S-76D aircraft to Bristow, and thank them for their continued trust in our products."

gas sector, most recently signing a significant long-term contract with BP Exploration Operating Company. The contract, which is for a five-year term with an option to extend, is for the provision of helicopter services and is worth around £125 million. During the five-year period Bristow will provide a range of helicopter support services to BP's offshore installations to the West of Shetland and in the East Shetland Basin, commencing July 2015 with two sole-use Sikorsky S-92 aircraft that will be based at Sumburgh Airport in Shetland.

Speaking on Bristow's website, Mike Imlach, director of European operations for Bristow Helicopters Ltd said that the contract was: "A significant win for Bristow, we look forward to operating a safe, efficient service supporting BP's offshore requirements from Sumburgh. This contract also will grow our presence in Shetland, where we already provide search and rescue services to the Maritime & Coastguard Agency from Sumburgh Airport and offshore helicopter services to the Integrated Aviation Consortium from Scatsta Airport."

Naturally, operating in offshore environments places the highest possible emphasis on safety – an attitude that pervades throughout the entire Bristow Group. Aviation in the oil and gas industry has seen considerable focus placed on safety in recent years, with a number of incidents highlighting the inherent dangers of operating aircraft over water and in harsh conditions. Nonetheless, technical competence, rigorous and unending attention to procedure and a renowned safety culture have seen Bristow earn a sterling reputation for being a strong, safe and reliable operator.

In this vein the company pursues Operational Excellence and world-class performance in every aspect of its business, striving to continually improve its clients' experience of its services. To achieve this it operates its unique Target Zero safety culture, which was initiated in 2007 as a method of engaging all employees to become proactive in safety, ensure that they are aware of

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POWERFUL EFFICIENT RELIABLE

In the demanding offshore oil environment, your mission is to bring people home safely.

That's our mission, too. Our S-76D helicopter delivers – with safety, reliability and performance. Technology meets tradition with advanced avionics, powerful engines and sophisticated safety equipment. Backed by first class service and support, the newest model of the legendary S-76 series is ready to deliver for your mission.

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and report unsafe practices, and take action to eliminate any dangers throughout all Bristow Group operations.

The company continuously improves its safety programmes, and has recently expanded Target Zero into additional areas of Target Zero Accidents, Target Zero Downtime and Target Zero Complaints, all of which help ensure that the business consistently performs higher than the industry average when it comes to safety.

Naturally, maintaining such high levels of safety rely heavily on training, and Bristow's training programmes are unmatched in the helicopter industry with the Bristow Academy having grow into the world's largest commercial ab-initio helicopter training service provider, training thousands of helicopter pilots from around the world. At its training academy Bristow has more than 50 helicopters, capable of training for a multitude of operational capabilities, as well as numerous simulators. When the company previously featured in *European Oil and Gas Magazine* it had recently invested in the acquisition of a £4 million S-76C++ flight simulator, to sit alongside the existing S-92 and EC225 simulators already in place. There are additional plans in place during 2014 to invest further in training capabilities, with the company making preparations at its Aberdeen training facilities for a fourth flight simulator to train pilots from across the globe on the new AW189 helicopter.

Alongside investment in training facilities Bristow places fleet expansion as a key strategic aim, regularly introducing additional aircraft of existing types, as well as new models, to its stable. Most recently the company has taken delivery of the new Sikorsky S-76D helicopter, bringing the latest and most advanced offshore helicopter technology to its clients, including faster cruise speed, increased range, more efficient fuel use and a quieter and more comfortable cabin.

"We are committed to providing the safest, most reliable and efficient service to our clients, and our S-76 aircraft have done just that by consistently performing on an aggressive schedule. We look forward to putting the S-76D, with its enhanced capabilities, into our operations around the world," explained Bristow president and COE William E. Chiles on the company's website.

Indeed, the S-76D brings with it many advantages over previous models, including improved power and performance by using all-composite main rotor blades, and Pratt & Whitney PW210S engines to offer a maximum cruise speed of around 155 knots and a maximum range of more than 440 nautical miles. In line with the company's safety targets, the helicopter also features Dual Full Authority Digital Engine Control (FADEC) systems that continuously monitor critical engine functions.

Moving into 2014, with a company of Bristow's standing, there is little doubt that further growth and expansion will continue to place the business at the forefront of the helicopter industry. Alongside maintaining

operational growth and expanding its operations the business remains dedicated to improving its operational excellence and being committed to the highest levels of safety and quality. All of which will ensure that Bristow remains the leading name in offshore and onshore helicopter operations for years to come.

As William E.Chiles explained in the company's 2013 annual report: "I believe that the future of Bristow is very bright with many exciting business opportunities and possibilities. Our vision, mission and core values, with safety first, that we created over nine years ago are still with us today and provide us direction. This is the strong heritage that Bristow has to offer its clients, customers, employees and investors. We believe humility is one of our greatest virtues, and we're careful to avoid patting ourselves on the back. So we will continue working hard to deepen our relationships with our clients, expand our already world-class capabilities, and drive for unmatched operational excellence, while continuing our prudent and proven financial strategy." O&G

AVIALL

Bristow's global operations and uniquely diversified fleet works seamlessly with Aviall's LIFT Program, which is designed to save operators and maintenance providers time, warehousing, resources and money. With distribution centers around the globe, Aviall is able to place materials from its broad portfolio of industry-leading brands at various locations close to Bristow's operations, helping them reduce their inventory and administrative costs. In addition, Aviall and Bristow have collaborated successfully to connect computer systems in real-time through Aviall's Web Services Program, which allows Bristow to see current price and availability. These functions benefit Bristow by helping them decrease their vendor lists, eliminate multiple freight charges, and eliminate unnecessary fees.

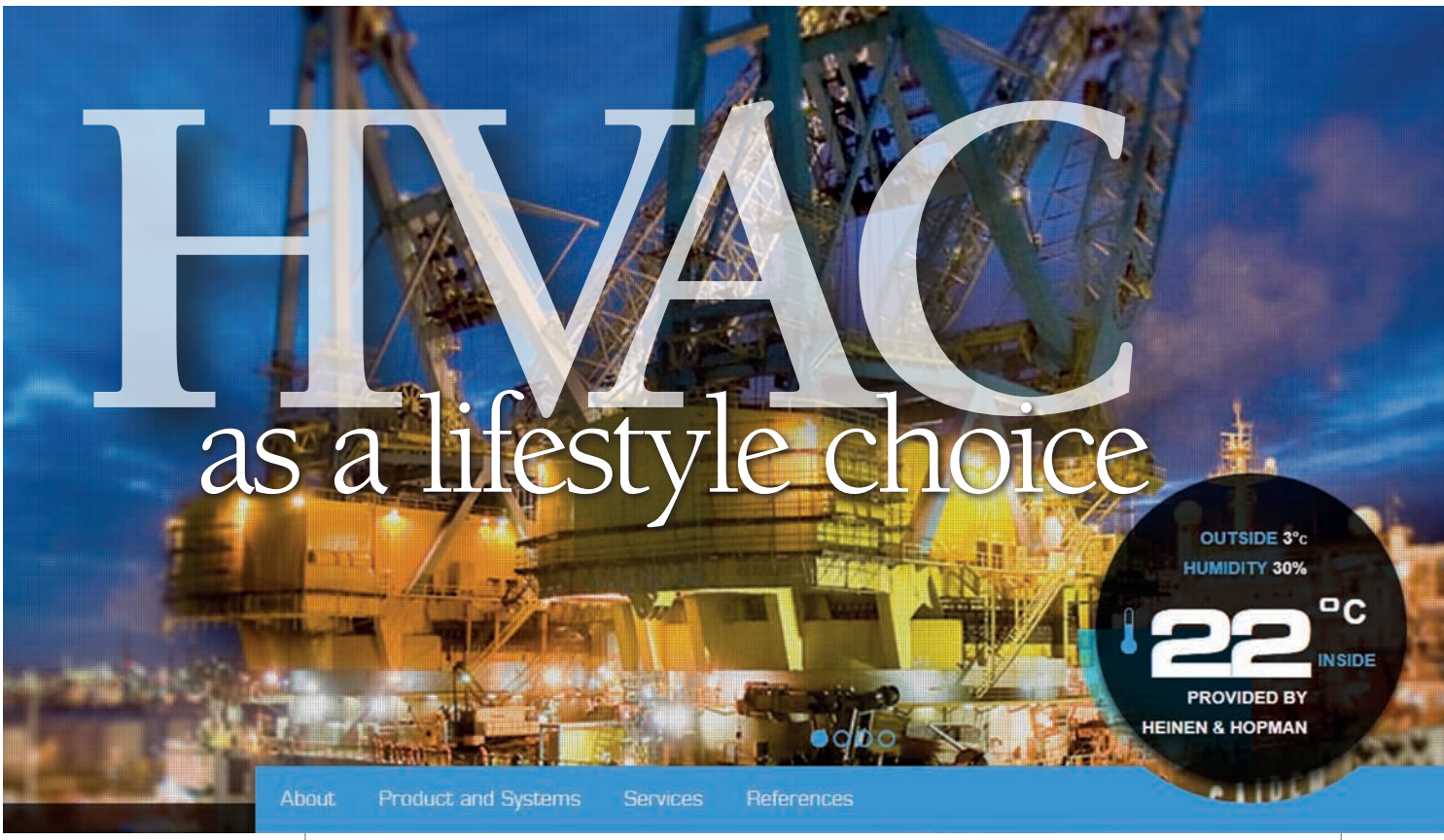
Aviall supports the different types of operations that Bristow maintains, whether it is in the North Sea, Gulf of Mexico, Nigeria, or any of its other locations. Aviall knows that Bristow's fleet requirements change from time to time and strives to ensure it receives the right part at the right place at the right time.

Aviall, a wholly owned subsidiary of The Boeing Company, markets and distributes products for more than 240 manufacturers and offers approximately 2,000,000 catalogue items from 40 customer service centers in North America, Europe and Asia-Pacific.

Bristow Group
bristowgroup.com

Services
Helicopter transportation

HVAC as a lifestyle choice



Established almost half a century ago in the Netherlands, Heinen & Hopman Engineering is a family business known for its highly sophisticated HVAC systems. The company is the first port of call for top superyacht builders, serves commercial shipping and navy clients around the world, and is widely recognised as an innovative partner for oil and gas concerns seeking optimal conditions on rigs and vessels. Now a new global strategy combined with an enhanced commitment to eco-friendly solutions is set to bring further recognition to this iconic brand.

"Whichever sector they are active in – from computers to hamburgers – the challenge for companies is to ensure that their brands are recognisable and memorable," says Heinen & Hopman director Joep Hopman with conviction. "They should be seen as lifestyle experiences and choices, not products. And this message needs to be communicated in the right way while also being proven in practice in the everyday lives of those who rely on these systems for safety and comfort."

Below
Heinen & Hopman director Joep Hopman

Broad portfolio

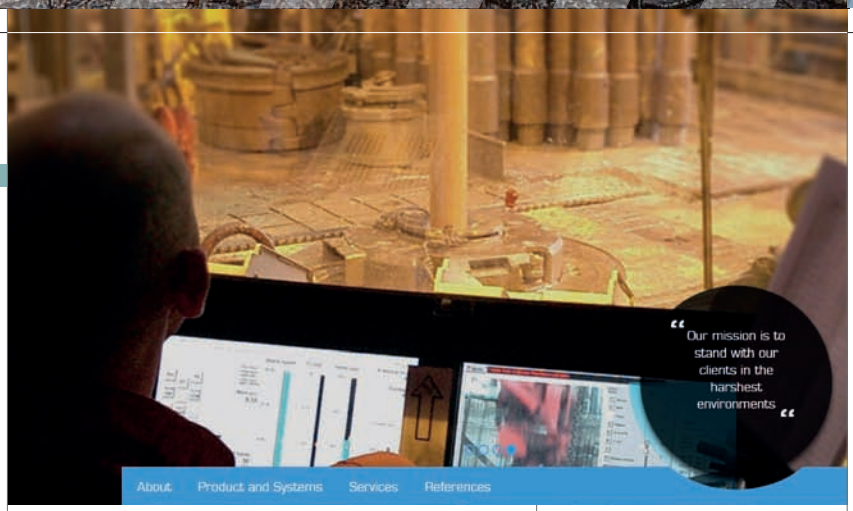
Hopman and the circa 1500 other experts who work for Heinen & Hopman certainly have an impressive portfolio of systems and solutions to offer. Over the decades the company has consistently set the standard for the design and manufacture of HVAC products in standard and bespoke designs, produced in a variety of sizes, models and capacities.

"The synergies that result from being involved in several maritime sectors have been a key factor in our success to date" adds Hopman. "Our ability to deliver first-class products and solutions has driven Heinen & Hopman's reputation. But it has been largely through word of mouth recommendations and our commitment to long-term customer relationships that we have been able to diversify in this way."

Brand awareness

With expansion comes increased competition, and to accelerate the rate of its growth Heinen & Hopman has identified a need to increase its brand awareness within the global market in a more structured manner. "Those who put quality first and want the best for their staff will eventually find their way to our doors, but our goal is to make the road there shorter and more easily signposted," continues Hopman.

"Take, for example, the new generation of our battery powered temporary refuge ventilation units for offshore applications. The TR unit is currently being subjected to a stringent testing regime at Camfil in Sweden and will be launched in May. Such an innovative solution that could offer benefits to so many in the oil and gas industry must receive the exposure it deserves."



Looking the part

A new marketing and communications strategy has been created that takes fully into account the rapid pace of technological developments and the need to have an identity that sets Heinen & Hopman apart from its competitors (Hopman calls it "looking the part"). A uniform, consistent identity and communication style is being rolled out and the strategy involves much more than words alone: it will go hand in hand with an ongoing extension of Heinen & Hopman's global network of offices, agents and sales and after-sales centres. In addition to the company headquarters in the Dutch town of Bunschoten-Spakenburg and a branch in Rotterdam, there are Heinen & Hopman subsidiaries in Brazil, China, France, Germany, India, Italy, Romania, Russia, Singapore, South Korea, Spain, Turkey and the United States.

The latest addition to the network is in the UAE. Based in Dubai, CASP has been a specialist supplier of HVAC for marine, offshore, oil and gas, industrial and commercial applications since 1988. Just like Heinen & Hopman, it offers complete solutions that are tailor-made to client requirements and budget.

Innovation matters

In addition to physical expansion to support customer requirements wherever they may be, Joep Hopman also emphasises the vital importance of innovation. "The continuous development of our client relations and our company partly depends on enhancing products, services and operational processes. Innovation is crucial to keep our expertise in the field of climate control up to par, and maintain our leading edge. This is why we continuously develop our knowledge and pass it on to our clients. Heinen & Hopman's vision on innovation is based on the conviction that we need to find creative and sustainable ways to face future challenges and client demands."

Ecologically responsible

This thinking extends to the ever more relevant issue of the environment. As a nation the Netherlands has long been a forerunner in the fight to protect our planet from unnecessary harm, and Heinen & Hopman has been a leader in this respect both within its home country and across its worldwide market.

"Heinen & Hopman products and systems have a reach that spans land and sea and we are genuinely concerned with adapting our solutions both for ourselves as residents of Planet Earth and the marine ecosystem," Hopman explains. "There is also a business side to this as many of our customers are also very keen to act – and be seen to act – in an ecologically responsible manner."

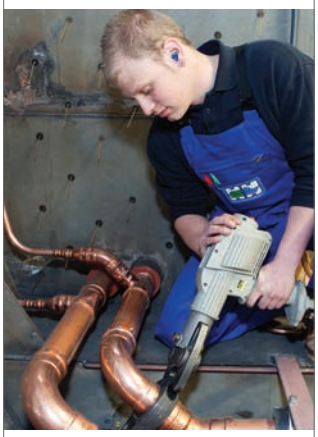
Green manifesto

Heinen & Hopman's mission and vision is therefore for a large part focused on the twin tenants of sustainable innovation. Its 'green manifesto' aims to increase awareness within the industry of the importance of environmentally sound solutions. The green manifesto logo appears on Heinen & Hopman's sustainable products and systems as well as information collateral.

The dedication to providing sustainable solutions begins within the company's offices and the general day-to-day running of the business and its assets. For example, geothermal energy is used within the firm's HQ and it strives to recycle whenever possible. Video conferencing is efficiently employed to allow communication between the company and its affiliates and avoid unnecessary travel, while Heinen & Hopman service and company cars are being replaced by electric vehicles wherever possible.

When it comes to 'in the field', Heinen & Hopman's line of Eco-Logic products and systems provides customers with the opportunity to lower energy consumption and CO_2 emissions. Other eco-friendly solutions include energy recovery from cooling water, choosing the best type of compressor, drives and so on, the smart design of HVAC spaces, efficient ventilation solutions, and savings on operational and maintenance costs.

"From now on our green philosophy will be shared across all communication platforms including the website, advertisements and brochures," concludes Hopman. "This will further increase awareness of how Heinen & Hopman is investing in a better and more efficient tomorrow." O&G



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Heinen & Hopman
heinenhopman.com
/en/offshore/

Services
Climate control technologies

Quality on top

Incorporated in 1986, ETAP has grown to become the largest power system analysis software firm in the world. Offering a complete spectrum of services in analytical engineering, ETAP has specialist experience in the planning, design, analysis, operation and automation solutions of power systems. Today, with more than 50,000 licenses in more than 100 countries around the world, ETAP is the most turnkey power system enterprise solution. "The company's headquarters is in California, US where ETAP's developments and testing are taking place. Offering our services to various economical sectors, we have grown 25 per cent year on year since our inception, today reaching 700 employees delivering services across the globe. We have 250 people working in-house on design, development and research support and approximately 500 people working in our 75 sales and support centres through our reps," begins Shaikh Sahid Hossain, vice president of ETAP Automation FZ LLC.

Gaining momentum over the last 27 years, ETAP has served more than 10,000 customers within the oil and gas, metal and mining, utilities, renewable and nuclear sectors. With a mission to provide state-of-the-art products and unsurpassed engineering services, ETAP delivers customer satisfaction through the combination of ultra-modern technologies and the utmost levels of quality. "Broadly speaking, we provide solutions for power systems from design, analysis, operation, automation and optimisation for a wide range of industries. The major share of our services is within the oil and gas industry, followed by metals and mining and utilities. Major customers within our dominant area of operation include British Petroleum, Total, ENI, ADNOC, KOC and Saudi Aramco, to name a few with which we are currently working on multi-build projects," discusses Hossain. "We are providing the power management and power automation solutions for Saudi Aramco's Power Distribution applications; this is one of the major projects that we have been involved with as Saudi Aramco is the largest oil and gas exploration company in the world."

Ensuring power reliability and manageability in the most remote, challenging and inhospitable locations in the world, ETAP is trusted by the major oil and gas firms to achieve a facility power system design that is wholly prepared for all situations and environments. Having invested billions in the construction of safe, efficient and solid electrical power infrastructures, oil firms rely on ETAP to protect their electrical systems, minimise any down time and have critical load running 24/7. Furthermore, ETAP's online platform, ETAP Real-Time, aids in the identification of power issues way in advance of any potential jeopardy towards the facility.

Offering a wealth of benefits, ETAP Real-

Time is designed to put customers in control of the operation, maintenance and planning of their electrical planning system through its key features of predicted system response to operator actions, system optimisation and automation, a multi-dimensional database, integrated alarm, warning and acknowledgement, and fast, optimal, and intelligent load shedding and restoration. Furthermore, the software's overall system optimisation and power loss reductions save energy costs, with up to thousands of dollars per MVA of load saved per year. Meanwhile, systems with abnormal loses, energy cost penalties and circulation power will see a significant increase in savings. Through reducing energy usage, optimising system operations and enhancing power system reliability, ETAP Real-Time delivers an immediate and long-term return on investment.

Committed to product development and customer satisfaction, ETAP spends a large per cent of its income on research and development (R&D) and has a pool of electrical scientists working at the company's headquarters in California, as Hossain explains: "ETAP's scientists bring in their different domain knowledge to enhance customer experience through user friendly products. Most of the R&D department and executive management committee have been with us since our inception, so some of our personnel have more than 20 years of experience working on the same product line. This expertise is why ETAP is ahead of the game and leading the way; our R&D department has been closely monitored by the CEO/president Dr. Farrokh Shokooh of ETAP, who knows that electrical scientists make a huge difference to the quality of a product."

By meeting the evolving needs of clients through the incorporation of ultra-modern advances in power and software technologies, ETAP has aggressively expanded its presence in countries around the world. Looking ahead, this trend looks set to continue for the innovative firm, as Hossain discusses: "We have opened eight new offices around the world in the last four years; this expansion enables us to offer close support and proximity for our customers. Over the coming five years, as a dominant player in the oil and gas industry, we plan to open no less than five additional offices. We will be looking at strategic areas such as the Middle East and the African market as these locations offer a lot of growth potential over the coming years. We aim to capture 30 per cent of the market share in the MENA oil and gas industry in 2014 and aim to grow our company." OSG

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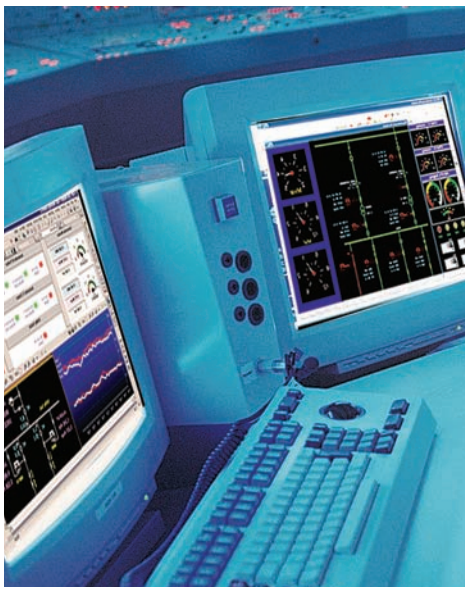
ETAP Automation FZ LLC
etap.com

Services
Power system analysis and power management solutions



All challenges met

Since it last appeared in

European Oil and Gas Magazine during November 2012, Stockton Drilling Limited (SDL) has continued to deliver specialist, turnkey solutions in both traditional pipeline installation and horizontal directional drilling (HDD) within the oil and gas and renewable energy industries. The family owned business is based in Wakefield, UK, but its 50 staff service projects for an international market with customers including major industry players such as Shell, BP, Aquamarine Power, E.ON UK, National Grid, and Wessex Water.

The company has been in operation for over a decade since it was founded in 2001 and some members of the Stockton Drilling team have as many as 25 years of experience, having previously worked together within the drilling sector. The company director Gearoid O'Connell, for example brings 20+ years of engineering problem solving to the business, which has allowed it to develop and employ innovative drilling solutions. These include applications for drilling and installing pipelines underneath geographical obstructions, such as rivers and canals as well as man-made hazards such as roads, railways, runways and existing pipelines. While the principles behind HDD may appear relatively simple, the skill and expertise required to execute HDD operations is significant. This is why SDL is currently the preferred choice when it comes to shore approaches for wind farms, wave energy machines and cable landings within the UK renewable energy sector.

Working with pipeline diameters ranging from six inches to 48 inches and lengths of between 300m and 1800m, the company is able to facilitate HDD operations through the employment of just three stages. In the simplest terms, a project begins with the drilling of a pilot hole. This is followed by a process of reaming out the hole to the required diameter to accommodate the product pipe. Finally, the pipeline is pulled or pushed through the pre-drilled hole. Recently, SDL was delighted to announce the completion of a two-kilometre drill between the islands of Orkney and Shapinsay in Scotland. The focus of the project was to install a pipeline under the seabed to deliver water to the small island of Shapinsay to

enable the local community to be supplied from the Orkney mainland.

To enable the delivery of the water to the island, SDL installed a 180mm diameter HPPE, high-pressure polyethylene pipe system. These robust pipelines are not only able to operate from temperatures between minus 40 degrees Celsius and 60 degrees Celsius but also offer excellent impact resistance. SDL employed its 250 tonne HDD rig to complete the two-kilometre drill, resulting in the installation of one of the longest pipelines in the country currently used for water supply.

When it comes to traditional pipeline installation, the staff at Stockton Drilling are all highly experienced, technically adept and efficient in all areas of open cut pipeline installation and as such the company is able to offer turnkey services in this area, incorporating a whole spectrum of applications including design, feasibility studies, procurement, installation and reinstatement.

The company also offers equipment hire for specialised HDD applications meaning that whether clients require a full package of services or additional HDD hardware, SDL is able to provide the appropriate solution. In addition to its already comprehensive service base, SDL has recently further expanded its operational capability through a joint venture with the Swedish firm, SWEOffshore. Through providing joint services in highly specialised sectors, SDL is now able to offer hydrographical services including bathymetrical survey and current recordings, as well as geophysical services extending to geophysical survey, bottom survey, sea floor composition, marine geological mapping and sediment classification. On the physical side, the joint venture allows SDL access to vessel hire services including crew boats, crew accommodation and work boats, allowing for marine investigation services, such as environmental monitoring, marine benthic surveys and seabed sampling and analysis. These services can also be supported by diving operations incorporating inspection, maintenance, repair and live 3D monitoring.

With SDL and SWEOffshore each able to share in the collective services provided by this highly beneficial joint venture, both firms can boast a highly specialised and impressively diverse range of services. As a result, in terms of unconventional and challenging drill projects with the support of dedicated survey services, the package on offer from SDL and SWEOffshore is second to none.

As 2014 progresses and the company looks to the future, SDL will seek to increase its global footprint and continue to grow within the international market. While the business is relatively small compared to larger operators, this is an advantage for the firm. It is able to offer highly focused services to its clients that are both highly flexible and innovative in execution in a way that is difficult for larger more bureaucratic organisations. As a family run business, communication within SDL is incredibly efficient, which will be of huge importance in increasing its global reach, with a particular focus on Australia and Algeria over the coming years. Likewise, technological innovation is at the forefront of what SDL has to offer and will continue to develop. Alongside its own research and development, joint ventures like that with SWEOffshore display a level of business acumen and technological drive that will spirit SDL into new markets and an increasing market position for many years. O&G

Stockton Drilling Limited
stocktondrilling.com

Services
Traditional pipeline installation and HDD drilling

Field of dreams

In March 2013, Rosenberg WorleyParsons AS was officially established following the acquisition of Bergen Group Rosenberg, a business whose trading heritage can be traced back to 1896. With initial interests lying in shipbuilding and repair, the company laid roots at Buøy, Stavanger, Norway, where it remains located today. In 1979, Rosenberg made its first steps into the offshore industry with the construction of the Statfjord B deck. Following this project, Rosenberg became involved with many of the major projects off the Norwegian Continental Shelf (NCS), and for over 30 years has remained at the forefront of the industry.

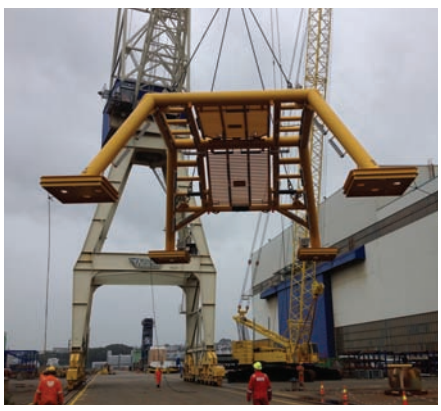
Although traditionally the business has served activities on the NCS, the shift in ownership, becoming part of the worldwide WorleyParsons operation, has brought about new opportunities to explore outside of Norway. New global systems and procedures are being incorporated into the business, and access to new tools and assurance processes will strengthen the technical stewardship and bring about new relationships within the corporation.

Having traded as part of WorleyParsons for almost 12 months now, *European Oil and Gas Magazine* spoke to chief executive officer Kristin Færøvik: "The last year has been a great journey for us. We have finished the transition phase and now have access to colleagues with expertise and specialist competence, and capacity from other subsidiary engineering companies within the group in different locations around the world.

"The business interest of Rosenberg WorleyParsons remains in brownfield modifications, i.e. modifications to existing installations on the NCS, primarily under EPC contracts. Offshore finalisation, installation and commissioning are still very much a part of what we do, and we continue our line of fabrication work based on detail design or engineering plans received from customers."

The company has been working on the Ekofisk accomodation platform for ConocoPhillips, providing hook up and commissioning assistance. As the project draws to a conclusion, Kristin announces: "Our work on the Ekofisk living quarters, the largest offshore accommodation unit in the Norwegian

O&G



North Sea with 552 single person cabins, is progressing according to schedule and the customer is very pleased with the performance of our team."

Rosenberg WorleyParsons is currently undertaking a new contract with GE Oil and Gas for the delivery of 14 subsea structures to Statoil's Snøhvit field, and is working alongside its new sister subsidiary, subsea specialist INTECSEA. "This is our first real test of working together with another WorleyParsons entity. It is progressing really well and we look forward to similar working relationships in the future," says Kristin. The work is due to be completed for delivery by May 2015.

Rosenberg WorleyParsons today is testament to its enduring ability to adapt to changing market circumstances. The facilities have undergone continuous improvement with focus on efficiency and quality, and the organisation is growing in line with an increase in demand for its services.

With a history growing from the exploration success in the Norwegian market in recent years, Kristin discusses the immediate developments in the area: "We follow all the discoveries and developments on the NCS with great interest and excitement, and it is encouraging that the licensing rounds in Norway attract a great deal of interest from so many companies. We are following the Johan Sverdrup project with great interest and look forward to future opportunities there. Although it is just an ongoing FEED contract at this stage, there could be opportunities for Rosenberg WorleyParsons, and the wider organisation, as the project matures.

"We were also awarded a FEED contract to provide engineering for a capacity increase on the Ekofisk field. We continue to work with ConocoPhillips and this latest contract highlights the ongoing nature of this relationship. We are currently in the middle of this project and there is the potential for future developments, which is looking promising."

Through its years of trading, Rosenberg WorleyParsons has established a highly regarded and skilled workforce. Highlighting some of the strengths that attract customers, Kristin says: "We deliver a high quality service and workmanship and customer feedback supports this time and again. We regard one of our main strengths as what comes out of our construction facility, and critically, we deliver it on time. Our knowledge and experience of working to tight installation windows makes us a valuable asset

to any large construction project."

The company is nearing the end of a very large construction project for Statoil, where it delivered 12 pipeline end manifolds. With all structures now delivered and installed on the seabed, the project was completed on time and to specification. To maintain its stance as a well-regarded organisation, Kristin explains Rosenberg WorleyParsons' strategy to overcome the skill shortage: "We are continuing to take on apprentices, something we have always done, and we take responsibility for continuing to develop a skilled workforce. Over the last few years we have continued to grow our engineering capacity. We deem this as one of our greatest successes as this has been key to winning EPC contracts."

Rosenberg WorleyParsons has the ability and flexibility to undertake a wide variety of projects from simple, small-scale fabrication to the delivery of large and complex offshore installations. With the support of the wider WorleyParsons family, Rosenberg is well positioned to continue to play an important role on the NCS and beyond.

With ambitions to grow the services that it has on offer, Rosenberg WorleyParsons is undertaking further studies, and continuing to take on larger EPC contracts, through its expanded engineering capacity. As the company settles into 2014, Kristin reviews the targets in sight: "Our priority is first and foremost to deliver on the projects that we have already won. Secondly, we seek to win new work and we are carrying out a lot of tendering, right now in particular for fabrication projects. We are also actively involved in the tendering of EPC projects for Norway."

Through the evaluation of company figures, the progress and growth that Rosenberg has made over the past few years has been clearly significant. Poised to achieve similar financial achievements over the next few years, Kristin concludes: "We aim to continue to develop activity and create an even more robust business, with profitable growth for the corporation. From our position in Stavanger and with the support of the rest of WorleyParsons, we have an exciting future ahead." O&G

IFS

For more than 20 years, IFS has worked closely with leading contractors, suppliers and service companies to ensure its solutions meet the oil and gas industry's stringent requirements. Today, more than 400 project-oriented companies use IFS' solutions. The company's focus on the oil and gas industry is evidenced in deep industry expertise, broad functional coverage and a solid track record.

IFS Applications for EPCI Contractors offers the oil and gas industry a modern, proven project-driven business solution for efficient handling of large modification and EPCI contracts. With projects and asset lifecycles in focus - from engineering and procurement to construction/ fabrication and installation - IFS Applications for EPCI Contractors helps increase visibility and improve business performance. IFS Applications for EPCI Contactors is a flexible, component-based industry solution that can be deployed as a stand-alone solution; integrated with existing corporate enterprise systems; or as a comprehensive IFS Applications deployment. The solution delivers unique project, engineering, procurement and fabrication support, including a comprehensive, multi-discipline Engineering Register, all within the same integrated standard system.

IFS Applications for EPCI Contractors includes functionality for contract and project management, risk management, budgeting and forecasting, engineering, materials management, document management, fabrication and service management, all integrated with financials and human resources.

Rosenberg WorleyParsons AS
worleyparsons.com

Services
Engineering, fabrication and construction

Subsea solutions

Reef Subsea was established in 2010 by HitecVision and GC Rieber Shipping. On 28th January 2014, the company announced an ownership change with HitecVision taking 100 per cent control of the business that consists of two companies, Reef Subsea Integrated Projects (RSIP), and Reef Subsea Dredging and Excavation.

Introducing the fleet, managing director Arne Bengt Riple begins: "We have four ships in our fleet, two of which are through an agreement with GC Rieber, which remains in place following the change in ownership." The fleet consists of the Polar Prince and Polar King, and two Reef Subsea vessels, the Reef Despina and Reef Larissa, performing cable laying, Inspection, Maintenance and Repair (IMR) services and light construction. "Our vessels are currently working in operations utilising both towing and trenching capacity," he continues.

Geographically the company's interests lay in the North Sea, particularly the UK and Norwegian sectors and North Europe, with a windfarm project off the coast of Wales. Additionally the company has established itself in the West of Africa focused on light construction and ROV support. "The Polar Prince and Polar King are both working on the Gwynt y Môr project on behalf of RWE. Both vessels are quite different in their operations. The Polar Prince has the capacity to pull the plough and lay the cable, and using the Polar King we are able to pick up the ends of the cables, making the connection to the windfarm," says Arne.

The business also operates the Reef Despina, a slightly smaller vessel than the Polar range. Having operated in Africa for the past year, it is due to commence operations on behalf of HESS

Limited, under a decommissioning project on the Angus Pipeline PL1857 Flushing project. The operation will take place in the Fife, Fergus, Flora and Angus (FFFA) fields, located in the central North Sea in water depths of 70 metres. As part of the decommissioning programme, RSIP will perform the removal of the pipeline contents with ROV assistance. It will deliver a filtration package, suction pump and associated down lines to evacuate pipeline contents to the vessel. RSIP will engineer and manage the project using its multi-skilled team.

"We are undertaking the project with one ship utilising our personnel for the decommissioning and structural removal. On completion of the project for HESS we will undertake a multi-million pound contract with Technip Norge AS for trenching services on the Bøyla Development Project in the North Sea, highlighting our ability to undertake two quite different types of jobs utilising the same type of vessel," Arne announces.

RSIP will provide the state-of-the-art Q1000 jet trencher, along with a team of experienced operators, to conduct trenching services in the project located 225 kilometres west of Stavanger, Norway, at a water depth of 120 metres. RSIP will also provide associated engineering procedures and onshore and offshore project management whilst its fourth vessel, Reef Larissa, is currently in the West of Africa under ongoing support vessel contracts.

One of the most significant milestones in the recent period is drawing to the completion of the RWE Gwynt y Môr project. The success of the business is attributed to a number of factors as Arne comments: "We have a very qualified team both on and offshore. We are focused on the quality and the high technological side of operations, working closely with professional ship management companies allowing us to focus on project performance. Engineering and the project performance are important aspects that ensure return business. The mix of people and the right fleet gives us an edge that allows us to perform tasks, enabling us to establish good relationships with several customers."

The combination of internal and external training has supported the business in its growth and by attracting qualified personnel it has been able to grow with speed. "We are expanding our focus from hiring experienced engineers to the introduction of an apprentice programme for newly educated engineers and we are looking to prime the right candidates from universities in 2014. We have over many years been training ROV personnel or offshore crews to our high standards and this training will remain," explains Arne.

Moving forward into 2014 focus is continued on cable laying in both the offshore windfarm market as well as the oil and gas market. "We have the capacity and knowledge that places us in a perfect position to develop our business. We aim to establish ourselves more permanently with resources in the West of Africa. We are expecting to see an increase of work in the North Sea, following recent investments.

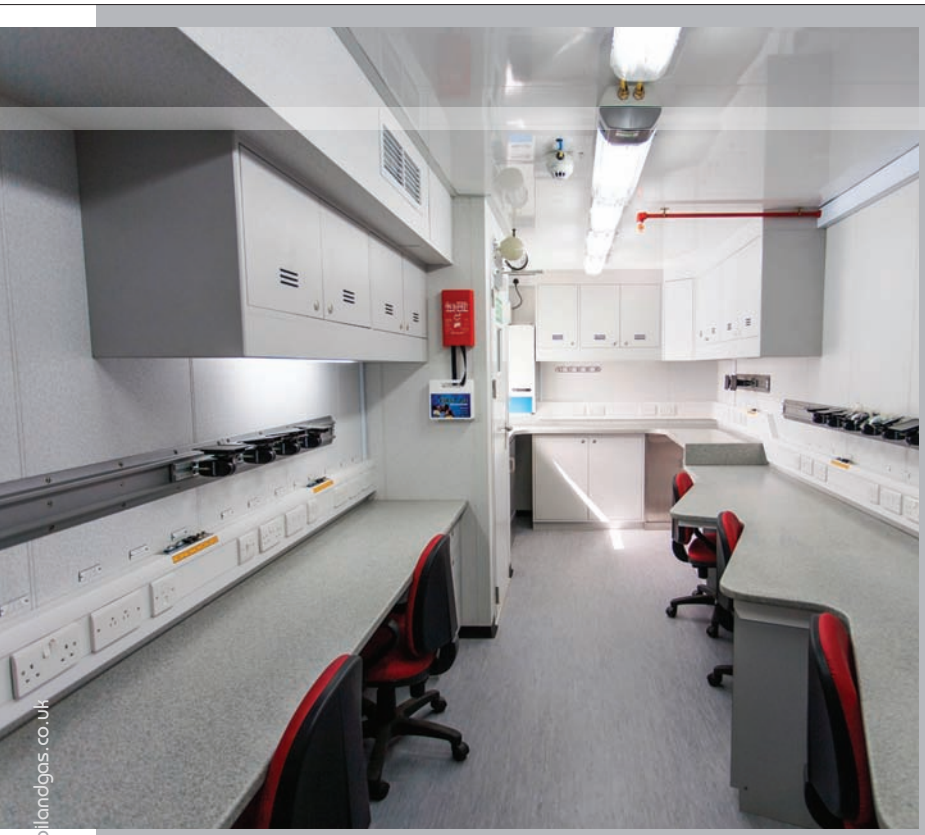
"Our vision is to grow our business, particularly in the service market. Over the next five years we will be increasing our market share working in close co-operation with both tier one suppliers as well as operators, utilising more vessels. In April 2014 we are going to have all four vessels in operation as well as using two other vessels on shorter charter hire. It is a very busy period and following the change in ownership structure we are looking forward to strengthening our growth strategy," Arne concludes. OEG

ACCPRON

In 2010 Accpron obtained preferred supplier status with REEF Subsea for the service of providing experienced offshore personnel. It has provided personnel with expertise covering ROV operations (IMR, light construction), survey, trenching and excavation. REEF Subsea demands that the company supplies skilled personnel, so Accpron's company objectives of being competent, service-minded, quick and efficient are adjectives that REEF Subsea associates with its services. Accpron supports REEF Subsea from its offices in Haugesund, Stavanger and Aberdeen.

Reef Subsea
reefsubsea.com

Services
Subsea construction and IMR, installation and trenching of cables and umbilicals, seabed dredging and excavation, and ROV and survey services



Enhancing the industry

Specialist Services Group

is a global supplier of modular buildings and packaging solutions for the oil and gas and utility industries. Established in 1982, it has developed an international capability in the provision of design, engineering, manufacture, installation and support across a broad range of products and services as Chris Ridley, group sales and marketing director begins: "Our core strength comes from the diverse backgrounds and experience of our staff. As a solution orientated business we are able to provide a number of cost effective, internationally compliant applications for the most challenging requirements of our clients."

Over the last 30 years Specialist Services Group has developed into a highly resourced responsive global company with international facilities in Dubai, Abu Dhabi, Aberdeen and Singapore, from which it supports clients worldwide. "Our main activities are divided into five business units, Modular Buildings, EPC, Drilling, Testing and Production, Modular Hire and Service, Maintenance and Spare Parts," continues Chris. With a client base including Petrofac, Woodside, BP, Shell, SBM and Halliburton to name just a few, Specialist Services provides a broad product range of turnkey innovative solutions, meeting unique certification requirements in all international oil and gas operating regions.

In 2012 the procurement, QHSE department, modular buildings and hire division moved to a new 350,000 square foot facility in Jebel Ali, which acts as the company's centre of excellence for the manufacturing of onshore and offshore modular buildings as well as Middle East and Africa hire centre. "This has enabled us to focus on innovative product development and is the world's largest specialised A60 module fabrication facility supplying products all over the world. Our clients are supported with a dedicated design process that enhances lean manufacturing, and the large fabrication volume capability we have cuts delivery times for customers all over the world," explains Chris.

DNV GL, a major global third party inspection agency, recently awarded the Manufacturing Survey Arrangement (MSA) to Specialist Services, displaying the trust in the quality of its systems, internal process and methods that consistently produce products with a 100 per cent acceptance with minimal inspection requirements. "The MSA is important for Specialist Services as it allows the manufacturing, testing and inspection of our own DNV 2.7-1 Offshore Containers and DNV 2.7-3 Portable Offshore Units throughout the build cycle without the need to call in DNV GL for intermediate in-process inspections," explains Chris.

"As a group we have experienced a significant growth and will achieve a 30 per cent increase in sales this financial year. EPC in particular has grown significantly in the last year with the development of our Abu Dhabi facility and some sizeable awards for our technical module buildings. Our forward pipeline is extremely strong and we look forward to a further year of expansion ahead," says Chris.

Specialist Services has been awarded a contract from Sea Trucks Group for the provision of a 216 man accommodation extension for Daewoo Shipbuilding and Marine Engineering's Arkutun-Dagi Project operated by Exxon Neftegas Limited in Sakhalin, Russia. With the project expected to commence in Q4 2014, Specialist Services agreed to a very tight deadline, with their project completion by March 2014. With limited time available for the production and installation

Below
Chris Ridley, group sales and marketing director at Specialist Services

of the accommodation units, the contract demonstrates market confidence in Specialist Services' capabilities, as Chris points out: "We provide an overall solution for accommodation units on a sale and/or hire basis and give clients a unique solution which assures that their mobilisation requirements can always be met.

"These modules offer Sea Trucks Group the flexibility to use them on their complete fleet of multi-purpose vessels and have been designed to the highest industry standards in order to do this. Our ability to deliver such units with the ABS/MLC compliancy is only possible due to our offshore experience and in-depth ties with the various bodies required to verify such modules design and manufacture," explains Chris. Through a fundamental understanding of clients' needs, Specialist Services ensures high levels of comfort and protection of life offshore and the process of Front End Engineering Design (FEED) supports innovative concepts that promote cost effective manufacturing processes.

Specialist Services has continued to expand its drilling, testing and production products and this year developed an early production facility. We are currently designing innovative modular solutions for EPF applications, which we hope to launch in the first quarter of 2104. "We have also recently produced the world's first quad certified modular building that meets certification and legislative requirements for the US offshore, Europe and Asia Pacific regions. This is the first time a single unit has been manufactured to ATEX, IECEX, DNV 2-7.2 Zone 1, NFPA 496 US coast guard/ABS.

"Our Asia Pacific business has tripled in the last three years with significant growth in our HIRE fleet, DTP product sales as well as securing two significant offshore accommodation module projects in Australia. We are continually expanding our service and sales teams in the region to meet the significant growth in demand for our products. The key to our success has been our rapid response and lead times as well as the ability to build products that meet varied specifications and certification requirements throughout the region," highlights Chris.

Specialist Services attended both Offshore Europe 2013 and OGA 2013. Each event provides a significant opportunity to present Specialist Services as Chris explains: "These are key events for Specialist Services that provide a tremendous platform to launch new products and keep clients informed about developments. Although it is often difficult to quantify the success of these events we can specifically attribute a number of orders with new clients to the events this year. In particular a large order for our DTP division for China signed at the OE event in Aberdeen. It is a demonstration of the diversity of visitors to the international events that we target."

Firmly into 2014, the mission ahead for Specialist Services Group is to continue successfully engineering, manufacturing and delivering world-class products that enhance oil and gas field development and protect life and assets. Summarising the future outlook, Chris concludes: "The restructuring of the business into five units with engineering, procurement, project management and dedicated aligned facilities is a platform designed to grow each sector significantly from facilities in the Middle East, Scotland and Singapore. Our vision is, by 2015, to be the market leader and preferred supplier across our core product offerings." O&G

Firmly into 2014, the mission ahead for Specialist Services Group is to continue successfully engineering, manufacturing and delivering world-class products that enhance oil and gas field development and protect life and assets

Specialist Services
specserve.com

Services
Modular solutions for oil and gas operational optimisation

A logical investment

Lubbers Transport Group

(LTG) has a long history that dates back as far as 1929, when the company was first founded as a livestock transport business in Schoonebeek, the Netherlands. The company began with a small fleet of only three trucks, however during the course of over six decades it has diversified into new markets and swelled to include a fleet of around 120 trucks and 300 trailers.

Today LTG provides international transport services throughout Europe, geared to meet the requirements of the region's oil and gas industry. The organisation currently maintains several brands including RTH Lubbers within the United Kingdom, following a merger with RTH Haulage during 2002. Inside of Europe, the company operates under the name Lubbers Logistics. Until January 2014 its operations within Scandinavia were conducted under the name Dan Carrier, however the business has now been incorporated into the Lubbers brand and is now known as Lubbers Denmark. Commenting on the change Steffan Christensen, sales director Nordic says: "We believe now is the right time to integrate our businesses under the Lubbers name. We are presenting our Esbjerg operations with a clear profile that ties strongly to the rest of the expanding European network of the Lubbers Transport Group.

"Dan Carrier has a proud heritage and loyal customer base built over many years. We want to retain and build upon a hard won reputation for outstanding service and focus on strengthening our relationships with our customers, as Lubbers Denmark."

LTG also passed an important milestone during the final months of 2013 when AAC Capital (ACC), a leading mid-market buyout firm announced the acquisition of a majority steak in the group. AAC operates within Benelux and to date has completed 26 management buyouts, 20 of which are now fully realised. The firm has an established track record of investing in profitable, cash-generative companies headquartered in the Benelux region and enabling them to further develop with a strong financial backing. Regarding the sale Ger Engelsman, CEO of LTG remarked: "Our ambition is to further establish our market leading position in upstream oil and gas transport and logistics services. Our strategy is to accelerate

international growth by following our customers to emerging oil and gas regions and opening up new bases, whilst we will continue to strive for the highest service levels and QHSE standards. We have been looking for a professional partner to help us realise this strategy and have chosen AAC. They have a wealth of experience in helping management teams in realising their international growth ambitions."

The attraction of AAC to LTG was in the company's strong performance and continued growth as Marc Staal, managing partner at AAC ebaborates: "Lubbers is a highly successful and well positioned business in the attractively growing oil and gas services sector. We have been impressed by its unique business culture, which stands for a true partnership with its customers, outstanding service levels and compliance to the highest QHSE requirements. Building upon this strong foundation, we look forward to be a trusted and reliable partner to management and the current shareholders in supporting the international growth ambitions of LTG."

The impressive performance of LTG was highlighted prior to the AAC investment into the company, when it received a Golden Gazelle Award from the Dutch national financial newspaper Financieel Dagblad. The esteemed publication handed out Gazelle Awards to the fastest growing companies in the Netherlands for the tenth time in its existence, focusing on three categories; small companies 100,000 euros to two million euros, middle sized companies ranging from two million to 30 million euros and finally large companies valued at over 30 million euros. In total, 395 companies were awarded FD Gazelle recognition and additionally the companies to achieve the highest turnover growth per province and category were given the Golden Gazelle Award. LTG won the Golden Gazelle in the large company category for its strong performance for the financial years 2010, 2011 and 2012, marking its increasing strength and know-how within Europe's transport market.

When it comes to servicing the European logistics market, LTG offers a turnkey package of solutions to meet the varied needs of its clients. Whether transporting standard, exceptional or dangerous goods, the group can rely on over 80 years of experience and a vast equipment portfolio to tackle the job. The group maintains a fleet of trucks ranging from open flatbed trailers (13.6 metres length), taut liners, low-loaders, pick-ups, and small trucks that engage in road transport between the group's various international depots in the Netherlands (Schoonebeek, Velsen-Noord, and Den Helder), Germany (Celle), Denmark (Esbjerg), Italy (Ravenna), Poland (Kutno), and the UK (Aberdeen, Newcastle, and Great Yarmouth) and Romania (Poliesti). The company's latest addition is the opening of a sales office in Stavanger, Norway in August 2013.

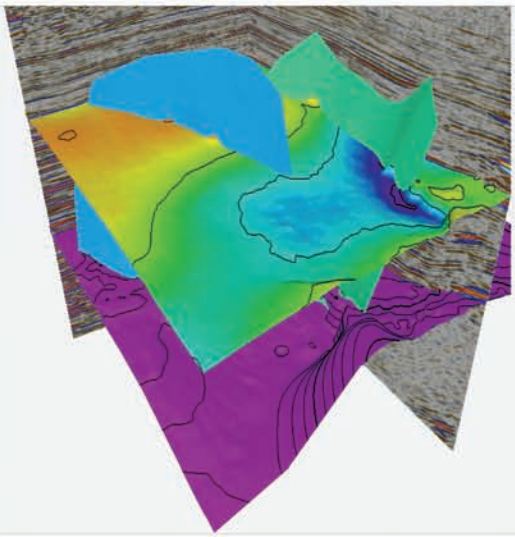
With a new partner in ACC and an expanding network of bases from which to conduct its operations, LTG is poised to realise its ambition to continue to grow well into 2014 and beyond. As well as new investment into the company, acclaimed industry recognition and an expanding equipment portfolio, LTG has benefitted from internal development including a 1.2million euros investment in its Aberdeen facility. This will allow the firm to increase its cargo input within the United Kingdom, offering yet further signs that LTG is set to be a very fast moving provider indeed.

Lubbers
Transport Group
lubbers.net

Services
Upstream logistics solutions

Integrated Geological Solutions

Software



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Key to production

Gulf Keystone Petroleum

Ltd. is an independent oil and gas exploration and production company with operations in the Kurdistan Region of Iraq, and offices in the capital city, Erbil and London, UK. The company established itself in the region in 2007 and has since made significant progress with five discoveries across four blocks, including the world-class discovery of the Shaikan field in 2009, from which commercial production and crude oil exports commenced in 2013.

Having progressed so rapidly in a relatively short time, Gulf Keystone's finance director Ewen Ainsworth provides an update on the company's near-term objectives and ongoing interests in an interview with *European Oil and Gas Magazine*: "Our immediate focus is to ramp-up production at Shaikan, develop a flexible marketing strategy for our crude and continue exploration, appraisal operations and also commence early production on the Sheikh Adi, Ber Bahr and Akri-Bijeel blocks, all with discoveries. To date, nearly 20 wells have been drilled or are being drilled across Gulf Keystone's acreage in order to realise multi-billion barrel resource potential.

The Shaikan Field Development Plan (FDP) was approved in June 2013, granting Gulf Keystone full permission to commence commercial production from the field and representing a key milestone for the company, with the production beginning just one month later. Gulf Keystone announced the commencement of crude oil exports from the Shaikan field in January 2014. "The first Shaikan production facility, PF-1, is in operation with two wells currently tied to the facility and work on the second Shaikan production facility, PF-2, is nearing completion. We commenced commercial production and crude oil exports from the Shaikan field with the aim of ramping up production to meet our near-term target of 40,000 barrels of oil per day in 2014 and then the overall Phase 1 target of 100,000 barrels per day."

Production from the Shaikan block is set to play a crucial role in helping the Kurdistan region to achieve its overall oil export targets, which will be of huge significance to

RDR GROUP

RDR Group worked with Gulf Keystone to interpret and restore key seismic lines from Sheikh Adi and Shaikan, validating the seismic interpretation, clarifying links between shallow and deep structures, identifying the likely mechanisms and extent of folding, and recognising structural inversion in the target area. The results of the study were critical to the analysis of petroleum systems in this part of Kurdistan. Ongoing RDR projects in the Kurdistan region include extensive field mapping, section restoration and sample analysis of fault rocks and regional seals.

IDEC

International Drilling Fluids and Engineering Services (IDEC) Ltd is the first independent drilling fluids company providing customised drilling fluid solutions and well-site services for all types of drilling activities.

In March 2013 the company agreed a contract with Gulf Keystone Petroleum International Ltd (GKPI) for the provision of drilling fluids, bulks, chemicals, equipment and services. The contract is to last for a period of two years, or until the completion of drilling and/or workover activities on the Shaikan (Block K-5) and Sheikh Adi (Block) appraisal well programme in Kurdistan, Iraq. If successfully completed the contract may be extended, further building and strengthening the relationship between IDEC and GKPI.

the development of the region as a whole. Alongside progress in the Shaikan field Gulf Keystone has also developed its corporate social responsibility (CSR) strategy, which has advanced dramatically over the last 12 months with the aim of supporting the communities living in the areas in which the company operates. "CSR is an important part of our business, we need the support of surrounding communities in order to run our operations effectively and we aim to reflect the support we receive via our CSR strategy. Our initiatives include projects such as the building of event halls, water pumps and access roads, and supplying schools and youth centres with equipment that they require. We are also passionate about training and recruitment in the region and have very successful competency-based programmes in place. At least 75 per cent of our workforce is local personnel and wherever possible, outsourced contracts are awarded to regional operators," says Ewen.

Health, safety and environmental considerations remain core values for Gulf Keystone and it recognises its obligation to identify and reduce risks, safeguard people and protect the environment, assets and the communities surrounding its operations. Through its commitment to ensuring positive leadership, hazard assessment, risk management and excellent communication channels on the ground, the business has been able to achieve this target.

Moving into 2014, Gulf Keystone is continually growing and evolving, as Ewen comments: "We have made significant operational progress over recent years; we are in a key position with working interests in four adjacent on-trend blocks and five discoveries in the Kurdistan Region of Iraq. Shaikan was declared commercial in August 2012 and in November 2013 so too was the Akri-Bijeel block, based on the Bijell-1 and Bakrman-1 discoveries." At the end of 2012, Gulf Keystone made a new discovery

IDEC

International Drilling Fluids & Engineering Services (IDEC) Ltd.

International Drilling Fluids and Engineering Services (IDEC) Ltd is a Middle East company registered in the British Virgin Island (BVI) working extensively in East Africa and Iraq and involved in drilling, reservoir drill-in and completion fluids and services for the petroleum industry; solids control equipment and environmental services. IDEC is the first independent drilling fluids company in East Africa and has provided customized drilling fluid solutions and well-site services for all types of drilling activities.

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> We commenced commercial production and crude oil exports from the Shaikan field with the aim of ramping up production to meet our near-term target of 40,000 barrels of oil per day in 2014 and then the overall Phase 1 target of 100,000 barrels per day

following a successful well testing programme of the second exploration well on the Sheikh Adi block, and in May 2013 Gulf Keystone's partner Genel Energy made a commercial discovery on the Ber Bahr Block.

In October 2012, Gulf Keystone was successful in its first bid to raise funds via a placement of senior unsecured convertible bonds, due October 2017 for an amount of $275 million. In November 2013, a further $50 million was raised through a tap issue of these convertible bonds, confirming investor interest and providing funding to reach the Shaikan field development plan early production targets. The company's increasing production will provide a recurring revenue stream allowing for future funding options.

"In 2014 we will continue implementation of the FDP, increase Shaikan field early production and sales, and obtain and evaluate results of the Shaikan-7 deep exploration well. We will be evaluating the Sheikh Adi discovery, targeting additional exploration potential, and commence early production from the Bijell-1 extended well test on Akri-Bijeel, while continuing to appraise the Bijell and Bakrman discoveries on the block and assess the Ber Bahr discovery.

The process is underway on the company's proposed move from AIM to the Standard Segment of the Official List, the current expectation is for the admission to be achieved as soon as practicable in 2014.

Targeting future outlook, the Phase 1 development drilling campaign on the Shaikan block is on the company's radar. "As set out in the FDP, we will be undertaking an active development drilling campaign as well as installing additional production facilities. A review of the FDP will include Phase 2 Cretaceous, Triassic and, potentially, Permian development. A key element of the FDP is the commencement of a sour gas injection project. Shaikan-8 was completed as the first sour gas reinjection well and bids have been tendered for gas compressing equipment required to increase plant production capacity, which is subject to well performance and emissions constraints, from the near-term production targets. We expect to finalise the sour gas injection project in 2015," explains Ewen. "In due course we anticipate being in a position to use free-cash-flows achieved from production and export to continue to grow our business."

Success in the region has been supported by longstanding relationships with the Kurdistan Regional Government's Ministry of Natural Resources, as well as transparency with surrounding communities and businesses in the areas of operation. "We value these relationships as they have been, and continue to be, essential to our success. We are working hand-in-hand with the Ministry to help the region achieve its overall oil-export target. We still have active exploration upside in the Kurdistan Region of Iraq and we are committed to realising the full potential of all four of our blocks," concludes Ewen. O&G

Gulf Keystone Petroleum Ltd
gulfkeystone.com

Services
Exploration and production

Great strength

Fully operational since 2010, Bow (Breakbulk and Offshore Wind) Terminal's core focus is to meet the long-term needs of the offshore industry through the provision of ultra-modern facilities and equipment. Strategically located in the port of Vlissingen, the Netherlands, BOW is a subsidiary of the Kloosterboer group, a financially strong, independent, family run organisation that was established in 1925.

A leader in the logistic provision of temperature-controlled goods in Western Europe, Kloosterboer boasts more than 600 efficient and dedicated personnel at its seven terminals in the Netherlands where it offers services such as warehousing, processing, forwarding, stevedoring and customs. While the group has a clear interest in developing a strong foothold in the booming North Sea, it also has terminals located in Canada, the US and France.

Benefiting from the financial strength of its shareholder, BOW was developed to meet the demands of the offshore industry following a spate of investment into renewable energy in 2008. The market response to the newly established dedicated terminal proved positive upon its launch in 2010, with BOW's first contract awarded by Statoil for the Sheringham Shoal Offshore Wind Farm project in the UK. Comprising of the heavy lift of 88 transition pieces and monopiles for wind turbine foundations, the successfully completed project resulted in a spate of further contracts with major oil and gas firms throughout 2011 and 2012.

Previously featured in *European Oil and Gas Magazine* in November 2012, sales and purchase manager Arjen Pattenier discussed the terminals projects and services: "From 2011 to summer 2012 we have carried out more than 12 offshore projects from the small to much larger scale ones, including Moray Offshore, Ekofisk Offshore project, South Arne Offshore project, and Teeside Wind Farm development. During 2013 BOW terminal worked with the project teams on three major wind farms simultaneously. For Humber Gateway, Northwind and Dan Tysk we handled more than 490 heavy components including the cable reel and grout logistics. This was a big achievement for our team. The quality and safety standards were ensured by our OHSAS 180001 and ISO 90001 procedures, where BOW management committed itself to DNV.

"In 2014 the quay of BOW terminal will be extended with another 175 metres, including a heavy lift platform of 20 tons per m2. As well as the offshore wind sector, we also focus on breakbulk, project, and heavy lift cargoes for many of the same clients. In particular we see that more and more of the large oil and energy based companies also require storage and lifting capabilities for their general cargo, such as steel pipes, bars, and plates, which we can offer."

As increased growth of its operations continued, Kloosterboer acquired a further seven hectares of land from Zeeland Seaports in 2012 and invested in the largest fixed heavy lift crane in Europe the same year; the Gottwald MK, which has a lifting capacity of 1200 tonnes, was purchased to meet the anticipated continued growth of cargo size in the offshore market and offers customers of the terminal permanently available high-level capacity. On top of this, BOW has mobile harbour cranes, mobile telescopic cranes with a lifting capacity ranging from 40 to 400 tonnes, a range of cherrypickers, various mafi trailers, tug masters, flatbed trailers and SPMT's for loads up to 1000 tonnes to ensure complete flexibility for customer requirements.

Following these huge investments, BOW today ensures optimal logistical expertise through its experienced and committed personnel and high quality, cutting-edge equipment. Wholly capable of the reliable and efficient handling of customers' valuable materials 24 hours a day, seven days a week, the terminal runs an expert team of heavy lift supervisors, operators and

riggers for the specialised heavy lift operations at its deep sea quay. Focused on riverbarges, jack-up vessels, installation vessels, river pontoons, coasters, floating concepts and northsea barges, BOW has a comprehensive portfolio of materials and equipment available to ensure its stevedoring department delivers high quality loading and unloading operation as well as the stripping and stuffing of containers, trucks and wagons.

Focused on breakbulk shipments and sawn timber shipments, the terminal's multi cargo division specialises in direct over board big bag shipments; to carry out these operations, the division operates six mobile cranes that boast a lifting capacity up to 100 tonnes as well as a fleet of forklift trucks with a broad range of lifting capacity. For container handling the terminal has reachstackers available, while IMO containers are handled or stored via the IMO stacking area.

With a strategic vision to become an integrated part of its customers' whole business operations, BOW owns and operates a 20 hectare storage facility, where it offers services such as the provision of all load bearing materials, skidding and jacking systems, smart engineering for the storage of heavy loads and the covered storage of high value cargo. On top of this, the terminal offers a broad portfolio of services including port agency and chartering, scaffolding, coating touch-ups, engineering and design and pre-rigging arrangements.

Ideally situated between the ports of Rotterdam and Antwerp at the mouth of the Western Scheldt estuary, BOW's strategic links and direct connection to the open sea makes it an attractive option for European oil and gas companies working on North Sea projects. Having developed an excellent reputation for providing high quality facilities and permanent heavy lift in a unique area over the last four years, BOW has accumulated an impressive list of returning customers. This trend for ongoing growth looks likely to continue as the terminal focuses on engaging customers at an earlier project stage and offering a total package solution of storage, shipment and handling. OEG

BOW Terminal BV
bowterminal.nl

Services
Heavy lift specialists

Prestigious service

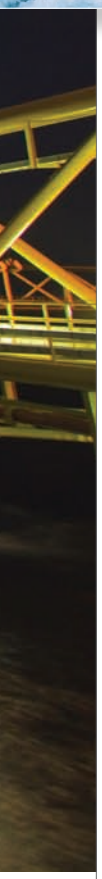
Andersen Mek. Verksted (AMV) AS is a privately owned incorporated company with 130 skilled workers based at its head office in Flekkefjord, Norway. On an international basis, AMV AS operates its own companies with enterprises in South America and Asia - in total, the group consists of some 180 employees.

The main activities of AMV AS lie within the tunnelling and mining segment, as well as equipment for offshore oil and gas production. AMV has more than 40 years of experience with these latter products, and as much as 35 per cent of its production is offshore related. Its services in the offshore sector include the following:

- Development /engineering
- Fabrication
- Assembly, mechanical /electrical /hydraulic
- Testing
- Survey offshore
- Offshore commissioning
- Service /maintenance assignments
- Overhauling /modification assignments
- Spare parts management

Within the Offshore division AMV develops products, solutions and concepts in close collaboration with its customers, and is also working on the development of its own products. In this area the company benefits from an in-house research and development department, which is constantly working hard to bring the best ideas to fruition. Its engineers have broad experiences gained from many disciplines – indeed the organisation has worked with the offshore industry since 1978, with the start-up of Maritime Hydraulics (today known as Aker Solutions Maritime Hydraulics). Today AMV provides products and services to a large number of blue-chip clients, including Aker Solutions MH AS, Weatherford Rig System AS, TTS Energy, Rolls Royce Marine, Stimline AS and Optipump AS.

The business is a complete supplier, able to perform assignments in engineering and design, such as fabrication and testing, installation and commissioning. Furthermore, it is also active in the market for upgrading and overhauling of



existing equipment and installations targeting the offshore market. Throughout the entire design/engineering process, AMV's main emphasis is that the final product shall offer a high level of functionality, serviceability and reliability.

Many state-of-the-art products manufactured by AMV are produced at its facility in Norway, where it has a large land area at its disposal with a building mass of about 150,000 square feet, and which consists of offices, a machining hall, welding hall, assembly hall, electro department, storage, and paint and sandblasting halls. All departments are equipped with the modern equipment and machinery that is required to meet today's high demands for reliable products that work in robust environments.

One of AMV's main strengths is its 'machine park', which is renowned for its spectrum of machine types, as well as accuracy and on-time delivery. This modern machine workshop features much of the company's newest technology and affords it the capability to take on all kinds of work in cutting, machining and welding.

In the cutting section, in 2010 AMV invested in a new cutting table, the ESAB Suprarex SXE-P1 3500, which can accommodate dimensions up to 2500mm x 6000mm, while its milling machine technology includes a range of Mazak controlled lathes, various machining centres, round grinding machine, bed milling machines, boring mills, and manual machines.

It is apparent from its range of equipment that part of AMV's strategy is to regularly invest in machines, resources, equipment and facilities, to ensure efficiency and quality in all its endeavours.

The company also recognises that in order to achieve the quality that is required by its demanding customers, it not only needs to be certified according to ISO 9001, ISO 14001, and Achilles, but also has to keep a sharp focus on health and safety. This means safety is paramount in all its procedures and routines, in order to protect its employees, who after all, are a most vital resource.

AMV credits these employees as responsible for ensuring that the company reaches its goals. This means that it spends a lot of time and energy in striving to employ the right people with the right attitudes, skills, and qualifications.

It is also dedicated to furthering the development of its personnel, both personal and professional, and also offers those people who wish to take on a challenge some opportunities to work overseas, in many corners of the world.

While the Offshore division accounts for almost half of AMV's output, it is also a complete supplier of its own products to the tunnelling and mining industry. Included in AMV's product portfolio are drilling jumbos, shotcrete robots, working platforms, grouting systems, special projects applications and auxiliary equipment, and the company has its own facility for testing of rigs and other tunnel and mining equipment.

After a century and a half of existence, AMV is today a local business with international activities and ambitious plans for growth and expansion. In both of its areas of specialism AMV works with respected clients and its products are often featured on prestigious contracts, reflecting its heritage and renown in the market. Its years of business and experience, allied with a strong growth in incoming orders, are evidence enough that customers are always at the core of all of AMV's business activities. O&G

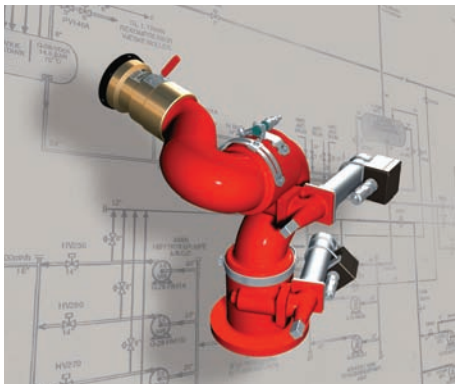
Andersen Mek Verksted
amv.as

Services
Engineering, design, fabrication and testing

Protection through experience

Fire Protection Engineering

(FPE) was founded in April 2000 by a team of individuals with a long-standing history in the supply of fire protection systems for the oil and gas industry. It was initially taken over by the Norwegian company Bjorge ASA in May 2007, and in January 2011 Bjorge ASA was divided and de-merged from Oslo stock exchange. FPE is today the daughter of the new company Align AS and through the acquisition of Sontum Fire and Safety, FPE's position as a full-range supplier to new buildings, maintenance and modification (MMO), as well as the aftermarket has been significantly strengthened. Main owner of Align group and Fire Protection Engineering AS is the Norwegian private equity investor Hitec Vision.



The core competence of the business is established in engineering and the majority of its engineers and designers entered the industry between the late 1970's and early 1990's promoting a wealth of more than 30 years experience across the business. The crew of assembly fitters and service technicians also has extensive experience with assembling and servicing a range of fire fighting equipment, with several of the technicians awarded with multidiscipline qualifications.

With a large portfolio, the business offers a range of products and solutions to customers from deluge and sprinkler systems, central foam skids, dual agent hose reel units and firewater hose reels to firewater hydrants, firewater monitor and valve skids, fine water spray systems and clean agent gas suppression systems (INERGEN). Nozzle integrated helideck systems, surge pressure compensators and the provision of hydraulic calculations using PipNet software further complement the range.

The service department undertakes a large variety of tasks, such as installation, commissioning, trouble-shooting and repair, turnkey replacement and upgrading projects. FPE's personnel have been involved as project managers and engineers in supplying fire protection systems and equipment to most of the platforms operating in the Norwegian sector of the North Sea, but also for projects in the UK, Singapore, Korea, China, Canada, Azerbaijan, Australia and Russia.

Speaking with *European Oil and Gas Magazine*, Svein Roar Sivertsen, sales and marketing director, focuses on business development: "The market today is still growing, but we foresee it flattening out towards the end of 2014 and into 2015. The future from 2016 and onwards depends on the willingness for the operators to invest and develop their discoveries."

FPE has recently been awarded the framework agreement for Statoil's Mariner & Bressey field in the UKCS. The major contract has a value of over 100 MNOK. Additionally the business was awarded the contract on the Aasta Hansteen project, the world largest SPAR platform with a value of over 50 MNOK, and Shell Norway's onshore gas treatment plant, Nyhamna (Ormenlange), where FPE is delivering engineered fire fighting system solutions.

Following the business expansion and the establishment of an office in Houston, the company's market share in the US and surrounding regions has improved, as Svein says: "Optimism is high as work in the area has increased. Since the opening of the office we have been awarded several contracts, and it is important for us that we are closer to the decision makers as well." By ultimately being closer to the engineering companies FPE is in a strategically better position to follow-up each lead created out of the Houston office.

With order books comfortable for 2014, Svein addresses the future plans of the company in the oil and gas industry: "We have the aim of developing through organic growth. We view

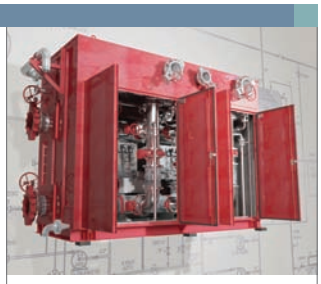
it as the most important aspect of development that is ongoing in the areas in which we already hold a strong position."

Previously, the business was looking into development utilising the relationships with its sister companies within the group. Svein reviews the progress on this vision: "The daughter companies of Align AS have now established a concept called "LEGO". Essentially this is a product and technology provider of safety and production critical solutions. i.e. FEED, concept and detail engineering for green and brownfield projects with globally recognised quality brands."

Ensuring the quality, FPE AS has designed and constructed a state-of-the-art test facility, with a large capacity and high flexibility. From this facility, all water-based fire fighting equipment, such as deluge, sprinkler, monitor, hydrant and hose reel systems may be performance tested, at full capacity. The main business objective is to contribute to the protection of personnel and production facilities, by guaranteeing that extinguishing systems operate safely at all times.

In recognition of the importance in growing talent for the future of the industry the company has been working towards attracting new personnel with the right aptitude. "We have had success where we invite young graduate students for a session at our premises based on a speed date concept where we address the opportunities and possibilities of joining FPE. We have a good mix of junior and senior engineers where the young people are learning from the more experienced employees. We offer internal education and training with new topics each time and provide many possibilities for a strong and rewarding career," explains Svein. Extending its training, FPE additionally promotes its academy, from which it runs a series of tailored seminars for customers, with topics at their request.

Moving into the future, the business recognises the financial goals that it aims to achieve, but what is fundamentally of importance is the vision of becoming the preferred supplier of engineered fire fighting systems for the global oil and gas industry. OSG



Fire Protection Engineering AS
fpe.no

Services
Fire protection systems

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Rigged for success

Since the company was last featured in *European Oil and Gas Magazine* during February 2013, Drydocks World has continued to nurture its reputation as a leading name within the maritime sector. With over 30 years of industry experience behind it, the past 12 months have seen further success for the company, with new multi-million dollar contracts, world-class construction projects and history-defining lift operations.

The Dubai based company is a subsidiary of its parent firm Dubai World and is located in a prime position within one of the world's fastest developing regions. Its flagship Dubai shipyard is the largest facility in the Middle East and has developed a prolific reputation for its execution of new build projects, conversions and offshore construction. Drydocks World is an impressive facility that handles some 350 vessels per year, the majority of which are ultra-large crude carriers (ULCC) and very large crude carriers (VLCC). However, the yard can boast an eclectic

ALE CREATES INNOVATION TO MAKE 10,000t TOPSIDE LIFT POSSIBLE

Teams from two ALE branches designed a unique gantry system in order to perform a lift and mating operation of a 10,000t topside at Drydocks World for the World's largest and first semi-submersible HVDC platform, DolWin Beta, which was constructed at the shipyard.

The gantry system created by ALE's R&D department at ALE in Breda, the Netherlands and the Middle East branch combined various standard gantry types into one system to make the lift possible. Drydocks World carried out an assessment of topside structural strength, carried out precise weight calculations and designed the heavy lift pad eyes to suit the tailor made lifting arrangement of ALE.

The topside was lifted from six consoles, four using ALE's Laced Tower system and two A-Frame Structures positioned centrally to create longitudinal stability. The system also incorporated side braces into pre-cast concrete foundations in the Dock Pier walls, which provided transverse stability and a ballasted securing system that could be activated to lock-down the lifted topside if weather conditions were to deteriorate suddenly.

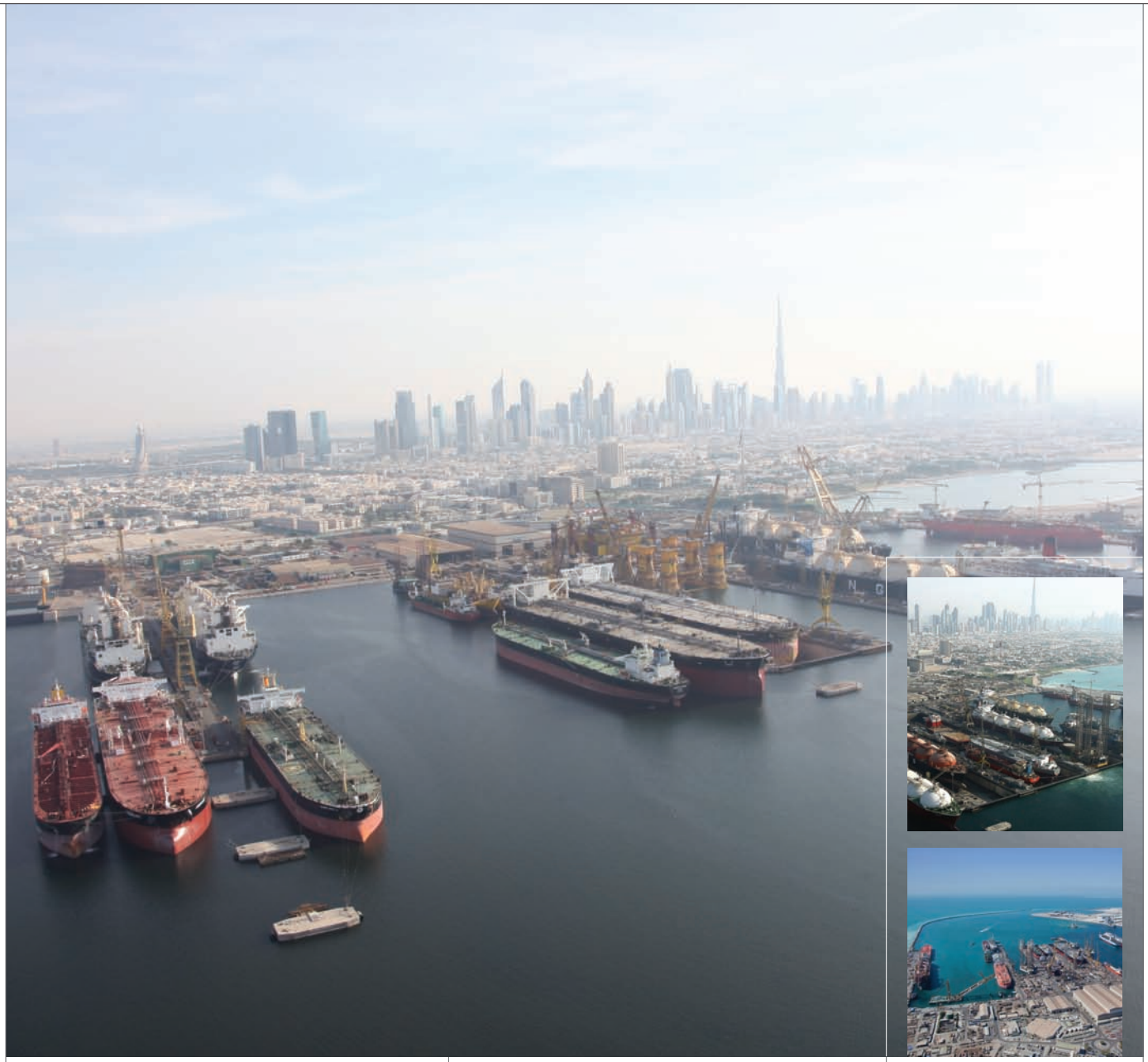
On top of each gantry tower, four strand jack units were installed giving a total of 24 strand jacks with a minimum capacity of 500t each to lift the topside. Specialist equipment and personnel were mobilised from across the group to build and operate the gantry system and the system was set-up for maximum flexibility and accuracy during the mating process.

After the test lift, the topside was lifted clear of its supports and suspended in order to prepare the topside for full height lift. Weather was a constant challenge and all teams worked together to reduce this clear weather window from five to three days. This was done by carefully planning and combining Drydocks World's marine capabilities and ALE's lifting operations. ALE lifted the topside to a final height of 52.8m meters in phases, in between which careful and precise removal of the support barge undocking and docking of the substructure was effected by Drydocks World. Once at full height the semi-submersible hull structure was extremely carefully manoeuvred in-between the ALE gantry system, underneath the suspended topside. The innovative fendering system designed by Drydocks World facilitated this process. ALE then lowered the topside to the precisely positioned substructure, thereby releasing weight in a controlled fashion under careful guidance of the technical personnel of Drydocks World. Welding of the two structures was carried out simultaneously in parallel with a precise lowering operation. The outcome of this team effort was a perfect mating.

Edward Talbot, projects manager at ALE said "For our Client this was a first and as such a lot of design work, verification and detailed checks were completed to ensure full integrity of the entire system during the operation. Our aim was to execute the lift efficiently with minimal risk to the topside and surrounding yard activities.

"Usually a lift such as this would rely upon a very restrictive 'weather window' requiring extended periods of relatively low wind speeds to effect the lift and integration safely. In this case it was up to ALE to create a system that was capable of withstanding ten year return wind loads, however would not cause permanent disruption to the operability of the Dock.

The design meant that our client could not only perform the mating operation inside the dock but also maintain adjacent docking operations with minimal impact to the yard facility during and after lifting and mating completion."



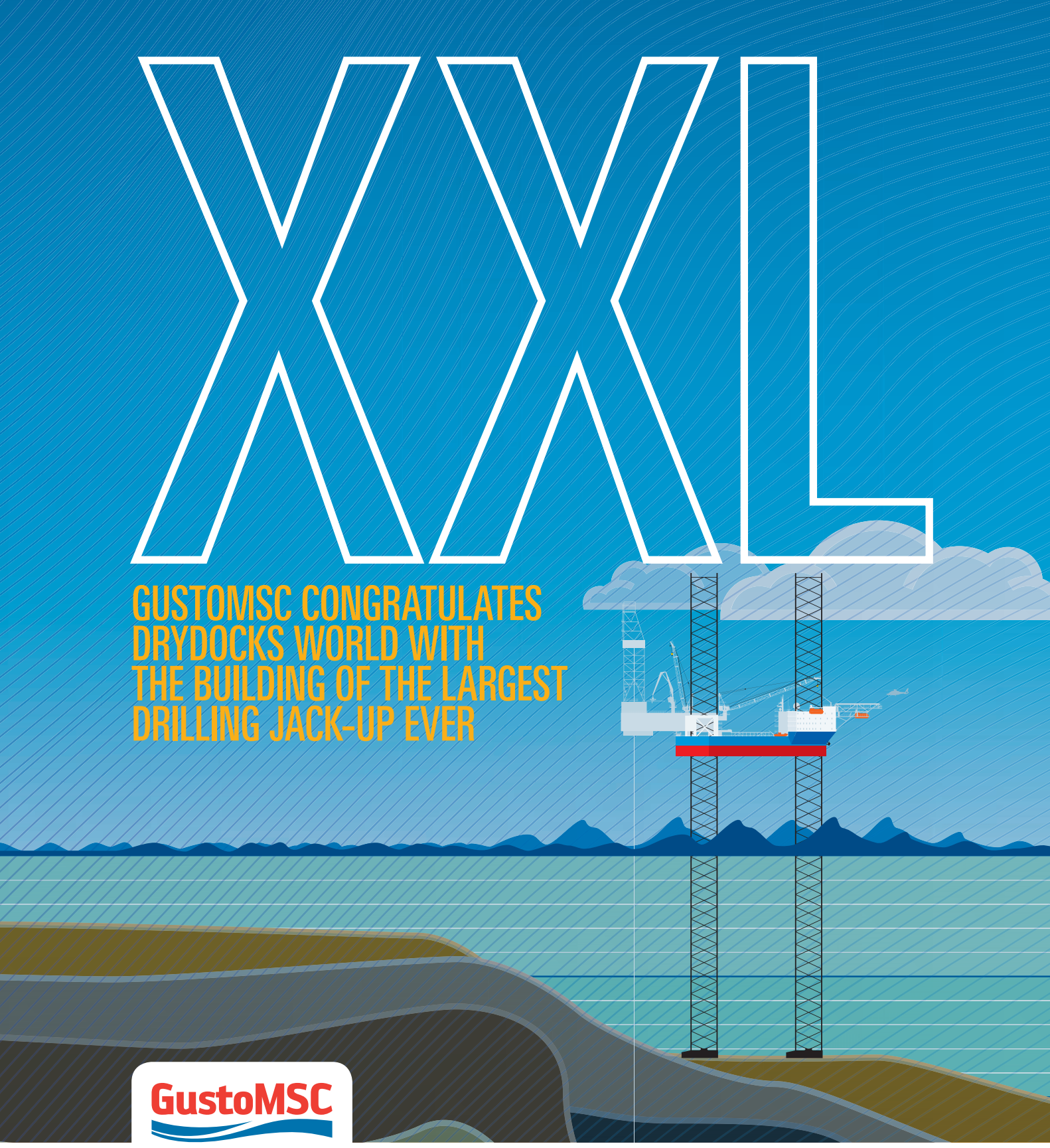
portfolio of completed projects including refit and refurbishment for classification checks for the iconic MS Queen Elizabeth 2 (QE2) from January 2013.

Within the final month of 2013 alone, Drydocks World was able to win prestigious contracts and execute industry-leading lift projects. By the opening days of December 2013, Drydocks World announced that it had signed a letter of intent (LOI) with Offshore Innovation Management Ltd for the construction of a series of AJ 62-X135, multi-purpose jack-up rigs, with projects slated to commence in 2014. Commenting on the significance of the project via press release, H.E Khamis Juma Buamim, chairman of Drydocks World and Maritime World said: "This is an extension on winning 'Expo 2020.' Congratulations to our leadership on achieving this landmark event, which is bound to have a significant impact and will substantially boost returns for the economy of the UAE. We are delighted to have signed this LOI to construct these high performance rigs, which can provide a broad range of services including the provision of accommodation and construction services, heavy lift support for hook-up and commissioning activities during installation of new topsides or in the installation of subsea structures. We have considerable experience in catering to the specialised requirements and exacting quality standards of the offshore oil and gas industry and have made deep and meaningful inroads into these rapidly evolving sectors in recent months. This is in line with our business strategy to target this market segment aggressively with added value services."

The 86m by 95m AJ 62-X 135 rig design stands a towering 185m in height and weighs an imposing 26,000 tonnes. The three-leg design offers multi-purpose functionality and will provide both accommodation and facilities in accordance with NORSOK European standards

XXL

GUSTOMSC CONGRATULATES DRYDOCKS WORLD WITH THE BUILDING OF THE LARGEST DRILLING JACK-UP EVER



GustoMSC

The drilling jack-up CJ80-X175-A is the latest and largest version in the CJ-series. It is capable to work under harsh conditions to a depth of 175 metres. The CJ80 stands for maximizing operational efficiency, while minimizing risks.

GustoMSC is a world renowned and influential design and engineering company. We globally serve the largest players in the offshore oil and gas industry by providing the best in class solutions for mobile offshore units.

GustoMSC
Karel Doormanweg 25
3115 JD Schiedam
The Netherlands

T +31 (0)10 288 30 00
info@gustomsc.com

www.gustomsc.com

Its flagship Dubai shipyard is the largest facility in the Middle East and has developed a prolific reputation for its execution of new build projects, conversions and offshore construction

for between 208 and 490 people in single cabins depending on rig configuration. The rig is able to operate in waters of up to 135m in depth with an air gap of 25m and boasts the significant advantage that it is able of undertake 100 per cent up-time regardless of weather conditions, unlike semi-submersible accommodation and construction rigs. The design also features a 3000 ton Huismann crane for offshore heavy lifts, a large free working deck with full crane coverage, a heli-deck for use by AW 101 helicopters and provision for a full helicopter crew of 21 personnel and full safety equipment for all onboard employees.

Similarly, the award of the Dubai Expo 2020 mega jack-up rig is a major milestone for Drydocks World. Gusto MSC, which is one of the major partners in this project, has designed the CJ 80 rig and it will be the first of this design and will the largest jack-up rig ever built. Designed to be operated in harsh environments including the Norwegian Sector of the North Sea at a maximum water-depth of 175m with a 25m air-gap. The 101m X 110m, 5500 m sq unit will be classed by DNV and will meet all rules and regulations in force within the Norwegian and UK sector of the North Sea. The design draft is 8.5m, minimum operational water depth is 20m and length of legs is 232m. It is designed to accommodate a total of 160 persons preparing the unit to be used as a drilling and production unit. The rig will be equipped with the latest available state-of-the-art drilling equipment to be able to drill to 40,000 ft drilling depth. The rig will be equipped with a total of four high-pressure (7000 psi) mud pumps.

As well as winning sizable new contracts, Drydocks World has distinguished itself through the execution of several high-profile projects. One of which, was the 10,000-ton topside lift of the first gravity base of the world's largest offshore semi-submersible HVDC platform structure, DolWin beta. The massive structure was lifted a total height of 52.8 m from the bottom of the dock. The ambitious lift was part of the mating operation of the topside components with the unit substructure. The operation consisted of lifting the topsides via strand jacks and floating the substructure in the dock before carefully moving it under the lifted topsides. These were then lowered with precise guidance and subsequently locked with the underlying substructure. Dedicated teams from Drydocks World, Aibel, ABB and TenneT worked tirelessly for months to achieve this engineering and docking spectacle. "We have taken our engineering excellence to greater heights through this unique and remarkable feat," said H.E.Khamis Juma Buamim. "It is a significant first and speaks volumes of our strengths in terms of technical capabilities. I am sure that the future will bring even more challenging assignments and we will handle them with equal ease. This heavy lift is a hallmark anywhere in the world, and in our involvement with offshore projects. In the months ahead we look forward to greater achievements in our operations that will place us on par, if not ahead, with the best in the business."

Moving into 2014, Drydocks World is in a prime position with a strong order book throughout the year and beyond. Furthermore, the company can expect to expand its business following in-depth talks with Foresight Ltd to help the company develop its rig business. Commenting on this and the future of Drydocks World, H.E. Khamis Juma Buamim says: "We are delighted that more and more companies are acknowledging the emerging clout of UAE in the maritime and energy, oil and gas arena. We are emerging as a strong contender in building drilling rigs and jack-up barges for the offshore oil and gas sector, and have proven our mettle with some highly successful projects of great international significance in recent times. Moreover, there is sustained interest from companies across the globe in the world-class Dubai Maritime City, which holds a cornucopia of businesses with maritime interests, creating vital synergies for the growth of the industry, which is emerging from the global financial meltdown."

GUSTOMSC

GustoMSC, the world renowned and influential design and engineering company of mobile offshore units and associated equipment, has partnered with Drydocks World for two of the largest jack-ups ever being built. The AJ62-X135-416 is an accommodation jack-up with 416 POB in single cabins, intended for water depths of 135 metres in the North Sea. The CJ80-X175-A is a drilling jack-up capable of operating in water depths of up to 175 metres on the Norwegian Continental Shelf. Besides exploring and production drilling at the largest drilling envelope ever (33 m x 25 m), it can also carry a production module next to the drilling cantilever, catering for simultaneous drilling and production operations.

Drydocks World
drydocks.gov.ae

Services
Offshore engineering, ship repair/maintenance, rig building and conversion, maritime clusters, yacht repair and navy vessels, associated services

Ofar Spa is a world leader in the supply of products within the Oil&Gas Market. The new investments in technology, equipment, skilled personnel put Ofar as one of the most important players in the international forging market, with product range going from few tons up to 200 tons and deliveries worldwide; as part of the GIVA Group, the supply chain is integrated from scrap to finish machining, with 100% internal control of any process. The partnership with a young and well developed company as Balltec resulted in the production of rich-values chain stoppers for the Guara Lumpa project and mandrels and receptacles for other rigs.

ofar

steel forging

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+ 39 030 9522511 (switchboard)
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www.ofarspa.com

An engineering culture

Meteoric is perhaps the only way to describe the growth of Balltec Limited over the past two years. Since it was last featured in *European Oil and Gas Magazine* during August 2012, the company has completed work on the ambitious Petrobras Guará Lula project on behalf of Subsea 7 and today is focused on solidifying its position as an engineering solutions provider, as well as maintaining its core business in innovative mechanical connectors.

Balltec was established in 2004 with the world's only patented ball and taper lifting device, since then it has installed over 1000 products and successfully completed over 150 projects. Balltec has always placed a large emphasis on engineering innovative solutions for the oil and gas industry, originally focusing on ball and taper technology.

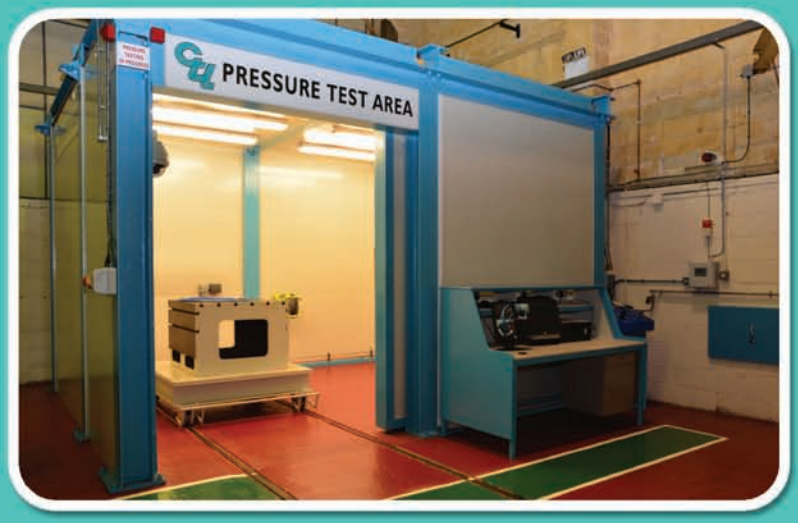
By 2011 Balltec had moved from its original premises to a larger site located in Morecambe, Lancashire and after only 12 months, following a continued increase in demand for mooring systems, pipeline recovery tools and bespoke engineering solutions the company acquired an additional adjacent workshop to increase its engineering and fabrication potential. One of the key advantages of this secondary workshop is that it has been refitted to accommodate fabrication and welding facilities as well as significant storage space for Balltec's comprehensive PipeLOK and LiftLOK fleet. The new facility and the assets it contains will enable Balltec to further enhance the in-house services that the company is able to offer, as managing director Russell Benson explains: "The new site will allow us do more of the work ourselves when it comes to fabrication. We already carry out all design, assembly and test activities in-house and a development following the Guará Lula project is a desire to handle additional project processes internally. We are in the process of getting several of our technicians certified in welding to various common offshore standards including AWS D1.1, BS EN 15614 and DNV-OS-C401."

The strong foundation provided by the firm's production base allows Balltec to provide some of the world's largest and most technically advanced equipment. Its PipeLOK pipeline abandonment and recovery tool, for example incorporates over 30 years of industry experience and now within its third-generation is the most advanced piece of equipment of its type on the market. Testament to the company's dedication to innovation and quality, the PipeLOK can be produced as a bespoke option to meet the client's requirements and boasts a 100 per cent failure-free track record across multiple applications and projects.

Continuing in the spirit of innovation and firsts, spirited by the company's founder, the MoorLOK subsea mooring connector is the world's only patented ball and taper subsea mooring connector. The MoorLOK is designed for temporary and permanent mooring of all floating structures and shares in the 100 per cent success track record of the PipeLOK. Among the benefits that distinguish the MoorLOK from other mooring products are the fact that it is the only ROV-less connection method, maintains a smaller, compact design that does not compromise strength, the incorporation of the patented TripLOK triple locking system that remains failsafe even during zero loading or inversion, and that it does not require clumsy pins or protrusions that could cause instillation problems. These in addition to Balltec's LiftLOK, BendLOK and Helical Connectors, coupled with the company's ability to deliver bespoke engineering solutions have made it an obvious choice when it comes to executing large, technically demanding projects.

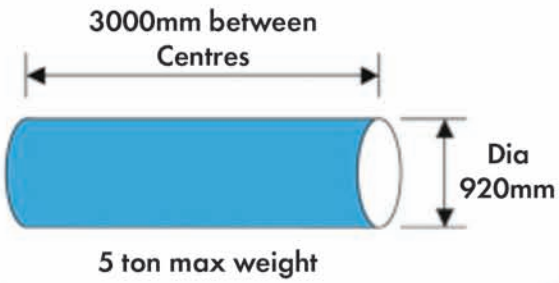
The work on the ambitious Guará Lula project that Balltec has recently undertaken is an impressive example of the demanding projects that the company can execute in only a limited turnaround time. The project was a major investment for its owner, Petrobras, operating within the Santos Basin at ultra-deep water depths of beyond 2100m, some 300km from the shore. Guará-Lula resulted in a one billion dollar contract awarded to Subsea 7, with Balltec

High pressure testing services available up to 22,500psi

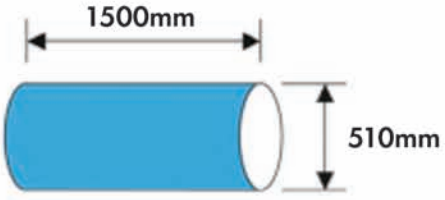


Our new Hydro Test chamber has a pressure rating of 22,500psi and is a dual system capable of using either oil or water mediums. The approved 22,500psi pressure test system has a high-pressure calibrated transducer with USB to enable connection to a PC or Laptop.

MAZAK INTEGREX E650 E-TOWER



MAZAK INTEGREX 50YB



These machines are utilised by Balltec, Morecambe on for their MoorLOK subsea mooring connectors.

CTL ENGINEERING

Tel: 0161 430 583116 | Email: cwb@ctl-eng.com
www.ctl-eng.com

55 YEARS ESTABLISHED 1955-2010

contracted to provide 36 buoy connectors and six tensioners for the project.

The scope of the project was vast and once work commenced, the tight timeframe for turnaround was only 18 months. However, despite the mammoth requirements of Guará-Lula, Balltec was able to undertake the project successfully and on time, as Russell elaborates: "We secured the contract in a design competition and our proposal was chosen as the best way forward, but it was still a concept product at that stage and as we continued the project a lot of challenges came to light. We had to fabricate various test rigs to test the functionality of the equipment, we developed a prototype connector which was tested extensively and then from there, once the design was frozen, we had to push on and get the units manufactured.

"We delivered those starting in April 2013 and the final delivery went out in July 2013. This required a lot of our resources; we grew from 20 people to a peak of about 80 when we went to a 24/7 working pattern. We also managed to sustain the current Balltec product range, which has brought the company to where it is today and we had record years for all of those during the same time. So it was a real challenge to sustain the regular business alongside such a mammoth project.

"The physical size of the equipment was bigger than anything we had previously done," he continues. "Each top connector weighs 25 tonnes, each subsea tensioning unit weighs 28 tonnes and we had to install entirely new crane facilities and infrastructure to deal with the project. We had to build a bespoke assembly rig to put the connectors together and all of this was designed and built on the job as the project was developing. Technically, the subsea chain tensioner was unique because nobody has produced a subsea tensioning system before. That was probably the biggest technical challenge and the finished design is controllable from the surface and via ROV skid subsea. The client had serious requirements for it as it had to tension to 1000 metric tonnes, so it's an enormous piece of equipment."

Moving into 2014, Balltec will look to consolidate on the rapid growth it has enjoyed as a result of the Guará Lula project and seek to resume its development operations. Although the company is keen to obtain further large scale engineering projects, it is also gearing up to launch new product lines as well as bring the technologies developed for Guará-Lula to the wider market. First in line for development is the BendLOK diver-less bend stiffener connector, which has recently completed a one million cycle fatigue test, monitored throughout by DNV. With a strong history of innovation and engineering problem solving, Balltec is well placed to become a major player within the oil and gas industry. OSG

CTL

Balltec was established in 2004 and is building on over 25 years' experience of pioneering and development of the ball and taper technology for the oil and gas industry.

In 2006 CTL invested in CNC Mazak Millturn machines and with this capability was able to offer Balltec in Morecombe a unique service on its Mandrel Connectors.

With the Mazak Millturn Machines offering a large turning and milling option with a diameter of 920Ø m/m and overall length of 3000m/m, CTL quickly mastered the pocket machining on these hefty components.

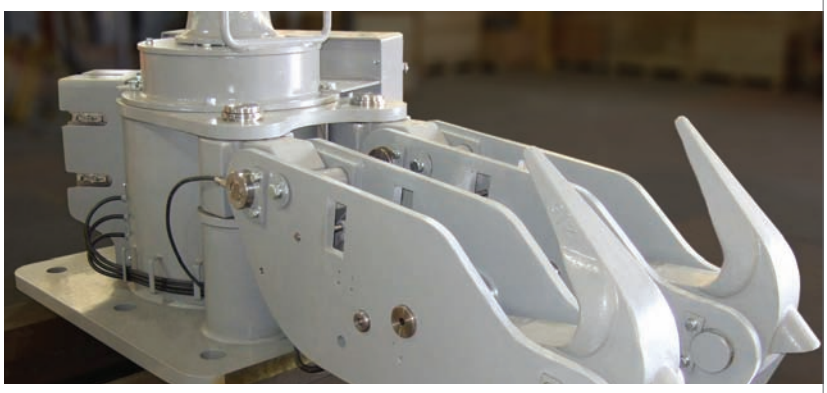
Utilising its in-house CMM inspection facility it was able to provide Balltec 100 per cent quality and on-time delivery. CTL to date will have manufactured 30 off Mandrels for Balltec.

Balltec Limited
balltec.com

Services
Mechanical connectors and engineering solutions

Taking the strain

Strainstall is a broad based engineering business and part of James Fisher and Sons Plc Group. Specialising in load measurement and sensor based safety technology, the business was established in 1965 operating out of the Isle of Wight where it remains positioned today. Meeting the demands and environmental factors of the oil and gas industry requires the very best of design, materials and testing. Strainstall has nearly 50 years of experience in this market and has built up significant expertise in offering monitoring solutions that have been proven all round the world in this hostile environment. Through its long association with the manufacture of standard and bespoke load cells, it has assisted several industries in operating safely and efficiently.



From the supply of subsea load shackles to monitor the anchor loads of an FPSO to complete jetty management systems in LNG and oil terminals, and from the monitoring of stresses in LNG storage tanks to fatigue damage assessment of offshore steelwork, Strainstall has answered the toughest questions, time and time again. Its in-house capability to consistently develop new products and technology has aided the business in producing solutions for mechanical, electrical and electronic software. The business has over 140 employees around the world in the UK, Dubai, Singapore, Malaysia, Australia, and most recently Qatar.

Strainstall WLL (Qatar) was officially established in October 2013, and forms part of the operations in the Middle East. Business in the region has grown rapidly in the last nine years to become acknowledged as a leading testing laboratory for all on-site geotechnical, pile testing and movement monitoring services. Recognised for its excellent experience with vibration and settlement monitoring, the business undertook a project for The Qatar Museum Authority. To date, it has completed more than 30 projects in Qatar including bi-directional static load testing, various pile testing works, ground instrumentation, survey works and vibration monitoring, and is currently working on several other projects.

Working with a range of customers in a variety of market sectors the company has established a client base that extends between oil majors, EPCs, service companies and lifting equipment firms. By recognising the importance of working closely with customers, the company has succeeded in becoming a technological

SEA CON GROUP

The SEA CON Group is a world leader in underwater connector technology and manufacture, and supplies an extensive and diverse range of electrical, optical and hybrid connector assemblies, submersible switches and cable system solutions for many applications within the oceanographic, oil and gas, defence, and environmental markets.

partner with many key clients. The business designs and manufactures load and stress monitoring systems for TLPs and other offshore structures. As part of its unique approach it is able to design, manufacture and supply complete systems, from high-performance load cells to custom-designed, fully integrated multi-sensor packages that monitor parameters such as vessel draft and ballast, Metocean conditions, vessel loading and structural dynamics. These systems play an integral part in maintaining operational safety and the formulation of efficient platform management, inspection and maintenance plans. All the application software is developed and maintained by Strainstall, providing a high level of control over a project that enables the final design to be configured to the exact requirements of the customer.

In October 2013, the company announced an order to supply its StressAlert Hull Stress Monitoring System (HSMS) to Hyundai Heavy Industries for five new 18,000 TEU class container ships. The carriers are the largest container vessels ever to be built. The order comes as a testament to the years of experience and quality of monitoring technology that the company has become renowned for. The business also received CSCS certification in October, the leading competency scheme for construction. The certification recognises that a large proportion of the company's onsite workers hold full CSCS qualifications.

In June 2013, Strainstall announced that its new Offshore Wind Farm vessel Management System (OWMS) had completed North Sea trials. The system provides the potential for significant improvements in the numerous transfer vessel movements that support operation and maintenance activities in the offshore wind energy industry. The system builds on the very successful Integrated Mooring Monitoring Solution (IMMS) that is used extensively in the tightly regulated environment of the offshore oil and gas sector to improve the safety and effectiveness of transfer vessel operations.

Scott Cruttenden, business development manager commented: "We were particularly pleased to have been able to work with East Coast Charters and E.ON to successfully demonstrate the offshore wind farm vessel management system at the Scroby Sands wind farm. This highly innovative system has the potential to make a step-change contribution to the improvement of transfer vessel operations across the marine renewable energy sector. By bringing all the key data and information elements together in a customisable form, which can include a cloud database implementation, the operation of the numerous transfer vessels required to support offshore wind farms can be made more resource efficient and cost-effective, while also improving the safety of both crew and wind farm maintenance personnel."

Continuing its investment in product research and development, the business looks towards the next 12 months with a positive outlook. With the backing of a broad client base and a strong reputation in the industry, the management and engineering team is focused on the ongoing expansion that has become the trend within the organisation. O&G

VERMEIRE-BELTING

Vermeire-Belting is the leading company for the sales of power transmissions equipment in Benelux, but is also active in France and Germany. The company is an official agent of worldwide companies such as NTN-SNR, THK, Continental, IWIS, Motovario, WATT, Power-Jacks, Servomech, Parker, Siemens, and Fuji.
We have a highly qualified technical team to support our customers with a global solution for their machines. We have a very high stock (15000m² with 40000 references) and a workshop (2000m²) for assembling of reducers, linear axes, and other products.
We have also a new business unit, Vermeire-Motion, fully dedicated to total drive solutions for linear motions with drives.

SOUTHAMPTON FREIGHT SERVICES LTD (SFS)

SFS is a family owned independent international freight forwarder and logistics provider, working in partnership with Strainstall UK to provide detailed solutions for their product movement across the globe. Its specialist services include air, ocean, road, and courier; both import and export, warehousing services and specialist logistics operations for the cruise and wider marine industry. Its honest approach to the industry focuses on a high level of customer service and long-term partnerships with clients.

Strainstall
strainstall.com

Services
Solution provider for load measurement and monitoring applications

An impressive turnover

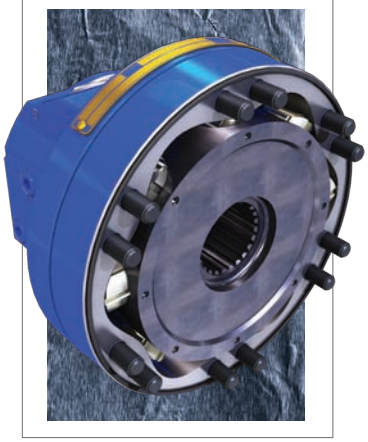
THOMAS DUDLEY

Thomas Dudley is delighted to have worked closely in partnership with Rotary Power over the last 12 months. During this time, it has successfully managed the production of 12 new components and looks forward to exploiting its unrivalled engineering capabilities to develop the relationship further.

RUSSELL DUCTILE CASTINGS LTD

CHAMBERLIN & HILL CASTINGS

Chamberlin plc has developed a close working relationship with Rotary Power, through its foundries located in Scunthorpe and Leicester, over many years. They are a key customer to our business and we are glad to have the opportunity to support them in their growth plans and the ongoing development of new products, we wish them every success in their new facility.



Since Rotary Power Limited last appeared within *European Oil and Gas Magazine* during May 2012, the company has continued to surge ahead in its mission to provide benchmark solutions in the design, development and manufacture of high quality hydraulic pumps and motors. The UK based company was founded in 1979 and is now headquartered in South Shields, with a current workforce of around 120 employees.

Although the business has endured the same challenges that have hindered the manufacturing sector during the past three to four years, Rotary Power has invested significantly in all areas of its business. These range from new product introductions through to the relocation of its manufacturing facilities to a 150,000 sq ft location in South Shields. The facility development leaves the company well positioned to grow with increased momentum and improve its overall market presence worldwide.

Market conditions within the manufacturing sector have indeed remained volatile in the face of an uncertain recovery from the global economic downturn. However, through careful deliberation and an agile response to fluctuating trading conditions throughout the world, Rotary Power has developed a strategy that it believes will propel it through 2014 and beyond, as CEO Geoff Willis explains: "Through very detailed and thorough market studies, we have identified a very clear strategy of growth. Of course we have set ourselves a very ambitious growth target and this is by no means a certainty, however the timing is right to press ahead with driving the business into a new phase. The analysis encompassed the obvious areas such as product design, innovation and sales development, but also identified the critical constraints on the business such as expansion of the manufacturing space. By aligning the strategic growth plan to a detailed assessment of our capacity constraints, it became clear that we needed to invest in larger manufacturing facilities."

By moving production to larger premises Rotary Power has increased its manufacturing potential and taken a key position to engage the emergent market as the global economy moves towards future buoyancy. The facility itself is a ten year old, pre-existing building that the company has refurbished to a high standard, using almost exclusively local suppliers. Throughout the North of England, a mature and robust supply chain serves Rotary Power

and this has enabled the transition into the new manufacturing base to proceed incredibly smoothly and efficiently.

Although increasing energy demands have invigorated movement within the oil and gas sector, the global market remains relatively challenging as Geoff observes: "Energy demands have been driven heavily by the economies of China and India and this has underpinned some of the confidence within the oil and gas markets. However this has not been universal and the uncertainties of the fracking market in North America continue to be a frustration. How fracking actually unravels within the UK is something that also remains to be seen."

New products sit alongside the company's existing range to allow it to service the oil and gas industry as well as the industrial, marine, subsea, offshore, chemical and construction sectors. From bespoke designs to standard products, Rotary Power is able to deliver motors and pumps to satisfy the most arduous application requirements. Its SMA motor range for example, is the solution of choice for heavy-duty applications and offers an excellent lifetime. The SMA range is able to withstand 350bar continuous pressure rating and delivers speed and power ratings far in excess of standard HTLS (High Torque Low Speed) motors as well as displacements ranging from 120 to 16,400 cm3/rev.

Other ranges deliver optimal solutions for mid to light weight applications, including a full range of motors that feature radial piston configuration offering static and dynamic breaks as well as wheel, shaft and torque-module mount options. Heavy-duty external load and high-speed options are available with capacities ranging from 376 to 8092 cm3/rev. For smaller, lighter applications the XF range of motors offer compact, modular design, high reliability and an increased range of capacities from 150 to 1120 cm3/rev. Furthermore, Rotary Power displayed its very latest range, the XJ CAM motor, at the Bauma Munich exhibition during April 2013. While the range is still in its infancy, according to Geoff: "It is showing very strong indications of market acceptance and it will be a focus to conclude this during 2014." The company's portfolio of motors is complimented by the 'A' and 'C' range of pumps, which offer high accuracy fluid metering with precision flow controls with capacities ranging from two to 125 cm3/rev. Each range offers high-pressure capacity with the 'A' range able to handle most fluid types, while the 'C' range is designed specifically for the Polyurethane industry.

Vital to the continued success of Rotary Power is its continued dedication to aftersales support and customer focus. The relationship between the company and its customers is something that Rotary Power takes very seriously and is an area that it supports through a strong global support network and a customer-facing presence at various trade shows, as Geoff elaborates: "Aftersales support is not a choice, it is a necessity to do business within the company's chosen markets. Rotary Power has its own aftersales teams located around the world and these will continue to grow as our market share increases. Trade shows and exhibitions are also very important. It goes without saying that every business is working to maximise its return on every pound, euro and dollar that is spent. This means that it is no longer acceptable to just try marketing strategies that simply sound good. We need to embody a full creative marketing strategy of which tradeshows are just one part."

Although the past three to four years have brought with them significant challenges across the manufacturing sector, Rotary Power has braved the storm and even flourished within a turbulent environment. As the company moves into 2014 it will look to introduce new products and take advantage of its expanded manufacturing base to propel it as a market leader in hydraulic pump and motor supply. O&G

> New products sit alongside the company's existing range to allow it to service the oil and gas industry as well as the industrial, marine, subsea, offshore, chemical and construction sectors

Rotary Power Limited
rotarypower.com

Services
Hydraulic motors and pumps

Advanced Polymer Sealing Solutions

Arefco Special Products Limited is part of the UTEX Industries Inc family of sealing solution providers.

Based in Ashington Northumberland, Arefco Special Products lead the market in the design, development and manufacture of advanced elastomer and plastic sealing solutions where reliability, quality, endurance in harsh environmental conditions are the key drivers for supplier selection.

APPLICATIONS:

- Onshore Oil and Gas
- Offshore deep water high pressure / high temperature
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- Spring energised seals
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- Explosive decompression resistant sealing systems
- Modular fully engineered solutions.
- Product test cell, tailored to customer specification

ISO 9001:2008 approved
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Going global

Delta Doha Corporation is Qatar's leading provider of custom designed and manufactured wellheads, Christmas trees and other oilfield equipment, and has full in-house capability to support local and international extracting contractors and oil and gas producers to manage complete pressure flow operations on site.

The company prides itself on delivering the most innovative and cost effective engineering designs and solutions, which range from design and manufacture to complete turnkey project management. A dedicated team of engineers, many with over 30 years' experience in wellhead equipment handling and maintenance, provide a complete aftersales support service for clients worldwide. This includes field installation, maintenance and repair of any brand of equipment, and inspection services. Staff are continuously trained and developed to maintain their knowledge of leading edge developments in technology.

The Delta portfolio of products and services has been brought together and developed over the past 20 years through a series of strategic investments in equipment, facilities and personnel. In 1994 when Delta was originally acquired by Sheikh Sultan bin Jassem bin Mohammed Al-Thani and HH Sheikh Mohammed Bin Khalifa Al-Thani, it was the only local manufacturer and provider of oilfield equipment and services in the Middle East.

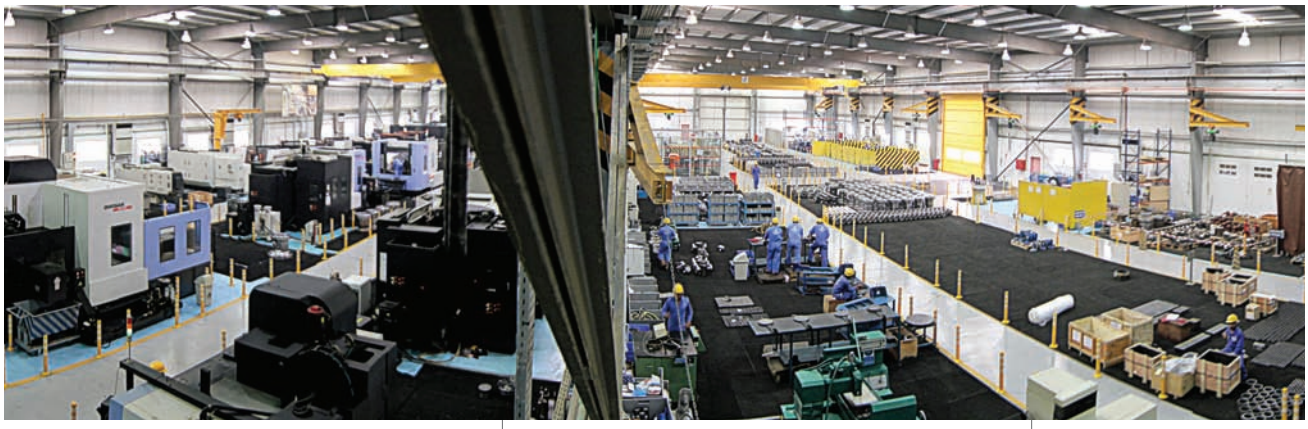
Years of investment and growth have followed. By 1998 Delta began to expand into the regional marketplace, first entering Oman and Kuwait, and then into the other Gulf Co-operation Council (GCC) countries. In 2008, recognising that there was a growing need for specialised welding and steel structure services in the region, the company formed a new subsidiary called Delta Fabco. A purpose built fabrication facility constructed at Um Salal, went into production that same year.

As part of its ongoing strategic growth plan, the company invested in two major construction projects in 2009. The first was the construction of a new corporate headquarters at Saliya, in Doha's new industrial area. This is located just ten km from the main highway connecting the city with the Saudi road from the North. The second project was a major investment in the future of the business: a purpose built state-the-art manufacturing facility adjacent to the headquarters.

Approved by the American Petroleum Institute and operating to API Q1, ISO 9001 and ISO/TS29001 standards, the manufacturing plant is staffed by a team of highly qualified engineers and has the capacity to design and produce more than 150 customised wellheads and Christmas trees, as well as 800 valves, bulk piping and fittings per month. Field testing of the equipment is guaranteed, and carried out on the premises using the latest technology.

The final major investment in Delta services and capabilities took place in 2011, and incorporated a basic restructuring exercise. Responding to the growing demand for highly specialised engineering and maintenance support, Delta's internal service and engineering capabilities were brought together in a single specialised subsidiary named Dserv. This provides maintenance consulting and support services to clients in the LNG and oil industries worldwide.

In parallel with this long-term development of



technical capabilities, Delta has been expanding throughout the Middle East and into the global marketplace. Its location in Qatar, mid way along the eastern side of the Arabian Peninsula, is strategically excellent for international operations.

Qatar has strong transport links with all the major oil and gas production centres in the region and globally. A network of fast modern highways link it not only to the Gulf States but also with other key Middle East countries such as Yemen, Jordan, Oman, Iran Lebanon and Syria. The nation's global air freight and international port facilities provide a reliable route for transporting products and personnel to destinations around the globe.

To embed company expertise overseas Delta opened its first overseas branch in Kuwait in 2010, specifically focusing on servicing the rapidly growing energy industries in Kuwait and Iraq. Expansion beyond the GCC states began with contracts in Africa, Asia and Russia, and has continued with the opening of a branch in the US in 2011 to supply Qatar-manufactured equipment and expertise to markets in South and North America.

All of this is based on the expertise and capabilities of the manufacturing facilities in Doha. Design, production and assembly take place in a fully air conditioned 5000 sq m manufacturing plant that is not yet five years old. To maintain this leading position the staff are continuously trained and equipment updated.

The engineering department is equipped with the latest 3D modelling, enabling engineers to combine Finite Element Analysis (FEA) with traditional design study procedures. The highly accurate meshing technique provided by FEA enables engineers to study complex shapes and models under virtual pressures and temperatures. The results are then compared and studied using traditional design processes. From this, the optimum product is achieved. The department also routinely uses 3D printing technology to facilitate innovation and speed up the design process.

Having created the optimum design, manufacturing is undertaken in a high tech centre equipped with over 40 of the latest machines. These include CNC machines capable of carrying out all types of precision operations, and large CNC horizontal boring machines with a pallet size of 2000mm x 1800mm for manufacturing dual blocks. All products are API monogrammed and strictly comply with the highest quality standards and health and safety measures. In addition, the plant is qualified and equipped to produce Sour Service products, with specialised coating.

At the after production stage, the plant boasts extensive assembly and test facilities. There are two benches for hydrostatic testing up to 15,000 psi and gas/nitrogen testing up to 20,000 psi. A horizontal test bench is provided for valves and equipment up to 16" and another bench analyses the performance of pressure valves. UT or radiographic inspection is performed for all product specification level three parts, and hardness testing for NACE service is carried out on all product specification levels.

The entire operation is supported by the Infor LN/Infor BAAN ERP system, which also manages quality documentation and traceability, from the raw material stage through to the end product.

In recent years, Delta has been through a significant period of investment and growth, which has equipped it to continue expanding both regionally and globally. Looking to the future, the company is well placed to support Qatar's ambition to become the world's largest exporter of LNG. Moreover its world-class facilities and capabilities are already contributing to the development of a centre of integrated energy expertise on the eastern coast of the Arabian Peninsula. O&G

> The company prides itself on delivering the most innovative and cost effective engineering designs and solutions, which range from design and manufacture to complete turnkey project management

AREFCO SPECIAL PRODUCTS

Arefco Special Products (part of the Utex Family) is proud to be involved with Delta Doha Corporation. It has a long-term partnership with Delta Doha, which has seen over 15 year's collaboration between both organisations. This has now developed as both companies have expanded into partnership for seal design in Elastomeric and Thermoplastic products that encompasses material selection, manufacture and testing regime (API, ISO & Norsok) through to production parts.

Delta Doha Corporation
deltadoha.com

Services
Designs and manufactures oilfield equipment

Building for the future

FIBERGRATE COMPOSITE STRUCTURES

Fibergrate Composite Structures is the preferred supplier of GRP Gratings to JBS Group, a leading provider of fabrication, engineering, commercial, marine and heat exchanger services to the UK oil and gas industry. Throughout a strong and successful working relationship, Fibergrate has successfully supplied GRP Gratings to JBS for use on offshore walkways. Fibergrate's lightweight GRP meets the client's requirements to reduce weight and also to withstand the harsh and corrosive environments found on offshore installations.

Originally founded in 1974, the JBS Group (Scotland) Ltd is again looking to expand its growth within Peterhead and the North East of Scotland as a leading service company to the oil and gas industry. Scott Buchan, managing director highlights: "year on year we have managed to grow the business to such an extent that we need to expand the business premises again."

European Oil and Gas Magazine recently spoke to Scott following an agreement to purchase additional land: "Our main facility sits on a 1.75 acre site for storage, handling, fabrication and engineering. We have planned a new building that will strengthen our position as a leading fabrication company in the North East, facilitating the building of larger offshore structures and accommodation modules." The new facility, part funded by an RSA grant will house all 70 staff and dispose of the need for extra rented facilities currently in use. As a modern, efficient and forward-thinking company its key aim is to understand and exceed customer's needs and expectations whilst offering value for money.

The business has developed five separate limited companies, creating versatility that meets demand with each operating independently. Offering fabrication, engineering, commercial, marine and heat exchanger services, JBS can accommodate both onshore and offshore work scopes when and where required. "We have a strong workforce of over 50 personnel able to cover all aspects of work. We are still a family owned business and know how important it is to keep our clients happy and meet deadlines so we are very much focused on continuing this support and close working relationships with our customers," says Scott.

The group takes pride in its reputation and growth stems from the belief that by developing the business model it can encapsulate key support services for clients providing a one-stop-shop. "The benefit is the quick turnaround assisting much larger scale projects. For clients, it is beneficial to have all work constructed under one roof and is a huge advantage when it comes to trial assembly," Scott explains. Throughout 2013, the group grew to become the chosen contractor with a number of key clients within the service industry, as Iain Buchan, business development manager continues: "Our client base is still oil and gas based. Over the last year we have worked hard to get onto

the Approved Vendors Lists of some of the larger oil and gas companies in the North East. Our existing client base has now grown to include new customers such as Taqa, Technip, Woodgroup PSN, Stork Technical Services, ISS Harkland, Weatherford and Helix Well Ops."

Providing an overview on the projects nearing completion, Iain says: "The chemical bath tank for Stork Technical Services is a complete new build for the offshore Zone II environment. The double skinned tank will be used to clean the client's hydro cyclones, saving time and costs by not having to transport the items back to shore. We are close to completing our first Donut Station for Woodgroup Taqa to be fitted onto the Cormorant Alpha Platform. With a total weight of just under 11 tonnes, the station consists of an 11 metre walkway, grating and handrails an features an embarkation rail support frame and safety gate." The whole structure was manufactured, galvanised and painted within eight weeks, highlighting the fast turnaround speeds JBS has become renowned for.

Recent work with Proserv included the construction of four workshop containers each fitted out internally with electrics ready to take on their next project. The company is continually sending offshore welders and fabricators to assist Halliburton on the NTVL and Galaxy III where it is fitting a number of fabrications, including Walkways and grillages produced in-house.

Another recent work-scope completed was the delivery of 4 x Hose Reel Systems for Weatherford. These were completely built and tested in-house, which shows the wide variety of services that the JBS group can provide.

To help meet the demand of the ever-increasing workload the JBS Group appointed Gordon Ingram as general manager in May 2013. Gordon brings with him 30 years of experience in the oil and gas Industry with 20 years of that in management. His past experiences include manufacturing, asset repair and maintenance, wireline, operating offshore, BOP assembly and high pressure testing (onshore and offshore), subsea and overseas experience. Gordon's experience will enable the JBS Group to enhance productivity and continue the development of the group.

Focusing on the increase in demand for its services Gordon adds: "We have seen more demand for our offshore capabilities, where we can supply 6G coded welders and qualified fabricators to assist with the installing of structures built in-house. We now have a core of 12 offshore personnel that can quickly be available to go offshore. Additionally there has been a steady increase each year in the mobilisation and demobilisation of kit for offshore vessels that our clients work on. We can supply up to 30 people on a 24 hour mobilisation basis to various ports up and down the breadth of the country."

Currently the group has eight apprentices that attend Aberdeenshire college and are working towards a NVQ level three in welding, fabrication and machine operation. "We recognise the Apprenticeship scheme as a valuable asset to the company. The team of apprentices have a great opportunity to learn various skills throughout the company and we were very proud to have one young apprentice win Apprentice of the Year 2013, which has set a president of achievement for the future," explains Gordon.

Looking towards the future the requirement for JBS' services is set to continue rising, and with over 30 years experience in the oil and gas industry the business moves forward with a solid reputation and support of a dynamic and hard working team. O&G

> We have a strong workforce of over 50 personnel able to cover all aspects of work. We are still a family owned business and know how important it is to keep our clients happy and meet deadlines so we are very much focused on continuing this support and close working relationships with our customers

JBS Group (Scotland) Ltd
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Services
Specialist engineering and fabrication

BARRIER

BARRIER FIRE PROTECTION

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Flying the flag

THE BARRIER GROUP

The Barrier Group has worked with OGN on three major projects over the past three years. It has carried out painting, scaffolding, fire protection, and architectural and insulation services.

Over 500,000 man-hours of work have been carried out accident-free, which is a major achievement in the construction industry. This has been achieved by Barrier and OGN safety teams working together with a 'zero tolerance' policy, backed by both senior managements, and training of the workforce. All the work has been carried out to the highest quality standards and to tight time schedules.

The Barrier Group works worldwide, with work currently in Germany, Equitorial Guinea, Papua New Guinea, and Korea.

Headquartered in Tyneside, UK, Offshore Group Newcastle Limited (OGN), operates as an engineering, procurement and construction contractor in the oil and gas and offshore wind sector. "There are fundamental benefits deriving from our geographical location in the north east of England," begins Craig Melville, chief commercial officer & deputy CEO. "The area has a longstanding heritage within the heavy industry sector, and as a result benefits from the UK's largest resource of skilled engineering manpower. Combined with this, we have accrued senior management and project teams with extensive industry experience and knowledge."

Over the last 30 years, Hadrian Yard, now OGN's flagship facility, has built a reputation for executing and delivering a significant proportion of the offshore oil and gas infrastructure operating in the North Sea/UKCS/Norwegian sector. Located on the North bank of the River Tyne, OGN is perfectly situated to cost effectively access and service the North Sea oil and gas industry. The area is also a major hub for energy related businesses, where the local and experienced supply chain is an invaluable asset.

Focusing on future development, Craig explains: "Apprenticeship and trainee schemes are crucial to the future recruitment needs and success as the whole industry faces an ever ageing workforce. It is essential that skills and knowledge are passed down to the next generation in order to maintain operational capabilities to develop a sustainable business for the future." Following the employment of four final year apprentices in 2012, in conjunction with Tyne North Training, it hired a further six fabrication and welding apprentices in 2013 and recruited two new rigging trainees. "We have been cautious not to over hire so that our apprentices have the best possible training opportunities. We feel that will be achieved by expanding the programme in line with our order book," he adds.

The business takes great pride in working collaboratively with its clients from design through to delivery, as Craig elaborates: "We believe in early engagement with the aim of utilising our experience and expertise in order to build client confidence and develop long-term working relationships. This philosophy in turn helps our clients meet their business objectives as we develop solutions that improve return on investment whilst minimising risk." During 2013 the general market has been quiet although by focusing on target opportunities through this period, OGN successfully continued the development of the business.

"We have completed the Apache Forties Alpha Satellite Platform (FASP) Topside structure, which sailed out in May 2013. It was our first major FEED & EPC contract, and is one of the largest North Sea EPC contracts to be fully completed in the UK in recent years," highlights Craig. Awarded in September 2010, the scope of work included an integrated production

platform, a four leg jacket suitable for water depths of 106 metres, fabricated jacket piles of 80 metres in length and a link bridge structure.

"We have also been working on the engineering, procurement and fabrication of a 5400 tonne jacket for Talisman Sinopec Energy UK Limited. This structure will form part of a new bridge-linked platform within the Montrose Area Redevelopment (MAR) Project," Craig adds. Measuring 118 metres in length, the jacket is due for installation in mid-2014. Not only benefitting local workers through the provision of 400 jobs, but a large percentage of construction materials and subcontracted services were sourced from the UK, supporting the regional supply chain.

In November 2013 the group was awarded a multi-million pound contract with EnQuest. The provision of its specialist fabrication services to undertake finishing and commissioning works on the EnQuest Producer, a 249 metre long Floating Production, Storage and Offloading (FPSO) vessel, will create 700 new project jobs at its Tyneside facility. Continuing the organic growth, Craig announces: "We have very recently won a prestigious multi-million pound contract for a 'blue chip' international oil and gas operator for the construction of a new process module. We will engage a workforce of up to 500 personnel to deliver the programme."

Extending its success in oil and gas and having created many hundreds of new jobs, the business is focusing on its long-term future with diversification into the renewable energy sector. Utilising its scope to service both oil and gas and renewable industries from the facilities in Tyneside, Craig says: "We have secured planning permission for a new £90 million offshore wind turbine jacket manufacturing facility at our Hadrian yard base, which has the potential to create hundreds of new jobs. The 36,000sqm factory will be able to manufacture various types of steel foundations suitable for large turbines with the capacity of 5MW or more each."

These will include the Triton foundation, an innovative three-leg steel jacket, developed by OGN and its subsidiary Aquind, specifically to address the needs of developers of large-scale offshore wind farms in the UK and Europe. The new purpose-built facility will be capable of producing up to 150 jackets a year.

"Looking ahead we plan to continue to grow the business in both sectors, through enhancements to our facilities and our regional supply chain. Our investment in a mass manufacturing factory will be a major strategic advantage across both sectors and will provide our client base with first class and reliable service," concludes Craig. O&G

> Over the last 30 years, Hadrian Yard, now OGN's flagship facility, has built a reputation for executing and delivering a significant proportion of the offshore oil and gas infrastructure operating in the North Sea/UKCS/ Norwegian sector

PIPETAWSE LIMITED

Pipetawse Limited is a pipework and steelwork fabrication company that strives to provide all its clients with a quality product delivered safely and on-time. Pipetawse Limited has been established since 1981, and is ISO 9001:2008 approved.

OGN Group
ogn-group.com

Services
Engineering, procurement, construction and installation services

Grain to gain

As a wholly owned subsidiary of National Grid, the LNG import facility on the Isle of Grain in Kent was first commissioned in 2005, and since this time has developed from strength to strength with a proven track record of on time and on budget delivery, to its standing today as the largest LNG import terminal in Europe with one million cubic metres of storage capacity, and now it has ambitious plans to grow further.

As the UK government takes steps in the electricity market reform process - determining what is affordable, what provides security of supply and what is sustainable as it drives towards; nuclear generation, encouraging wind farms both onshore and offshore and encouraging new gas fired plant to be built.

There is an expectation that a lot of the coal fired power stations will be retired as the environmental legislation allowances are used up and the reforms will lead to new capacity for gas fired generation. The government's capacity mechanism auction is expected to be concluded by the end of 2014, for new power generation capacity to be online in 2018.

Phil Carter, head of commercial UK LNG at National Grid advises: "At Grain we are in a position to provide new LNG importation capacity to support any new gas fired generation, and we are very keen to promote this to the market. We have the ability to bring new capacity online for winter 2018 consistent with the government's time frame for new gas fired generation, as well as for industrial, and commercial and domestic demand."

Grain LNG has been exploring opportunities to attract new customers interested in acquiring additional capacity via its Phase 4 Open Season process, now running in parallel with the government's market reform process and targeting 2018 when the UK will be in need of that type of facility. The government has declared that by 2030 it is expecting up to 26GW of new gas fired generation, and in that timeframe the level of import dependency may be up to 76 per cent. Phil continues: "For our Phase 4 development to strengthen we need clearer signals to emerge from the various processes in the market. These could come from the market conditions downstream or from upstream

developments and the combination will shape how we move forward."

The UK as a whole does not have a large amount of dedicated gas storage in comparison to other European countries. In the past it has relied on the North Sea gas fields to provide a level of flexibility that can manage outages on the system, or extreme weather conditions with associated high user demand. However, as the North Sea fields become depleted and less flexible, Phil highlights: "With the large tank capacity and send-out capability, the LNG facility at Grain provides our customers with a huge amount of flexibility. Individual customers naturally control their ship delivery schedules, but at Grain they also have control of when they send-out their gas, or alternatively how long they hold their LNG in the facility." In many other smaller terminals in Europe there is a restriction on storage, for example, at seven to ten days. In this period, vessels undergo unloading and exporting of all LNG into the gas transmission system in order to allow the next vessel to dock. "The storage is valuable, both in providing security of supply and flexibility to both the network and customers. As we go forward into a market that is expected to be much more dominated by intermittent renewable power generation, the flexibility for individual customers to manage their stock and level of flow through the terminal will become more important," he adds.

As renewable power generation and new nuclear power assets in the UK grow, it is widely believed that a scenario will be realised where there is greater variability and intermittency. Utilising wind generation backed up by gas fired power generation, combined with very responsive LNG importation incorporating significant storage, the UK can move confidently into the future. The model has been used in Japan and Korea, both of which are very dependant upon gas and other fossil fuel imports. The large facilities in these countries create great resilience, and it has proved successful.

"Through being part of the UK's energy mix, we are indirectly supporting other industries and with gas being cleaner than other fossil fuels we are contributing towards a sustainable future. Geographically we are 25 miles to the east of Greater London, and there is a lot of demand in the south-east for power generation, keeping people warm, and for industry," highlights Phil. With several power stations on the Hoo Peninsula being gas fired, Grain LNG has enough stock in the tanks to be able to flow significant amounts of gas into the transmission system, resulting in greater security of supply for those power generators as well as domestic and other industrial users. "Our facility benefits both the south-east corner, and the wider UK in general. Due to boil off we always have some gas flowing from the terminal into the local network and when our customers nominate at higher rate gas flows into the transmission system and into other parts of the country," he continues.

In 2013 the business announced that it was pursuing the construction of an LNG road tanker loading facility. Now, in 2014 Phil, advises: "We are progressing well, having recently received planning permission for the project. We will shortly be starting the construction process, and so far there has been a lot of interest with several parties expressing keen interest in loading of tankers with LNG at the Isle of Grain."

The planned construction has involved detailed engineering work, preceding the construction process, expected to start immediately and to be completed by Q2 2015. "It is a reasonably quick build process - on the scale of the LNG import facility, relatively modest in scale - so we don't anticipate any issues in terms of construction. We are building on an area of land that is already earmarked and clear of vegetation and environmental issues, so we predict a relatively straightforward process once we start," explains Phil.

With stringent regulations coming into effect

> At Grain we are in a position to provide new LNG importation capacity to support any new gas fired generation, and we are very keen to promote this to the market

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in the shipping industry in 2015, LNG is also seen as a clean fuel on which ships could run. As such, the business has witnessed an increase in demand over the last 12 months, as Phil explains: "The markets in Scandinavia and northern Germany into the Rhine have started developing faster than the UK. Our customers own all of the LNG in the facility so we would need to develop any marine reloading services as an opportunity for them, and there is interest in getting involved.

"Markets in Scandinavia and big bunkering ports around Rotterdam are probably going to be the first movers in that space, but we at Grain see this as a future opportunity, and when the market reaches a certain level we will be ready to act and help develop those services that our customers need. Again this is fundamental to our flexibility; we are looking to develop the infrastructure that will allow us to unload a ship of LNG and hold it to enable our customer to either re-load and re-export it, feed it into the transmission system, break bulk onto smaller vessels, or load it onto road tankers."

Longer term the business looks towards bulk reloading, a service that several other terminals in Europe already offer. "It's not something we have needed to do in the UK yet, but I think in a more flexible and responsive market place, it is a forward step that we will take. The biggest development we are looking at is further expansion, and we are in the market now talking to various counterparts; from the downstream big six in the UK, through to international oil companies and through to the upstream developers of liquefaction capability," says Phil.

Looking to the future Phil concludes: "Our focus over the next 12 months consists of building up our portfolio of capability on small scale, both road tankering and ship reloading, while continuing to explore the opportunities for major expansion with greater flexibility for our customers. Our business is not just shaped by demand, but additionally the supply element. New projects are being developed, particularly in the Atlantic basin, with the liquefaction of shale gas in the US, a lot of LNG will start to be produced in addition to potential Russian, eastern Mediterranean, and East and West of Africa supplies.

"All the projects will want to sell their LNG into dependable markets and the UK sector is the most liquid and deepest in Europe, and is forecast to stay the largest. For terminals such as Grain, there will be lots of suppliers looking into the market recognising the political stability of the UK to conduct long-term business." O&G

> With stringent regulations coming into effect in the shipping industry in 2015, LNG is seen as a clean fuel on which ships could run. As such, the business has witnessed an increase in demand over the last 12 months

National Grid Grain LNG Limited
nationalgrid.com/grainlng

Services
Commercial LNG importation terminal

Supplying excellence

Established in 1980, Great Yarmouth based Prior Diesel has more than 30 years' experience serving the oil, gas, marine, power and construction industries. With a global customer base, the company has developed a name that is synonymous with excellent performance and high standards of quality, as joint managing directors Gordon MacLean and Chris Conroy discuss: "We are distributors for many leading engine, transmission, pump and equipment manufacturers. Using the aforementioned, we have developed a multi-discipline design and build capability, which enables us to manufacture diesel driven packaged power generation, hydraulic power packs, process and well service equipment. Prior Diesel operates from its purpose-built premises where we employ 95 members of staff with a multi-million pound turnover. We have a wide range of customers, from small local businesses to global Blue Chip companies."

As a family-run business, the company is able to make instant decisions in an informal environment where all employees have the same common goal of successfully meeting the demands of its clients. "Without doubt one of the key reasons behind our continued success is the quality of our customer care," says Gordon. "We have an excellent reputation for delivering high quality services and products in a fast response time; furthermore, our technical knowledge, history of innovation and multi-discipline design and build capability give us a strong competitive edge in the market."

Elaborating further on Prior Diesel's capability, Gordon continues: "We interpret the client's requirements and take this information to produce a technical specification, which then becomes a turnkey engineering project where we source the required components to build, manufacture and finally test on site the completed piece of diesel driven equipment."

The company began in 1980 and has since seen a significant rise in its exports. Today Prior Diesel exports to more than 60 different countries and offers its services on a 24/7 basis. "We have continued to manufacture the highest quality bespoke Zone II rated nitrogen units to meet the needs our customers ever changing requirements. By giving our customers exactly what they need; simplified operation, low maintenance and easy access to serviceable items that are vital in the field, we ensure our equipment delivers results in the most challenging conditions," highlights Chris.

With dedicated departments covering well service, engine and parts sales, service and ship repair, the company strives to deliver an unrivalled level of service within its market sectors. Key to its reputation for excellence is the company's effective project management abilities, which minimise client costs and downtime while maximising productivity. Once a project is completed, Prior Diesel views after-sales support as an integral part of its services. "Many projects we have been involved in show the versatility

and expertise that we have here at Prior Diesel; for example in early 2013 we were asked by an existing customer to build a coiled tubing power pack and operators cabin. Despite having never undertaken a project such as this before, the project is now nearing completion," says Gordon.

Holding an impressive history for supplying the oil and gas market, Prior Diesel's well service equipment department has developed a multi-discipline design and build capability to offer bespoke units in a wide variety of configurations such as open skid, trailer mounted and split skid arrangements as well as various acoustic configurations that suit each customer's individual bespoke requirements. As demand for oil and gas services continued to grow, the company made the strategic decision to expand its facilities, as Chris comments: "We have tripled the size of the original site over the last ten years with the purchase of additional adjoining land and two more workshops, one of which is exclusively for our well service department." As the leading designer and manufacturer of specialised equipment for both onshore and offshore oil and gas wells, the company's equipment is developed for safe operations within Atex zone II hazardous areas as well as safe area environments.

Proud of the level of quality it offers clients, the company ensures quality control inspections are held for every segment of the manufacturing process, thus giving their customers confidence in the safe and efficient performance of their equipment.

Specialising in the complete overhaul of engines, generating sets, transmissions and pump sets; the company uses its mechanical, structural, electrical and repair expertise to provide a global repair and maintenance service to the engine manufacturers that it represents. Working in its custom-built workshops, Prior Diesel's factory trained engineers have the expertise to swiftly find solutions to customer issues. Facilities at the workshop include overhead cranes, electronic diagnostic equipment, cleaning facilities as well as a new engine load testing facility capable of taking up to 2000 BHP dynamometer.

Meanwhile, using its well established dealer status to supply a diverse portfolio of products to offshore, industrial and marine applications around the world, Prior Diesel's engine sales department is capable of supplying new and refurbished diesel or gas engines that are suitable for a number of applications within the oil and gas, industrial and marine markets. The company offers engines ranging from 20 to 3000 BHP to fulfil the customers' needs while also complying with necessary classification and legislative authorities.

Utilising the same dealer status the company has seen significant growth in parts sales with last year being the most successful to date being the UK's number one dealer with several of the engine manufacturers that it represents. At the same time the company has also experienced record growth in the servicing, repair and overhaul of engines, power generation and diesel driven equipment, particularly on offshore installations worldwide. Viewing health, safety and compliance as a priority in all areas of the business, the staff at the firm adhere to such policies and procedures at all times.

Versatile and renowned for quality, Prior Diesel's success lies in its ability to listen to market demand and adapt with the ever changing needs of its customers. "During the last 12 months we have developed a new product due to client demand," says Gordon. "It is an innovative diesel driven zone II compliant Wireline unit, which benefits from being compact, lightweight, super silent, easy to maintain, with an enclosed control cabin and an internal lifting mechanism to facilitate smooth changing of drums whilst working in the well service production fields." This success is certain to continue as Prior Diesel looks to further expand departments that are witnessing increased demand and maintain its steady growth strategy by expanding business with existing customers whilst increasing customer visits in more countries and continuing to increase the range of products on offer. OSC

> As the leading designer and manufacturer of specialised equipment for both onshore and offshore oil and gas wells, the company's equipment is developed for safe operations within Atex zone II hazardous areas as well as safe area environments

Prior Diesel Limited
priordiesel.com

Services
Supplier of products for the offshore industry

Unrivalled progress

Below
Ocean Installer CEO, Steinar Riise

When it comes to rapid growth coupled with in-depth industry experience and market ambition, there are few companies that can compete with Ocean Installer AS. The company was founded in January 2011 and in just over three years it has made an impressive impact, growing from a fledgling business in 2011 to an internationally recognised and successful industry player today. As of 2014 Ocean Installer is headquartered in Stavanger, Norway as well as further offices in Aberdeen, Scotland and Houston, Texas, US. It has grown to around 240 members of staff and an annual income of $200 million with a forth backlog of close to $400 million within an impressively short amount of time. Furthermore, its employees are expected to grow to around 300 during 2014 and the company has also invested in two fully operational subsea construction vessels during its history, with a third also expected for delivery during Summer 2014.

Ocean Installer enjoyed an extremely positive year during 2013 with its carefully executed growth resulting in the consolidation of its facilities and the completion of several expertly executed projects, as CEO Steinar Riise explains: “Carefully balanced, yet rapid growth has placed Ocean Installer in a position where it now bids on, wins and successfully delivers subsea projects in competition with major global subsea contractors. Since October 2013, we have further strengthened our organisation in Houston, staffing up for both tendering and project management activities. Moreover, we have sent our first vessel, the Normand Clipper to the Gulf of Mexico. Also, during the later summer and autumn of 2013, the company’s Aberdeen office became a fully operational branch of Ocean Installer, executing its first four major projects in full.”

From its Aberdeen office, Ocean Installer has earned a stellar reputation following the successful projects undertaken during 2013 for major operators including Shell and Talisman. Both the Normand Clipper and Normand Mermaid saw operation within the UK sector of the North Sea through the year with the Normand Clipper undertaking umbilical installation work in the Bittern field, which covered the installation of two new static umbilicals of 20.7 km and 18 km in length. The Normand Mermaid was responsible for the installation of a 1.5 km umbilical between the Arbroath platform and the Arkwright subsea manifold. “These projects represent two of the four projects executed from the Aberdeen office last year, in fact the job on the Arkwright field for Talisman was the very first,” says Steinar. “I am very happy with the high standard of these Aberdeen managed operations and with the good client relations we are building through such high quality operation performance in the UK.”

Not content to rest on its current success, Ocean Installer is keenly following the construction of its third vessel to allow the company to further expand its reputation

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99,86 %

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In 2013, Oceaneering AS had 114 500 hours of ROV diving with an availability of 99.86%, in the Norwegian sector.

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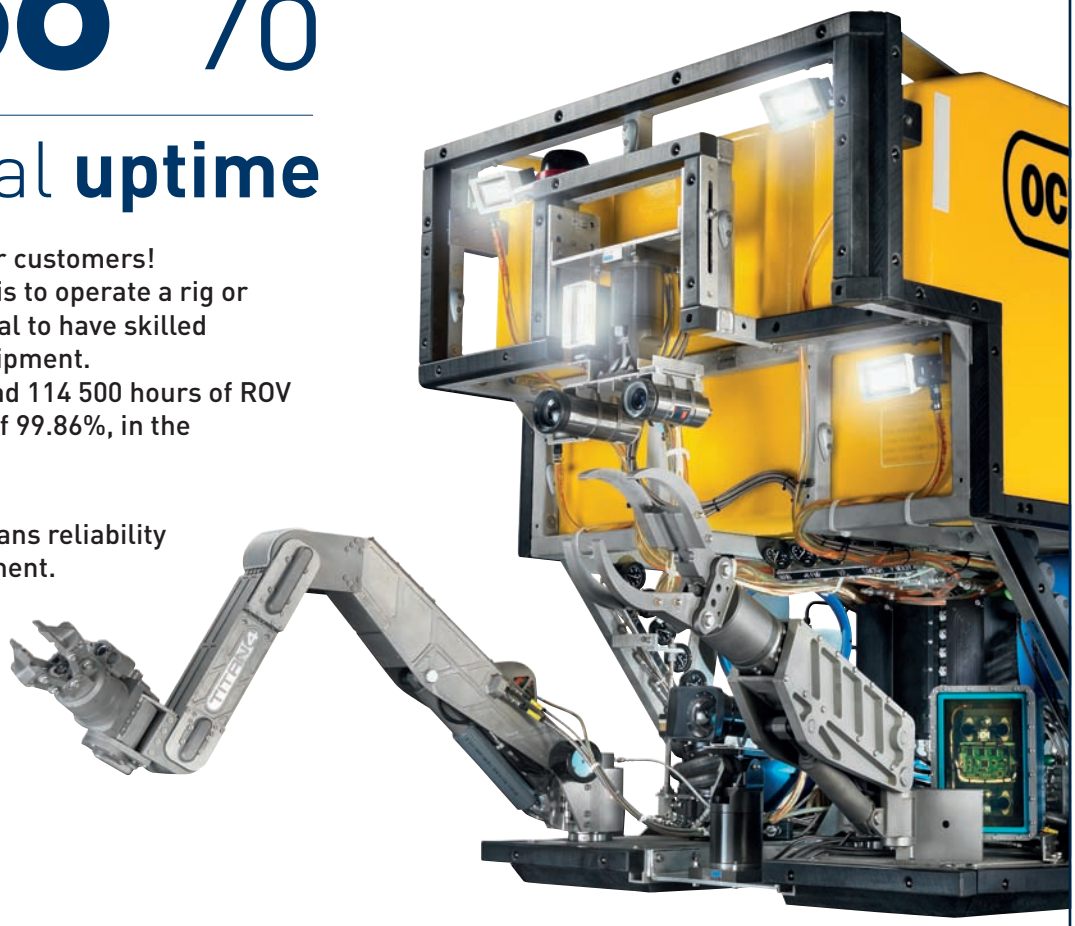

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and operational reach over the coming years. Charting the progress of the construction of the Normand Vision, Steinar comments: "The work is progressing according to plan and in January the hull arrived at the VARD yard in Søviknes, Norway for outfitting. Throughout the building process we have worked closely with our marine partner, Solstad Offshore, as well as key subcontractors, such as National Oilwell Varco and Huisman and we are very satisfied with the outcome of this process so far. Now we are very much looking forward to introducing the vessel to the worldwide market and our clients. The first planned offshore campaign is with Norske Shell at the Draugen field, then for Statoil on a subsea lines modification project slated for summer 2014."

The Normand Vision is scheduled to undertake a subsea umbilicals, risers and flowlines (SURF) contract with Statoil, valued at $55 million with options in excess of $95 million. The project will include SURF operations across various Statoil-owned fields within the Norwegian continental shelf and was finalised and agreed during September 2013. Project engineering and management is already well under way, with operations due to start during Summer 2014 and set to continue into 2015, 2016 and potentially 2017. The Normand Vision will enter the market as the main installation vessel for the project with the possibility of a small support vessel in operation to assist in the undertaking. "Normand Vision was designed exactly with this type of challenging North Sea contract in mind," says Steinar. "So we are very much looking forward to employing her on this project."

Ocean Installer has expanded impressively during the past three years and is set to continue in this tradition through a combination of exciting upcoming projects, like that of Statoil and a strong determination to become a key service provider within the global SURF market. "Ocean Installer is founded on high ambitions and since the company's inception in 2011, we have successfully met the demanding milestones we have set, one by one," Steinar elaborates. "We are naturally very happy with this achievement and the performance of the entire organisation. The company's focus has been and is still, to consistently build an ever more solid and robust company. I believe a key to Ocean Installer's success is its ability to attract and retain the right people; that is people with drive and ambition who take personal pride in and motivation from the development of the company."

Concluding on the company's aspirations for the future, Steinar reflects: "In 2014 we aim to achieve further organisational growth and we continue to build the company in all established regions by contracting and delivering complex projects. In terms of assets, we are focusing on a successful introduction of the Normand Vision as well as exploring sustainable solutions for further expanding our capabilities. The company's overreaching vision is to become a key service provider in the global SURF market and this will be our guiding objective over the next five years. In more concrete terms it implies further consolidating our position in the regions we currently have operations, as well as systematically working towards a broader global presence. Moreover, we will focus on further developing our asset base so as to include additional SURF capabilities, such as diving and rigid pipelay." OEG

Ocean Installer has expanded impressively during the past three years and is set to continue in this tradition through a combination of exciting upcoming projects, like that of Statoil and a strong determination to become a key service provider within the global SURF market

OCEANEERING

Oceaneering is a world-class provider of ROV services to the oil and gas industry with more than 290 reliable and well-proven ROV systems in operation worldwide. Both work ROVs and observation ROVs are in its portfolio. It has extensive expertise for all kinds of ROV-related work, including but not limited to: drill support and completion, vessel-based IMR and construction, intervention, surveying and inspection work and ad-hoc problem solving.

Ocean Installer AS
oceaninstaller.com

Services
Subsea construction

Yards ahead

SEVEN SEAS SERVICES GROUP

We are proud to support ASRY in providing first class services for all vessels though our brand new on-site fabrication, stores and camp facilities, purpose made for light metal fabrication and joinery works.

TOTAL SAFETY

Total Safety is the world's leading provider of safety service solutions to the upstream, midstream, downstream, refinery, chemical, petrochemical, power generation, marine and industrial markets. It provides high-quality safety solutions and products in a measurable, cost-effective manner, without compromise. Its relationship with Andy Shaw and ASRY Offshore Services has allowed for both company's clients to focus on their core competencies. Total Safety's commitment is to provide a safety solution for every problem.

Founded in 1977, ASRY (the Arab Shipbuilding and Repair Yard Company) is the Arabian Gulf's most experienced ship and rig repair yard, with more than 35 years of experience in the optimisation of marine assets. Beginning operations with a 500,000 deadweight tonnage dry-dock and two accompanying jetties, the shipyard has offered its services to a varied range of vessels since its inception; the spectrum of which has only diversified over the last 20 years, following the introduction of two floating docks of 252 metres and 227 metres in length in 1998 and twin 255 metre slipways in 2008.

Today a global leader in the repair and maintenance of all vessel types, as well as offshore rigs and craft, ASRY has the experience and knowledge to deliver an efficient and reliable service in all sectors it operates in. Boasting a leading range of facilities, the shipyard can offer maximum flexibility when accommodating ship schedules and provides the on-site presence of all major specialist workshops, major repair subcontractors and classifications, thus ensuring all repair requirements can be dealt with promptly in one single location.

As the oil and gas industry continued to flourish in the Middle East, ASRY, keen to expand its service offering, made the strategic decision to form its specialist division ASRY Offshore Services in September 2008; a wise move that has boosted turnover and led to ASRY Offshore Services becoming a critical part of the shipyard's portfolio of capabilities.

In addition to jack-up drilling rigs, ASRY Offshore Services can accommodate drill ships, semi-submersibles, cable and pipe laying vessels, offshore support and construction vessels for repairs, mobilising a skilled 'riding squad', surveying or component construction. On top of this, the division has the expertise to offer construction services to small and medium sized rigs and offshore vessels.

Previously in *European Oil and Gas Magazine* in May 2012, ASRY Offshore Services was looking to expand its services further with a new fabrication area; a strategic plan that has since come into fruition. Equipped with a broad range of pipe fabrication machines and a vast targeting area, the pipe fabrication workshop has capabilities for auto Oxy cutting, pipe cutting/bending, drilling, threading, lathes and grinders, beveling cutting and a number of other portable manual bending and cold cutting machines, as well as a selection of welding machines. Furthermore, the workshop has a separately controlled area for specialised welding work where renewal, conversion, new installation and other services are carried out by a team of highly qualified personnel.

Having established and developed a strong reputation for providing quality rig repair projects to customers operating in the Middle East, ASRY Offshore Services has become a major player in the oil and gas industry. This coveted position in the market offers the division an excellent platform for growth and continued expansion into new ventures as and when the market demands it. Despite the major successes the offshore division has enjoyed over recent years, there has been no significant change to the company's core priorities, as general manager of ASRY Offshore Services, Andy Shaw discussed: "Clearly the company needs to ensure it remains aware of what developments and events are taking place around it, and is able to react to these accordingly. However, the most important thing is for the company to be seen as the very best rig repair yard operator in the Middle East."

This long-term dedication to surpassing customer expectations through high quality services has resulted in ASRY winning a

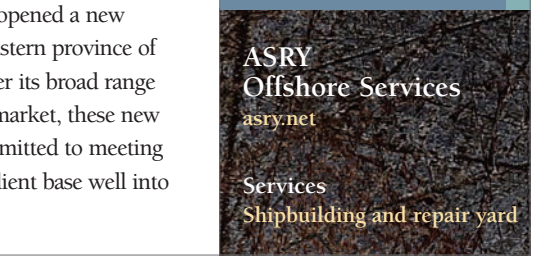
multitude of awards, the most recent being the Shipyard of the Year award at the Lloyds List Middle East and Indian Subcontinent (MEIS) Awards in October 2013. Viewed as one of the leading honours within the region's shipping industry, judges hailed the yard's ability to grow, improve and expand during challenging market conditions while competitors floundered. Previously winning the award in 2011, this second accolade in the Shipyard of the Year category joins ASRY's increasing portfolio of awards, such as the Safety Award at Lloyds List MEIS awards in 2012 and similar awards from both Lloyds List Global Awards and Seatrade MEIS Awards in 2010.

Having set the foundations for ongoing growth through internal and external expansion, ASRY's board of directors held the final board meeting of 2013 in mid December, under the chairmanship of His Excellency Shaikh Daij bin Salman Al-Khalifa. Centered around the approval of a number of initiatives to enhance the company's position during 2014, the meeting focused on the re-organisation of the firm's corporate structure, the huge potential to be found in the Saudi market and the approval of the 2014 budget that emphasises control on operating expenses.

Due to be rolled out in the first half of 2014, the restructure of the organisation aims to boost efficiency and enhance productivity in the face of severe competition and new competitors in a limited and evolving market. Meanwhile, as a result of strong relationships between Saudi Arabia and Bahrain, particularly in economic partnerships, ASRY views the Saudi market as significant for potential projects on the repair of military vessels, commercial ships and offshore platforms. To develop a stronger presence in this market, the company opened a new representative office in the Eastern province of Saudi Arabia where it can offer its broad range of services. In a competitive market, these new initiatives prove ASRY is committed to meeting the demands of its growing client base well into the future. OSG

HULL DIVING SERVICES CO. WLL

Our on-going close working relationship with ASRY & AOS in particular has certainly assisted HDS in increasing our service provision to include all types and methods of non-destructive testing services. In conjunction with rapid response times plus the professional engineering solutions provided by HDS and our partners; we are now able to offer additional services to our clients both above and below the waterline. Most recently we have completed inspection projects as far afield as Djibouti & Yemen.



Full circle service

Since the company was founded in 2003, Circle Oil has developed a highly regarded reputation relating to its exploration and production services within the oil and gas industry. Today it has operations in several areas across the globe and has had a presence on the London AIM stock exchange since 2004. From its registered office in Limerick, Republic of Ireland and its technical service base located within Berkshire, United Kingdom, Circle Oil has grown to incorporate successful operations within North African and Middle Eastern markets. At present the company is active inside of Egypt, Morocco, Oman and Tunisia, where its exploration and production services are employed in both onshore and offshore applications.

Circle Oil currently operates the largest license holding in Oman, which includes 100 per cent ownership of tenders for offshore Block 52 as well as onshore Block 49. The state of Oman can be regarded for its significant level of production and export of hydrocarbon, with multiple proven reserves and plays. The country is self-sufficient in oil and gas production and the Ministry of Oil and Gas (MOG) of Oman works closely with operators to ensure that operational and legislative requirements are met. "We have a great deal of support from the MOG in Oman. They always provide a strong helping hand for us and excellent level of assistance which is very appreciated," says country manager Hassan Al Lawati, while discussing the operational climate within the region. "The government here provides a great deal of help and if we need anything from them we can communicate very quickly because they are located very close by."

This closely collaborative and efficient relationship with local officials has allowed Circle Oil, through its wholly owned subsidiaries Circle Oil Oman Ltd (COOL) and Circle Oil Oman Offshore Ltd (COOOL) to sign and maintain two exploration and production sharing agreements with the Sultanate of Oman. The first of these was signed by COOL during 2005 for Block 49, which occupies an area of 15,438 sq.km and is located in the Rub Al Khali Basin. To date, several billion barrels of oil have been discovered in the Proterozoic/Cambrian reservoirs associated with the Ara Salt region of the South Oman Basin, and there is strong evidence of a similar salt basin beneath the western part of block 49. This new salt basin has been named the Ghudun Salt Basin and exploration activities have commenced with the two-fold objective of confirming the extent of salt and delineating likely drilling targets.

Offshore Operation

BGP has worldwide capability for marine seismic data acquisition. We provide our clients with efficient and cost effective service while maintaining the highest quality and excellent HSE performance.

Highlights

- WAZ 3D survey, high resolution 3D and 4D surveys, long offset 2D survey
- 4C OBC survey
- Multi-vessel operation
- Complex areas acquisition, especially in high risk shallow water areas
- GME survey

BGP Prospector

- Recording System: ION DigiSTREAMER
- Streamer Count (max): 12
- Streamer Length: 8 km
- Streamer Type: DigiSTREAMER Solid Streamer
- Streamer Steering: DigiFIN 5120
- Seismic Source: Dual Sercel GII - GUN Arrays
- Delivered: 2011

BGP Pioneer

- Recording System: Sercel Seal
- Streamer Count (max): 6
- Streamer Length: 6 km
- Streamer Type: Sercel Sentinel Solid Streamer
- Streamer Steering: DigiFIN 5120
- Seismic Source: Dual Sercel G - GUN Arrays
- Delivered: 2007

BGP Explorer

- Recording System: Sercel Seal
- Streamer Count (max): 4
- Streamer Length: 1 x 12 km, 2 x 8 km, 3 x 6 km, 4 x 4.5 km
- Streamer Type: Sercel Sentinel Solid Streamer
- Streamer Steering: DigiFIN 5120
- Seismic Source: Dual Sercel GII - GUN Arrays
- Delivered: 2010

BGP Challenger

- Recording System: Sercel Seal
- Streamer Count (max): 2
- Streamer Length: 1 x 12 km, 2 x 6 km
- Streamer Type: Sercel Sentinel Solid Streamer
- Seismic Source: Dual Bolt Air GUN Arrays
- Delivered: 2009

BGP Surveyor (Dong Fang Kan Tan No.1)

- Recording System: Sercel Seal
- Streamer Count (max): 1
- Streamer Length: 12 km
- Streamer Type: Sercel Sentinel Solid Streamer
- Seismic Source: Dual Sercel G GUN Arrays
- Delivered: 2007

BGP Researcher (Dong Fang Kan Tan No.2)

- Recording System: 4C OBC OYO GeoSpace
- Streamer Type: GeoRes Subsea Sensor Array Cable
- Delivered: 2007

Exploration activities have progressed well and in addition to a 3D survey conducted in 2010, the MOG granted an extension to the exploration period within the permit during 2012. This resulted in a 2306 line kilometre 2D seismic survey, due north-east of the 2010 activity, interpretation of this is close to completion and is expected to facilitate future drilling.

Offshore Block 52 has also seen extensive seismic survey operations and drilling in the area is expected to begin during fourth quarter 2014. The block occupies an area of 90,760 sq km with water depths ranging from 200-2500m and like Block 49, an exploration and production agreement for Block 52 was signed in 2005. Additionally, copies of a previously acquired 2D seismic survey covering 10,540 km were obtained along with associated magnetic and gravity data. These were supplemented by a comprehensive regional survey covering 6000km, which was under taken during 2007 while the subsequent data was interpreted in-house during autumn 2008. Furthermore, throughout late 2010 and early 2011 the BGP Challenger successfully performed a 2D seismic survey on behalf of Circle Oil to map

and re-affirm leads that had been previously identified during the previous operations. The results of this latest work have now been developed into a farm-out package inviting farm-in opportunities prior to exploration drilling.

Further to these operations, Circle Oil anticipates a significant increase in its projects in all of its geographic markets within the next year, as CEO Professor Chris Green comments: "2014 will be a very active year operationally, with substantial drilling activity in all our areas of operation. Exploration drilling in Morocco, onshore and offshore Tunisia, onshore Oman and development drilling in Egypt will be augmented with work on the new Beni Khalled permit. The recently announced new permit in Grombalia, Tunisia creates further potential for very significant upside and we await the result of the Omani bid round."

In addition to its strong performance on the technical side of the business within its various regions, Circle Oil has developed a strong corporate culture of co-operation and direct communication that enables the company to act quickly and effectively to market needs and to challenging situations. "We have well trained staff and a good connection with our operational programme within the business," Hassan elaborates. "We are very close to the ministry in Oman, as well as with our London and Ireland offices. The company is a mostly joint operation and we always have visitors. Our CEO always visits the countries that the business is active in, including Oman, so we can sit opposite each other and discuss the operation rather than by phone or by email. So it is much more direct and we are able to communicate very quickly."

The New Year has and will continue to be an exciting time for Circle Oil. As well as an increase in its physical operations, as of 6th January 2014 the company welcomed Steve Jenkins as its new chairman. Following a share increase of around 30 per cent at the news, returning non-executive chairman and previous interim chairman, Nick Clayton concludes: "The appointment of Steve Jenkins represents a landmark event for Circle and I am absolutely delighted to welcome him as the new chairman. He has a wealth of technical, city, management and MENA experience and is therefore an ideal candidate to work with the executive team and the board to steer the company through the next phase of development and growth." O&G

> In addition to its strong performance on the technical side of the business within its various regions, Circle Oil has developed a strong corporate culture of co-operation and direct communication that enables the company to act quickly and effectively to market needs and to challenging situations

Circle Oil PLC
circleoil.com

Services
Oil exploration and extraction

Building a new future

Colombo Dockyard started its operation as an integrated shipyard in 1974 and primarily focused on ship repair and building. Catering for the repair and maintenance of fleets in the international market, its ship building interests initially targeted the emerging market within Sri Lanka. Continuing its heavy involvement in repair and maintenance, by 1983 the business took the initiative to build a 125,000 dwt drydock, significantly enhancing the capacity. The shipbuilding sector grew during the notable boom in 2004 to 2008, building vessels for the offshore oil and gas industry, capitalising on its inherent strengths in building small and complex vessels, gained in the local market building harbour tugs and patrol boats required by the emergent port expansion and patrolling requirements of the Sri Lanka Navy.

Today, it plays an important role as one of the leading ship builders in South Asia capable of building high quality, fully integrated offshore support vessels for the international market at competitive prices. Equally, Colombo Dockyard still controls an important role in repair, maintenance and conversion of such vessels. In March 2013, the business celebrated the 20-year anniversary of its successful joint venture collaboration with its Japanese partners.

Mangala Yapa, managing director, addresses how the business has become recognised for its quality of service, HSE compliance and timely delivery, whilst remaining competitive: "The shipyard consists of four drydocks, large enough to deal with crude, product, gas and chemical tankers, and our location close to India, the international shipping routes and the Arabian Gulf places us in an ideal position for such repairs. In addition, all types of vessels catering to the oil and gas industry such as diving support vessels (DSV), well stimulators, seismic vessels and research vessels are drydocked for routine, emergency and damage repairs and conversions."

The shipyard is positioned in the intersection of major sea routes from the East coast of America, Europe, West and East Coasts of Africa, the Arabian Gulf and West and East Coast of India, the Far East and Australia, placing it in an enviable position for an integrated shipyard of this nature. Adhering to a Japanese ethos in business its core values can be attributed to its success, explains Mangala: "Remaining customer focused and committed to quality and HSE, enhances the flexibility and ability to adopt and adapt in a fast changing environment as we work towards long-term sustainability. We have a strategic location, competent and loyal workforce, sound management and operational ethos that gives us a competitive edge."

Commenting on the most significant

Above
Mangala Yapa, managing director of Colombo Dockyard

milestones reached throughout the years of operation, Mangala says: "Of course the commencement of our operation in August 1974 was very significant, and the decision to venture into the construction of a large drydock over the period 1982 to 1988 has been vital to the standing of our business today. In 1993 we restructured the operation following the Japanese collaboration, and in 2007 we internationalised our shipbuilding interests."

Clients from across the world including India, the Far East and Europe have benefitted from its ship repair expertise and the business has primarily focused on several important clients in Singapore in respect to ship building, working on behalf of Greatship (India) Limited and Greatship Global Offshore Services Limited (Singapore) amongst several other Singapore based owners. The Shipping Corporation of India (SCI) is one of the major customers of Colombo Dockyard Plc, whose oil and gas tankers as well as offshore support vessels are undergoing major repairs and conversions at the shipyard. "Most of the vessels including DSV Samudra Sevak, owned by the Oil and Natural Gas Corporation (ONGC) of India, are managed by the SCI and having evaluated and being confident of our capabilities, the entire major repair was entrusted to us," announces Mangala.

With the establishment of peace and stability, the country is poised to move ahead in expanding the facilities available for the maritime industry. The rapid expansion of the ports in Sri Lanka, including a newly constructed ultra-deepwater port, accommodating even the largest container vessels has been a significant step forward. Positioned between two fast developing economies, India and China, Sri Lanka's strategic importance in maritime activities is enhanced. Addressing growth, Mangala comments: "Developing the human resources capacity has been one of our key challenges throughout history and critical attention has been paid towards training, development and retaining personnel. At any given point we have a pool of around 350 to 400 trainees and apprentices, channelled through the National Apprenticeship and Industrial Training Authority (NAITA) and all our industrial employees, as well as employees of our subcontractors, are sourced from this pool of trainees that we create annually."

In constructing its future, the focus is very much on internal processes and improvements towards efficiency, productivity improvement and cost reduction. With its capacity and experience, Mangala concludes: "Colombo Dockyard is driven to reach greater heights both as an integrated ship-repairer and builder in niche markets and is driven to building technologically complex, fully integrated, quality vessels, maintaining them and converting some of the older vessels to meet modern requirements. The Sri Lankan Government has a strategic vision to develop the economy and the re-establishment of peace after a 30-year period of instability has given much needed space for Sri Lanka to forge ahead. The potential for growth is immense and as a company, we are truly poised to achieve it." O&G

> The shipyard consists of four drydocks, large enough to deal with crude, product, gas and chemical tankers, and our location close to India, the international shipping routes and the Arabian Gulf places us in an ideal position for such repairs

Colombo Dockyard Plc
cdl.lk

Services
Shipbuilding, repair and maintenance to an international market

Maintaining integrity

The impact of GCG Shotblasting Services entering the oil and gas industry was felt in 1985, when its first customers began to benefit from the expertise that it offered. Aiming to be at the forefront of technology for the protection of vital equipment, the company has invested heavily in research, training and equipment to keep it trading at the leading edge. With one of the largest sites in Scotland, GCG has the ability to coat any size and shape of equipment at its purpose-built site in Peterhead. Strategically, the business is well positioned in a location close to deepwater North Sea docking facilities, ensuring easy access by road or sea.

Designed specifically for shotblasting and applying conventional coatings, its fully equipped yard and in-house facilities provide the capacity to blast and coat large structures and equipment. The purpose-built shotblasting and coating facility benefits from over 140,000 cubic feet of space, with full extraction systems and a recycling system. Away from its land-based location, the offshore division is available to coat equipment at a client's site, anywhere in the world. Specialising in durable coatings, its solutions actively defend subsea and topside structures against degradation, shielding pipework, steelwork and valuable equipment from the damaging conditions in inhospitable locations.

From platforms in the North Sea and oil refineries in Scotland, to boats in the Pacific Ocean and anything in between, its highly trained team of coating experts will assess the job, agree the timescales with the client and work within a safe, controlled environment to apply the specialist protection best suited to the requirements. GCG was one of the first companies in the UK to provide Thermal Spray Aluminium (TSA) application to the oil and gas industry, nearly 30 years ago, positioning the business as a leader in the application. TSA is a technology that protects and greatly extends the life of a wide variety of products in the most hostile environments and in situations where coatings are vital for longevity. The variety of metallised coatings can be broken down into two main categories: finishing coatings, such as anti-corrosion or decorative coatings, and engineering coatings such as wear resistant and thermal barrier coatings. Thermal spraying is carried out in a wide range of anti-corrosion and engineering markets, including oil and gas,

construction, petrochemical and marine, where corrosion is a major problem.

In 2013 the company launched its newest coating, PPC553. The specialist coating has a cure time of six seconds and can be applied to minimally prepped steel, promoting a life span of 40 to 50 years. The long lasting, fast drying product requires very little maintenance. Developed as a direct response to market demand, it will save oil and gas operators a significant amount of money as it reduces the frequency of shutting down a platform for maintenance procedures. In scenarios where generic epoxy and polyurethane paints are currently used on offshore platforms, the new coating will extend current life spans over tenfold.

Beyond the maintenance savings, the product additionally promotes substantial health and safety benefits by addressing the corrosion and erosion issue, extending the structural integrity of the platform. The material is also solvent free, with zero VOCs and CFCs, and is compatible with the environmental objectives of GCG's clients.

Because of the harsh conditions to which oil and gas assets are subjected on a daily basis, GCG deals with both brand new equipment that needs to be protected and older kit that needs recoating to prolong its life. In all situations the priority of the business is to apply coatings quickly and safely, working closely with the maintenance team to fit in with the client's schedule and deadlines, minimising the downtime, and therefore the costs, involved.

With the increasing amount of ageing equipment in the North Sea, safeguarding asset integrity is more important than ever. The highest quality corrosion control is required to mitigate the degradation of offshore pipework and structures, avoiding the loss of hydrocarbon containment. Indications within the industry are that over the next five years the demand will continue to grow. GCG is ideally placed to meet this demand now that the PPC553 has been released. The product was one of the highlights at the Offshore Europe event in 2013 and received much attention from a variety of interested businesses throughout the world.

In keeping with its original aims, GCG is constantly looking to the future, researching new techniques and technology that can benefit customers and protect assets in the most cost-effective way. Moving forward on that basis, 2014 is looking to be an exciting year for the company. O&G

Because of the harsh conditions to which oil and gas assets are subjected on a daily basis, GCG deals with both brand new equipment that needs to be protected and older kit that needs recoating to prolong its life

GCG Shotblasting Services
gcgshotblasting.co.uk

Services
Corrosion protection

Its greatest quest

Norwegian Electric Systems

(NES) was established in 2009, and formally commenced operations in 2010. Although a relatively young company, it has grown out of more than 35 years of experience and knowledge within the electrical marine market. Today, NES has become recognised as an innovative, high-tech electrical company with a focus on diesel-electric and hybrid-electric systems for the global marine market.

With its in-house team having been involved in the development of over 4000 different electric systems it has a vision of becoming the global leader in diesel-electric and hybrid-electric systems. By achieving performance and producing innovative and reliable products that exceed customers' expectations, NES has developed a reputation of having great flexibility, reliability, a friendly approach, delivering innovation and, importantly, product development.

Maintaining a committed approach to teamwork, the business has designed solutions that cover a wide market spectrum. In addition to the traditional market, the comprehensive diversity of products and systems opens up the markets for drill ships, semi-submersibles, conventional rigs, platforms, large tankers and cruise vessels amongst others. The company's key technological development is the Quadro Drive® system, specially designed for ship installations and setting the standard for the next generation of propulsion converters.

The liquid-cooled four-quadrant drive has a power rating up to 5000kW making it suitable for the many industry wide applications. The active rectifier in the system creates the possibility of regenerating the energy from the propeller and shaft back to the grid, whilst the power factor is always in unity and equal to one, so the grid's capability is fully utilised. The result is a flexible and dynamic propulsion system, focusing on a high performance energy chain from the diesel motor to the propeller's thrust.

The modular based system allows for interchangeable parts and an option of de-rating the drive so should one module fail the vessel can avoid off-hire time. The arrangement of the electric propulsion system features a high level of reliability as each electric motor is supplied through its own Quadro Drive and associated control system. The reliability of the converters improves safety and the redundant main propulsion drive provides adequate power for the ship to operate if a malfunction occurs.

The company also provides a B.O.S.S.® (Black Out Safety System) that gives a fast torque reaction to avoid blackouts on the ship, and is aimed at meeting DP2 and DP3 class requirements. B.O.S.S. is designed to ensure

that a single fault will not lead to an electrical blackout, which is a major safety issue in the offshore sector as the electrical reliance continues to become greater. The system analyses and reacts accordingly, preventing a development into black-out, whilst any number of generators can be operated in parallel up to full power without risk of black-outs or total loss of propulsion. The response time, from the moment of detecting a critical situation until the propulsion system performs load adaption, can be measured in milliseconds.

With research and development remaining fundamentally important to the organisation, it has in January 2014 announced the release of two new systems. Since 2010, from its R&D department in Bergen, Norway, NES has been working towards the completion of its two new QUEST® (Quadro Energy Storage Technology) systems. Bringing these systems to the market has been a plan since the Quadro Drive was first finalised, based on the company's philosophy to prepare all its diesel electric and hybrid electric systems with add on modules.

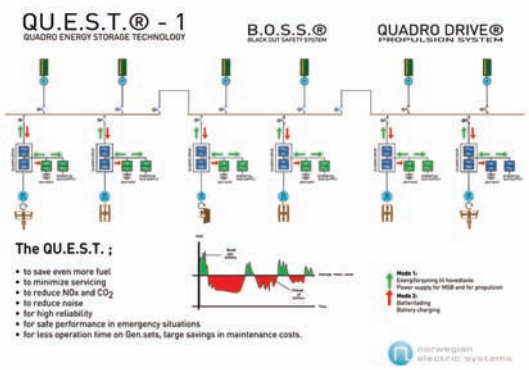
The business undertook a study on the implementation on a DC-grid system but found it to be out-of-date and far too expensive, particularly with regard to installation. The study on the grid system was a reaction to the current emphasis to switch to DC grids and NES now continues work towards a low voltage system. Interests within this field of study have developed from many of the company's customers requiring low voltage systems to operate in areas where there is no specialist high voltage support.

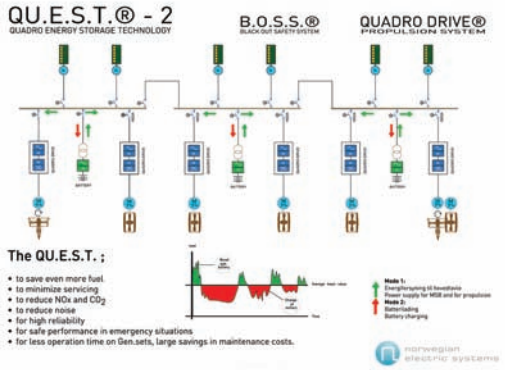
In the development of the new QUEST systems, the company can add many advantages to its Quadro Drive. The proven, leading diesel electric Quadro Drive system, has more than 18 systems already in operation and is regarded as having superb quality. Through its software development, NES was able to follow a few vessels to monitor fuel and power demand. With this background it had a solid base to calculate the average level of power and the necessary boosting power from the battery storage. (See illustration QUEST 1 and 2. Boosting in green and charging in red area of load/time level curve.)

Diesel-electric and hybrid-electric systems are capable of fuel savings between 15 and 55 per cent, and equal reduction in NOx and CO_2. As well as being much more dynamic in operation the vessel benefits by reducing maintenance costs by up to 30 per cent. The QUEST 1 and 2 can deliver further savings of up to 15 per cent on fuel and with less demand for running multiple gen-sets, resulting in less running time for the diesel engine, saving maintenance costs. A very high reliability of the total system can be achieved with further reductions on NOx and CO_2, with a 100 per cent secure emergency safety, and the QUEST operating safely in DP2 with a closed bus-tie.

The future developments of the product will see NES launch its new system for reduction of harbour power with five times less onboard necessity of power supply. The interest generated from the development of cutting-edge innovative solutions has seen NES increase its turn over since 2012 by more than 20 per cent and earnings before taxes and interest more than 30 per cent. Although the market has been low NES has managed to keep its global position, and has recognised noticeable activity growth in the jack-up sector.

As the trend towards diesel-electric and diesel-mechanical systems continues to grow, the future for NES is promising, with contracts already lined up extending into the next three year period. Aimed at achieving its goal of zero down-time for customers using NES equipment the company will continue to provide cost effective solutions for the servicing needs of the vessel during its lifetime. OEG





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KPMG

KPMG Norway has for many years been a proud partner to Norwegian Electric Systems. As part of an international network and with strong national and local roots, KPMG is a trusted provider of audit, advisory, tax and legal services to many Norwegian and international oil service companies.

Norwegian Electric Systems
norwegianelectric.com

Services
System integrator of electrical marine and offshore propulsion systems

Logistical position

DALES MARINE SERVICES

Dales Marine Services supplies demobilisation and mobilisation, maintenance and repair, and fabrication work to the oil and gas industry from its three harbourside bases at Aberdeen, Montrose, and Leith.

The firm is renowned for its extremely fast turnaround of work while at the same time providing a cost-effective high quality service. It has about 100 staff and additional contractors, which means the focus is on getting the job done, whether it's a simple workscope or a large and complicated fabrication.

Dales Marine also has drydock facilities at Aberdeen and Leith so it can provide demobilisation and mobilisation services on site, saving clients' time and money. Structural steelwork, fabrication, and pipework, mechanical engineering, diesel engine overhauls, and dry dock facilities

The Danish company Danbor Group was founded in 1974, and for the last 40 years it has provided logistics and stevedoring services. Today, Danbor Ltd is positioned within the UK in Montrose and Aberdeen, Den Helder in the Netherlands and in Esbjerg in Denmark.

Danbor has specialised in creating flexible service solutions to oil and gas operators as well as service companies. The organisation consists of the wind division specialising in wind turbine logistics, the Offshore Construction Group (OCG), working with the production and maintenance of offshore units, the H2S safety services division, offering safety solutions to onshore and offshore projects tailored to customer expectations, and finally, the logistics division. Logistics operations account for nearly half of the revenue at Danbor, covering all logistics services within oil and gas, from agency, custom clearance and freight forwarding to stevedoring and warehousing.

The logistics division is strong within the North Sea oil and gas sector, particularly through freight forwarding and transport between the major oil and gas capitals through sea, airfreight, road haulage, and courier businesses.

Additionally, the organisation offers agency services directly to oil and gas and rig operators across a variety of technical areas, procurement, document clearing, custom clearance, bunkering and warehousing.

It is through a history of displaying a high focus on operational safety that the business has developed an expanding client base, rewarded with the premium service and complemented by a full understanding of their needs. Torben Hansen Bredthauer, logistics director explains: "Oil and gas is a 'here and now' industry. If our customers need the product from A to B tomorrow, we make sure it is there. We communicate to our clients, having tracked the packages ourselves. We know exactly what is going on and operate proactively to make sure that they get the service and their products on time. In this industry time is money.

"We have a strategic position that we are looking to develop to grow the business. From our location in Montrose we aim to establish a viable and efficient solution for oil and gas operators."

Managing director for Danbor Ltd, Jens Panum Have, located in Aberdeen adds: "In 2014 we are investing substantially into developing our location in Montrose. By the end of this year we will have a fully operational base that will provide more space and accessibility than is currently available in Aberdeen. One of the biggest problems in Aberdeen is space and access to the harbour. We think Montrose, 45 minutes drive south of Aberdeen, is the answer to this issue."

The company has successfully undertaken numerous projects for seismic vessels out of its location in Montrose, and has generated interest amongst oil and gas operators and contractors. Whilst operating at speed, health and safety remains a dynamic part of everyday operation with regular audit procedures ensuring an efficient and safe system, as Jens adds: "In our business safety is everyone's business, and everyone is involved in developing and maintaining the safety culture."

Employing 550 personnel across a range of divisions and skill sets, Danbor implements training plans for all employees, whatever their position or level. "Through annual appraisals we discuss future skill sets, needs and requirements to fulfil the job. It is through this that we are able to keep the position filled with the highest level of skill. We currently have apprentices across a range of skill sets and it is our future goal to establish an international apprenticeship scheme where we can transfer the employee between different sites within the North Sea and on a

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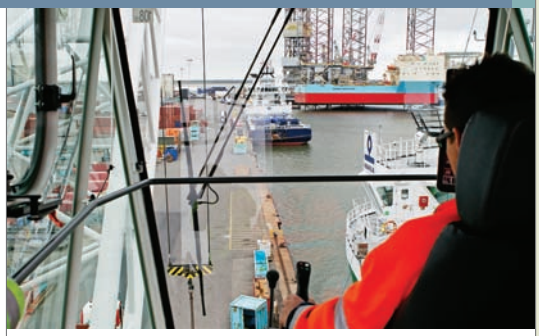
there's more to every workplace

global scale," says Torben.

The logistic success displayed in the oil and gas industry is from experience gained from a knowledge and history of making custom clearance, as Jens details: "We have dealt with local and national legislation in all countries operating in the North Sea. Although most are part of the EU, each has its own national legislation. If a small mistake is made in the handling it has the potential to cost money in delays. We support the companies throughout the process, ensuring the correct actions are followed throughout the freight moving procedure. By being locally present across the North Sea platforms we will gain an overview of how the supply chain is working for specific clients and will be able to provide appropriate consultation to achieve the best solution in terms of money and service."

Following the opening of the new office in Den Helder in August 2013, the business progresses into 2014 with the opening of a new office in Stavanger, Norway, further establishing



key strategic positions around the North Sea. "From our various positions we will be targeting local oil and gas operators to get the quay site operations up and running, and working to facilitate rig operators and other contractors within the oil and gas business.

"Our long-term focus incorporates a greater field of operation with planned global growth across Singapore, Houston, Dubai and Doha. The positioning of Danbor as a viable and global player within the oil and gas sector is a strategy set to significantly grow revenue in the next few years, whilst controlling a growing market dominance in the North Sea," concludes Torben. O&G

CSI

At CSI we specialise in storage and handling solutions for all industrial environments, from the supply of a few bays of shelving in the office to the design and installation of a fully integrated warehouse and production facility. Within every workplace there is hidden potential, knowing this we work closely with our clients to understand their business and find tailored solutions.
As the largest Dexion and Bott Distributor in the UK, we have been working within the oil and gas sector for over 30 years, supplying racking and storage solutions, mezzanine floors, workplace storage equipment and specialist ship shelving for use on oil rigs and supply vessels.

Danbor Ltd
danbor.com

Services
Agency, transport and logistic solutions for the oil and gas industry

Breaking ground

Over the last eight years

GEO-data has taken significant steps, catapulting it forward in the industry. Established in 1978, it reached a major milestone in 1985, acquiring laboratory facilities from where it conducts among other things stable carbon isotope analysis. Monitoring of ground water, soil air, ground air and environmental conditions are undertaken in this facility, with a special focus today on unconventional wells and environmental related monitoring projects. The drive behind the business lays in oil and gas, unconventional drilling, geothermal and environmental consultancy.

In 2011, GEO-data obtained a smaller company involved in core analysis. With growing interests in unconventional drilling the demand for typical analysis of normal types of rocks such as sandstone, or limestone is replaced by shales. Special machines and apparatus are required for low permeable rock types, and GEO-data is working towards analysis routines (e.g. GRI) for shale play evaluation. As well as heavy investment in machines it is increasing its capacity in the laboratory. "Our new laboratory will provide 600 sqm of additional space as we grow our activities in new fields.

"We have an R&D department that drives technology forward. Significant developments have been made with the isotope technology and also with gas chromatograph technology utilising a flame ionization detector (FID), an instrument that measures the concentration of organic species in a gas stream. Particularly in the light of shale gas development, it provides a better understanding of the reservoir in terms of gas and its composition. We aim to make the chromatograph faster with more accurate to ten ppm or lower detection limits," says Boris Nadolny, operations manager.

Over the last 18 months, there has been less activity in Germany due to environmental concerns as politics continue to play a major part in the development of fracking, both in the UK and Germany. "The climate for unconventional drilling is not very positive at present. This is however different in Poland, which is one of the main markets for unconventional drilling, and the leader in Europe. Some major players have recently ceased active drilling in Poland, but we have been able to increase our market share with companies such as Orlen, BNK and ConocoPhillips, one of the main drivers in shale gas exploration.

"Poland is still a big market, and we have up to ten units operational with our Polish partner, Geokrak. With them, we are providing gas canister desorption, which is needed for evaluation of shale gas resources. We are putting a lot of efforts in to new techniques, trying to increase our market share. As a partnership we are already the market leader in Europe for gas canister desorption," announces Boris. Politically, the UK is in favour of shale gas development and is currently undertaking environmental assessment monitoring as Boris continues: "We have involvement in tendering processes for potential unconventional wells in the UK.

"Exxon, Wintershall, GdF Suez and RWE are still our main clients in Germany focused on conventional oil. We are working with three smaller clients, backed by larger organisations that are trying to redevelop old oil fields, revaluate seismic data and doing new 3D seismic calculations on sites that have decreased to zero production. The first phase of doing seismic

PLATAL

Platal Mobilsysteme is a competent partner for individual customer container solutions in the field of inhousing technical equipment, even in difficult climate and environmental conditions. High quality and short delivery times are reasons for the long relationship between Geo Data and Platal. The factory located in the middle of Germany is a specialist for individual trailer and tank constructions to insert at oil and gas fields. All the Platal products are constructed and produced in Germany.

reinterpretation for old wells has begun and there will be a lot of work if successful." The business additionally has interests in Kazakhstan that have grown over the last 18 months. The region has large quantities of oil available and the focus is purely on conventional drilling.

"Two years ago we successfully entered Ukraine, establishing the branch Ukrgeodata LLP, based near Kiev. We are providing well site geologists for Shell, which is drilling in a mixture of both conventional and unconventional wells in the Kharkiv area. Our personnel are undertaking geological evaluation of the drilling process," highlights Boris.

The size of the business has proved a valuable asset that its clients benefit from, as Boris says: "We are dedicated to our clients. When they need something they only need to make one call and decisions can be quickly reached. It is our advantage to be fast reacting. We have less of a presence in as many countries as larger companies, but in those countries we are focused on customer satisfaction. It is important for personnel to remain up-to-date with technical aspects, and we value local geologists who know the areas, so employees in Poland, Germany, Ukraine and the UK are always of local origin. We have a training facility in Germany with a virtual mud-logging unit that focuses on mud-logging basics and advanced services like pressure evaluation, and geology as well as HSE. Many personnel are Master graded geologists, so much of our extensive training focus is on technical development."

Looking ahead over the next 12 months GEO-data is set to increase efforts in the UK, Poland and Ukraine, consolidating interests and focusing on the offshore project it has commenced in Kazakhstan. "Our long-term outlook incorporates an expectation of more activity in east and west Europe with unconventional projects, and shareholder investment being made for this purpose. We are trying to bring the laboratory quality to the field, which is already established but we are putting a lot into improvement," concludes Boris. OGG

GEO-data
geo-data.de

Services
Wellsite services, engineering, environmental laboratory and consulting

The heat is on

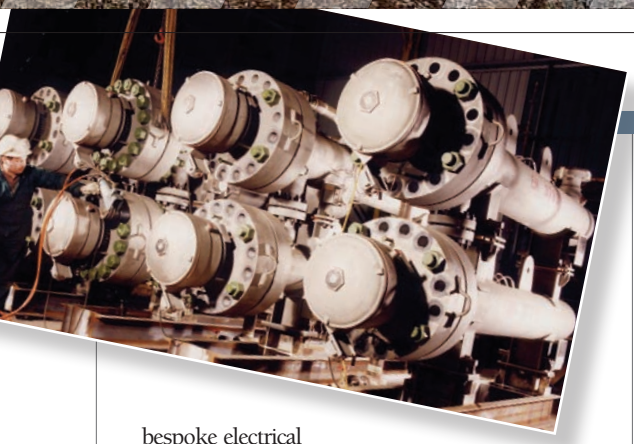
The origins of the business

reach back to 1915 when engineer, Edwin L. Wiegand, patented a resistance-heating element that would eventually be applied across a large array of processes. Chromalox was formed in 1917, when the company received its first order for a strip heater to be used in a product that became the modern household clothes iron. As growth continued, it developed a manufacturing presence in the 1920s, targeting new industrial heating products and processes. It expanded into the nuclear industry in the 1950s, supplying pressurising heaters, and was a supplier to the aerospace support industry in the 1960s, with a strip heater included on the first Apollo Lunar Module.

Chromalox entered the global market by acquiring two manufacturing facilities in Europe and a series of further acquisitions positioned it as a leader in the industry with international acquisitions continuing in the 1990s, adding a Hong Kong regional sales office in 1993 to service Asian markets. "We manufacture heat exchangers and control systems for the oil and gas industry for use in production both on and offshore, and into the refining and petrochemical complexes. Products are manufactured to almost every international standard and certification so we are able to supply to anywhere in the world," begins Richard Ackerman, sales director of process.

"The main growth over the last 30 to 40 years has been seen in the oil and gas and petrochemical industry, particularly due to the environmental benefits," adds Richard, pointing out that apart from the initial footprint from the production of electricity, there are no further emissions. "In several applications there is also a significant amount of power produced on site, so running costs are low. Higher operational temperature ranges up to 620° C for the Hydrocarbon market and the maintenance and physical size of our systems is much less than other traditional forms of heating," he continues. When decisions are made on the primary source of heating all considerations of temperature of operation, lifecycle cost, availability and environmental issues must be considered. It is fair to say electric heating constitutes a far higher percentage of the Hydrocarbon process heating requirement than 20-30 years ago.

Joining in the discussion, Herman Geveke, European sales manager adds: "We make



bespoke electrical heaters and associated control panels according to customer specifications. When gas is extracted from the ground it is full of impurities and heat is required in the separation process. In the extraction of oil, heat is required to lessen the viscosity to transport it through pipelines and further heat is required in the separation and refining processes to manufacture the higher grade fuels and feed stocks used today. The challenge is to meet the customer requirements as some applications are in very corrosive mediums, so a choice of materials is all important.

"Our worldwide presence is effective through regional offices and well established agents. With manufacturing facilities in the US, Europe and China, our Croydon office is the sales and project management centre for Europe, Middle East, Africa and India." The US company is headquartered in Pittsburgh, alongside its R&D facilities, which spearhead innovative product development. Over the past four years the company has opened up offices in India and Thailand, and has grown into Germany, China and the Middle East.

"As we move forward over the next 12 months, we will be targeting product development and focusing on new project areas. We aim to remain as a global and competent company that can be relied on," explains Herman, as Richard highlights: "We are advancing our existing products for Arctic and colder climate development down to minus 60 degrees Celsius. We have also been working on additional products that are not yet in our portfolio that will take the business forward in an exciting direction." In February 2014 the business announced a new design patent that has a specific use in power generation where excess power is produced. Essentially the development can heat and store energy into a large mass of fluid. Significantly, this product has explosion proof certification and can operate at 4160 volts, reducing the size of cabling, ampage and switchgear.

The announcement coincides with the UK government investment plan for the oil and gas industry over the next four years to 2018. "There is a potential for a growing market in shale gas, and although there are some challenges, we are trying to find ways to make our product suitable for the market. We work with a varied customer base, such as oil and gas companies, but also EPC contractors. It is important to work with all customer groups from the earliest stages to achieve the best result," says Herman.

Chromalox recognises the North Sea is still a market of significant investment, but equally notes that the Gulf region off the US and South America is growing substantially. "There is massive investment off the coast of West Africa, Asia, and on the Pacific Rim, and key developments are ongoing with national oil companies involved in several different projects," highlights Herman. Drawing to a conclusion on the future outlook, Richard says: "Steady growth and expansion into geographic areas where the business is less represented forms part of our long-term vision, and we strive to become stronger in those areas. There is a lot of activity in the subsea market and we see a gap for an effective heating product." O&G

> The challenge is to meet the customer requirements as some applications are in very corrosive mediums so it is important to have the right materials in order to adapt to those conditions

Chromalox
chromalox.co.uk

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Supplier of electric heaters, associated control panels and trace heating cables

Innovative Products
Environmental Solutions
Global Support

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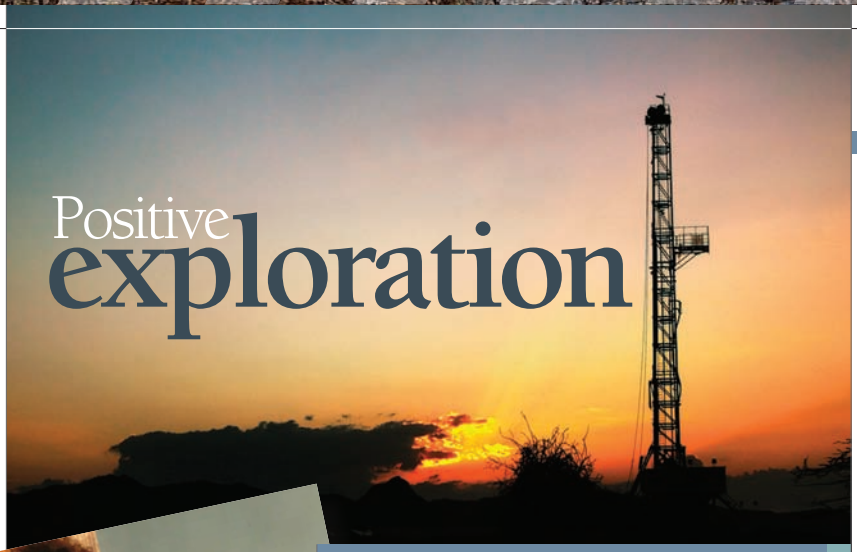
Positive exploration



AMC

AMC was established in 1988, and has over 26 years experience supplying high quality drilling fluids and drilling waste management solutions to the global minerals, water well, oil and gas, geothermal and coal bed methane industries. AMC's strength lies in its agility, its people, understanding of the local environment and its commitment to onsite support for its customers - wherever and whenever.
The company is committed to delivering innovative, customised solutions using its in-house manufacturing expertise and facilities.
AMC is proud to be associated with Africa Oil's success and look forward to supporting them through the challenges ahead.

Africa Oil Corp (AOC) is a Canadian listed international oil and gas exploration company with a relatively small staff of fewer than 50 employees. Some of these however boast as many as 30 years experience within the industry. The company can trace it roots back to 1983, when it was founded as Canmex Minerals Corporation (CMC) before moving into oil exploration and changing its name to Africa Oil Corp in 2009. AOC maintains a targeted focus on its prospects in East Africa and today holds assets in Kenya and Ethiopia. In addition it has a 45 per cent interest in Horn Petroleum Corporation (HPC), which operates two blocks in the Puntland Regional State, Somalia. Africa Oil has gained an increasingly respected reputation that is built upon a proven track record of oil field exploration and targeted investment.

Since AOC was last featured in *European Oil and Gas Magazine* in May 2013, the company has continued its aggressive exploration and drilling campaign in the South Lokichar Basin in Northern Kenya. This is in parallel to an additional exploration programme designed to open up new Tertiary and Cretaceous basins within Kenya and Ethiopia. During September 2013, AOC announced an increase of 557 per cent in estimates of contingent resources in the South Lokichar Basin and Ethiopia, as well as a significant increase in risked prospective resources. These estimates were based on independent assessments made by Gaffney, Cline & Associates (GCA) and were conducted in accordance with Canadian Securities Administrations in National Instrument 51-101 standards for disclosure for oil and gas activities. It should be noted that these estimates do not include the company's 45 per cent-owned subsidiary HPC or its assets.

The announcement was followed by continued exploration and drilling with operating partner Tullow Oil plc to tap new reserves and increase the level of confirmed contingent resources in the basin. Following the latest results Tullow updated its estimate of discovered resources in this basin to over 600 million barrels of oil. Tullow believes that the overall potential for the basin, which will be fully assessed over the next two years through a significant programme of exploration and appraisal wells, is in excess of one billion barrels of oil. Presently AOC has seven rigs drilling with its operating partners, four in the Lokichar Basin (operated by Tullow), while a further three rigs are preparing to drill basin opening wells in as yet unproven basins. The increased pace of the company's exploration programme has resulted in a 2014 exploration budget in the range of $300 to $350 million net to AOC. This represents a significant budget increase in comparison to the 2013 budget, estimated at $200 million.

During January 2014 AOC announced the discovery of two new oil fields in Block 10BB, resulting from exploration drilling in the Amosing-1 and Ewoi-1 wells. These discoveries continue the 100 per cent track record of success in the Lokichar Basin with seven discoveries out of seven exploration wells. Commenting on the news, president and CEO of AOC Keith Hill said: "The continued success of our exploration programme in northern Kenya will allow us to drive forward development plans with greater certainty. Given that we have had a 100 per cent success rate on exploration prospects in the basin, we expect to see more growth in resources and more discoveries as our aggressive drilling programme unfolds in 2014. In addition, the several new analogous basin opening wells being drilled during this period have the potential to bring a steep change in company valuation upon success."

As well as underscoring the company's tremendous track record in oil field exploration, these latest discoveries also have the potential to realise a high yield of future return. The Amosing discovery in particular looks to be very exciting for AOC, as Keith elaborates: "The Amosing discovery looks like it is going to be one of the company's best, with very good quality reservoir. It is very close to the Ngamia discovery, which is still the largest discovery AOC has had with over 200 meters of net pay. Amosing is only seven km away from that and looks to have very similar reservoir properties. The Ewoi discovery is on the other side of the basin in the lower Lokhone reservoirs. These tend to not be as good quality, but the structures are quite large. The structures on the east side

are roughly three times the size of the structures on the western side. We still consider these discoveries to have high potential, even though they may have slightly lower flow rates and the oil may be slightly harder to get out, as the volumes potential is quite high."

AOC has built a solid foundation upon which it will base its future operations into 2014 and beyond. Key to this is a spirit of close co-operation with local communities and government officials to develop relationships that benefit all concerned. AOC works hard to ensure that the challenges that accompany operating in remote regions are mitigated and that local communities are treated as partners rather than competitors.

Keith explains the reason for this approach: "It's all about community relations and gaining the social license to operate. I have been working in Africa since 1989, within the Sudan, Somalia and other countries without incident. This is because we always approach the local communities first. When we enter a new area, I always tell my team to act as though they are entering the communities' home and to act the way you would expect them to act in your own home. The building of these relationships does not always come easy; trust doesn't come over night, it has to be earned over time. It's about engaging the communities; telling them what you are planning to do and discussing how we can best benefit them. But most of all it is about keeping promises. If you say that you are going to do something, you had better do it. Once you do this a number of times, that's how relationships are built and trust earned.

"However we cannot do this alone. We work with host and foreign governments, domestic and international NGO's as well as international organisations like the World Bank and African Development Bank, to make sure this is a positive experience for as many groups of people as possible. It is our belief that the discovery and development of natural resources can and should be a blessing and not a curse." OGG

Africa Oil Corp
africaoilcorp.com

Services
Exploration

International integrity

IMES Group (IMES) is an international engineering company providing integrity management services, the design and manufacture of specialised weighing systems, subsea equipment and critical test equipment. The IMES Group holds a distinct competitive edge in the market place offering these four essential services, that when pulled together provide its clients with access to synergies of service and product solutions that are second to none.

The company also has crane inspection and engineering capabilities that includes; certification management, lifting equipment inspection, design and verification, proof load testing, field engineering, structural analysis and load monitoring. When you then consider that IMES is the only UK business to achieve ISO 9001, 14001, 180001, UKAS 17020, Lloyds Register Approval for Class 1 Davit Inspections and Baseefa accreditation its capability speaks for itself.

This vast competency has been amassed through experience and through strategic acquisition of performance specialists such as Davy Systems and Buchan Inspection. Davy Systems is highly regarded worldwide for designing and manufacturing precision weighing systems for harsh environments, while Buchan Inspection is renowned for excellence in the oil and gas sector for LOLER inspection services.

In an interview with *European Oil and Gas Magazine* Peter Smith, product sales manager, says: "Customer service is high on IMES' priority list. We consistently achieve excellent FPAL scores, averaging "excellent" across the board. We achieve this not only because of our skill set but because we pride ourselves on responsiveness, utilising forward thinking technology and in driving forward the innovation that addresses integrity issues for both the lifting and subsea environment."

IMES offers lifting and crane inspections through highly experienced and qualified technicians, backed by professional engineers who assist with integrity issues and solutions.

In addition, our dedicated manufacturing facility designs and manufactures world class load cells and pins to fully integrated load monitoring and measuring systems where high accuracy is demanded, even in harsh environments such as subsea.

"Our combined integrity engineering has allowed us to develop tools for riser inspections like no other in the world, and subsea electrical testing systems for fault finding and pre installation testing, our independence means that clients will get a balanced view on assets and they respect our advice," Peter explains.

With a national presence the IMES manufacturing facility in Sheffield is a leader in tension systems, one third of the world's Tension Leg Platforms (TLP) use IMES equipment. Other successful Sheffield products include FPSO and wireless mooring systems, ROV tether and umbilical monitoring, jack-up chord load monitoring, and crane and winch monitoring systems.

Made to the strictest standards, the equipment ensures longevity of use and operation in the harshest of conditions. "Our crane condition monitoring equipment is bespoke and used throughout the world. It continually monitors the condition of the crane, with a prediction on end of life derived by IMES engineering from this information," he adds.

IMES has specialist skills in Non-Destructive Testing (NDT) and Non-Destructive Examination (NDE) techniques, which can be

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delivered on lifting equipment and structures.

"We believe that testing and inspection is an important tool in asset assurance so we can accurately advise our clients in safety and to extend the working life of their assets. We invest time and money training our technicians from our six UK offices to ensure we have the right mix of experts and competency. Combined with other disciplines such as rope access, it gives our clients a great offering and us a great advantage over our competitors," says Peter.

The company also has a state of the art NDT inspection system that detects internal flaws in wire rope up to 83mm. When used in conjunction with the wire rope pressure lubricator, Viper, it delivers a complete wire rope management service.

IMES recently lubricated the UK's largest crane using its Viper lubrication system, offering tangible benefits as Peter describes: "On previous lubrications the client spent three weeks with three technicians using 37 units of grease. We lubricated the rope in two days with only two technicians and using just seven units of grease, making large savings in availability and actual cost spent. But cost is only part of the benefit. Unlike applying grease manually with a brush (which is messy and just lays the grease on top of the rope and in a lot of cases is ineffective) using Viper is a very clean operation that penetrates into the wire, making it more effective. It is very difficult to take a crane out of action for three weeks, but two days is much more viable. Consequently the client is now planning to increase the frequency of the lubrication process."

The group has successfully completed many important and critical projects ranging from inspecting loading of dive systems on DSV's, to the I Tube Visual Inspection System (ITVIS) deployment for Schiehallion, monitoring and recording the safe riser disconnections. IMES has also supported many clients with the use of its Subsea Electrical Test System (SETS) including BP and Shell fields for quick electrical diagnosis in all the projects that IMES undertakes, savings are made for the clients in both time and money.

Peter explains that this was originally conceived of as a result of a brief from BP, the Subsea Electrical test System (SETS) assisted with defective and decaying subsea electrical control and communication systems. Deployed using an ROV, SETS has the ability to find faults quickly saving time on topside vessels and lost production. More recently he adds: "Our SETS has been used to test umbilicals subsea during their installation, it is a fantastic benefit to clients and their clients that umbilicals can now be tested and signed off immediately after being laid."

Peter is keen to stress that "along with service, innovation and quality we have spoken about, health and safety is of the utmost importance to us." He takes the topic very seriously adding that "Our HSE manager has over 30 years oil and gas experience, which supports our strong accreditation and we achieved a zero score in TRCF."

2013 was certainly an incredible year for IMES and it plans to further build on this success by increasing its workforce competency through industry training during 2014.

"We see quality of workmanship and our highly skilled workforce as critical to keeping our customers at the leading edge," says Peter. "Indeed, while investing in technology will continue to develop our core business remains the lifting equipment services that we offer clients. IMES remains totally committed to both delivering a high standard of service and competency backed by our new version of our SmartCert2 system for LOLER compliance."

New premises evidence the company's continues growth. Peter explains: "Last year we brought all our resources in Aberdeen under one roof, increasing both our storage and workshop space, enabling the storage and rapid deployment of all our subsea equipment, such as ITVIS and SETS, our NDT, load testing and rope access kits together. On top of the increased workshop space we have also invested in a small test bed for pulling up to 65t, complementing our 250t test bed located in Rosyth. We are now in a prominent position and operate 24/7 around the world for oil and gas clients."

With a positive market forecast ahead, Peter concludes: "Business will be busy over the next five years. Our inspections engineers, in partnership with the support of our chartered engineers, are busy with responding to and working with clients; diagnosing faults and generating best value and bespoke solutions. We are currently involved in a number of large projects including supplying consultancy services throughout the design, production, installation and testing phases for four ship-to-shore cranes at the Port of Southampton."

Innovation and investment in new technology specifically aimed at assisting complex client needs certainly stands out as a key feature of working with IMES, and is a core feature of its future. O&G

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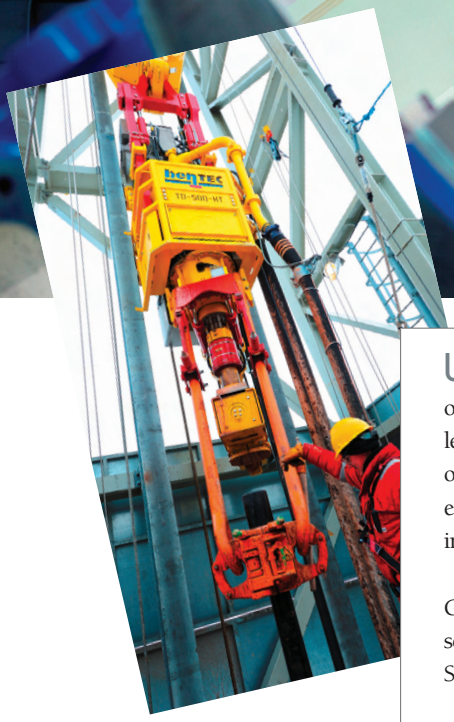

Drilling down to International success

With more than 125 years

of experience, Bentec is one of the world's leading manufacturers of drilling rigs and oilfield equipment, delivering high quality, cost effective solutions to meet the demands of the international oil and gas drilling industry.

Bentec is headquartered in Bad Bentheim, Germany with additional production and service facilities in Tyumen, Russia and Nizwa, Sultanate of Oman.

The company's roots can be traced back to 1888, although the Bentec brand was first established in 1994. Today, Bentec employs over 800 staff and runs as a fully independent subsidiary of its parent company, KCA Deutag.

Since it was last featured in *European Oil and Gas magazine* during February 2012, Bentec has continued to increase the scope of its product portfolio with the introduction of a further element in its top drive range. The resulting 275 tonne top drive, which was introduced during the latter months of 2012, further strengthens the company's ability to service lower-end drill applications, complimenting the 350 and 500 tonne top drives. The company is also planning to launch a 750 tonne top drive later this year to meet the demands of the offshore market. "We launched the 275 tonne top drive in Germany and also in Russia over the course of two major events," says Carsten Freyer, vice president of business development.

"We have had several successes, especially in the Russian market with regard to the design of equipment for smaller rigs and this is also the case within the Asian Pacific. We have also increased the company's production capacity significantly, all Bentec top drives are designed in and built within Germany and all of the necessary parts are likewise sourced from German businesses."

In addition to expanding the capability of its German production facilities for the production of top drives and other equipment, Bentec further developed its aftersales and global sales operations between 2012 and the present day. "We have also built a separate pillar to our business to undertake aftersales services," Carsten explains. "Aftersales has always been part of the company's service offering, but we decided to create a specific branch like we had done with business development and sales. During 2012 a team was hired to manage aftersales with specific goals and targets.

"We have increased the effectiveness of the company's sales division, not simply by adding more people to our Russian or Middle Eastern regions for example, but by making it a comprehensive organisation with a greater global footprint and additional agents within potential growth markets."

The combination of over 125 years of industry experience and investment in expanded production capabilities has enabled Bentec to further develop its product portfolio and to provide turnkey solutions to a number of clients across the globe. During 2013, Bentec

Below
CEO of Bentec, Dirk Schulze

confirmed a multi-million order for a brand-new rig from Todd Energy to be initially deployed to Todd's Mangahewa oil and gas field inland from Tikorangi, where noise concerns had been voiced by local residents. The new Bentec rig is designed to operate at a noise level of 45dB at a distance of 350 metres away. This is about nine decibels lower than the rig that is currently in operation in the area. Commenting on the design of the rig Carsten says: "The client came up with a couple of specific product requirements like a new walking system that we added to the 450 tonne Bentec Euro rig. We also added a new hydraulic catwalk system, meaning that during the course of this design we significantly added new components to our equipment portfolio."

A key strength for Bentec is that the company enjoys a strong vertical manufacturing capacity, which allows it to deliver turnkey solutions to projects like the Todd Energy rig, as Carsten elaborates: "We have almost 100 per cent vertical manufacturing capacity, everything that is around the bore hole on a drilling rig has been designed, engineered and manufactured in-house by Bentec. Our aftersales service is another key business strength. As the market is becoming increasingly competitive and as technology becomes more complex, customers need to have the right people and services available 24/7 in order to successfully maintain their rigs."

The combination of proven, reliable technology and dedicated aftersales and support services has enabled Bentec to expand its global footprint, and the company has enjoyed continued expansion and tenders in North Africa since 2012. "The first breakthrough in the North African market was an award for 14 top drives in 2012," says CEO Dirk Schulze. "It was a very competitive tender and at that time we had just launched the company's range of top drives and were competing against existing, well known brands. However, we were able to gain the upper hand and win the order. Later we were awarded a tender for four fast moving desert rigs in the face of competition from larger organisations."

The four rigs were delivered to clients in Algeria by 2013 and following the timely completion of the project; Bentec received its largest single order to date for seven land rigs from Enafor in Algeria. This order is an impressive success story for Bentec as it represents an important landmark for the company as well as a keen endorsement of its technology.

"What we have seen is a customer that purchased its first rig in 2013 and subsequently observed the benefits of Bentec operation," says Dirk. "Enafor is now looking forward to receiving its new rigs over the next 15 months. We work hard to maintain the highest quality standards across our drilling rig systems and our success is testament to that, the services we provide and our continued commitment to developing additional business in Algeria. We may not be the largest rig supplier in the world. However, our dedication to increasing drilling efficiency and exceeding health and safety targets has been a key factor for our customers and is just one of the reasons why they return to us after a successful operation."

As well as its expansion into new markets, Bentec can expect to see strong business within its traditional markets in both Russia and Oman during 2014 and beyond. Within Russia for example, there is a forceful drive to expand oil and gas production as Dirk explains: "We definitely see growth potential in Russia, the increased targets that it has introduced will mean it needs to modernise its existing fleet as well as introduce new, modern rigs. This is well known to the industry and we will see more activity in this market, with our facility in the region we are well placed to address this activity."

Furthermore, Bentec's parent company KCA Deutag was awarded a significant tender from BP during early 2014, to supply three fast moving desert rigs in Oman through a multi-million dollar contract.

With contracts and tenders coming Bentec's way from some of the oil and gas sectors most prevalent operators, the company has grown exponentially from around 300 staff in 2010 to its current level of 800 today. The relationship between Bentec and KCA Deutag will be mutually beneficial to both organisations as the strong reputation and global influence of Bentec continues to grow. O&G

WAGENBORG FOXDRILL

Wagenborg Foxdrill is a leading service provider in the oil and gas industry and has been working in close relationship with Bentec for several decades. Both companies joined forces in many projects when it comes to the rig up of new rigs, derrick modifications, consultancy and engineering. Wagenborg Foxdrill installed many first class Bentec products such as offshore derricks, top drives including guiderails, Cluster Sliders, Euro Rigs, Desert Rigs, Speed Rigs and Euromatic Rigs. As a result Wagenborg Foxdrill is the preferred supplier for many of Bentec's final clients. Wagenborg Foxdrill has the competent people, equipment, systems and capacity to support customers worldwide.

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Services
Manufacturer of drilling rigs and oilfield equipment

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Piping hot

The history of the company

dates back to 1960 when the first extrusion line was constructed at its plant in Nikopol, Ukraine. Centravis Ltd emerged in 2007 as a result of the integration of the manufacturing, service and trading assets owned by UVIS group, a family company with a primary focus on stainless steel tubes and pipes distribution. Heavy investment during 2007-2010 led to the upgrade of equipment improving efficiency, productivity and widening the product range.

Currently the company's product portfolio covers general tubes and pipes for the oil and gas industry, heat exchanger tubes, hollow bars, boiler tubes, instrumentation tubes, furnace tubes, and Ni-alloys. The range offered varies in size from 4 to 245mm in diameter with wall thickness 0.2 to 35mm, and tube length up to 27m.

A major direction for investment relates to the hot shop, where a state-of-the-art extrusion line with a 44 MN extrusion press and new induction furnaces were installed. Its main suppliers are SMS Meer and the former company IAS, now also a part of SMS Meer. Production of tubes up to 245 mm with standard tolerances as D3/T3 is feasible on the new press and the maximum length of hot finished tubes is 15m.

As Viacheslav Erkes, sales director of Centravis, explained: "Centravis is the sixth biggest producer of seamless stainless steel tubes and pipes worldwide. With a portfolio that includes over 1000 reference sizes of more than 100 types of corrosion and heat resistant steel grades we are striving to provide the highest quality tubular products combined with the best service, pricing and terms conditions worldwide for all consuming industries."

This is due to a clear company vision and strategy centered on sustaining cost leadership, focused on customer needs, ensuring a comprehensive service. "To achieve this we have implemented huge investments, and an additional investment programme will follow," explained Viacheslav.

As a result of the recent investment programme, Centravis widened its product offering both in steel grades and dimensional range, and continues to master new high-tech products to meet requirements in accuracy, length and surface finishing. The business has recently successfully mastered duplex/superduplex grades both in hot and cold finishing, developed thin-walled tubes (219mm in diameter with wall thickness 6mm, 168mm in diameter with wall thickness 3.5-4mm, 159mm in diameter with wall 3.5-4mm), as well as up to 15m long furnace/heater tubes (with a necessary grain size without additional heat treatment) destined for the petrochemical industry, significant expansion of its U- tubes range and range of tubes for automotive applications.

"In 2013 the company received NORSOK M-650 and ISO TS 16949 certification, strengthening its position in the oil and gas industry in Scandinavia and the UK, as well as in the automotive industry and providing an opportunity to operate worldwide. Centravis' laboratory was certified according to ISO 17025, which enables us to perform the most complex and demanding orders and serve our customers. As a result we received a number of interesting

DNEPROSPETSSTAL

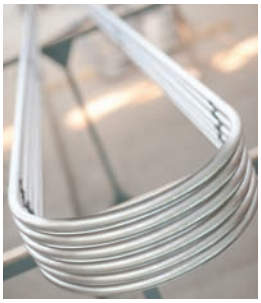
Dneprospetsstal (DSS) is a supplier of choice to numerous customers globally for specialty steel long products, such as stainless, tool, air melt and PM (powder metal) high-speed steel, carbon and alloy SBQ.

Centravis has been a strategic customer for DSS produced rounds for seamless tube making for many years. A large-volume, yearly sales agreement will cover shipments of 300-series stainless in 2014, while duplex material will soon supplement the existing range of grades supplied.

LAMIFLEX GROUP

The Lamiflex Group supplies packaging solutions for the tube industry worldwide, including the original Lamiflex product, VCI-stretch film, stretchfilm machines etc. In the oil and gas service industry our products have been more or less a standard to protect valuable tools like screens, packers, and linear hangers etc. from mechanical damage and corrosion during storage and in transit.

> Centravis is the sixth biggest producer of seamless stainless steel tubes and pipes worldwide. With a portfolio that includes over 1000 reference sizes of more than 100 types of corrosion and heat resistant steel grades we are striving to provide the highest quality tubular products combined with the best service, pricing and terms conditions worldwide for all consuming industries



projects for furnace tubes, tubes for nuclear power generation, and instrumentation tubes," stated Viacheslav.

"Alongside increasing our product offering customer service has always been one of the most important values for Centravis. We are a flexible, small company, but are able to perform big projects. No matter where the customers are located, we provide top grade customer service worldwide. This is achieved through a network of sales offices in Russia, Ukraine, Uzbekistan, Germany, Switzerland, Italy, the US and agents in Brazil, the Middle East, Korea, Australia and others, meaning that the business supplies to markets worldwide in a geography that covers 70 countries. Our geographical location coupled with our understanding of CIS and Western business standards and habits enables us to occupy a unique position in the world market of seamless stainless steel tubes," said Viacheslav.

In line with the long-term strategy, Centravis has implemented additional service and customer interaction tools, including on-line tools to check stock availability. Due to the production capacity, the business is able to offer short lead times, technical advising and online quality certificate verification service, amongst others. In 2013 the company established the sales engineers service aimed at providing support for key products such as tubes and pipes for oil and gas, nuclear and thermal power generation, automotive and aerospace sectors.

Despite the global stainless steel tubes and pipes market remaining stagnant during 2013, Centravis achieved planned performance with growth in all key markets, with product sales increasing 12 per cent year-on-year and 65 per cent exported outside The Commonwealth of Independent States (CIS). Throughout the year, Centravis was able to continue the implementation of the development strategy with high value added segments, such as sales increase in nuclear power generation tubes.

Commenting on the performance of the business, Viacheslav said: "The company has remained the leading supplier of seamless stainless tubes to the CIS market, especially for nuclear and thermal power engineering. In 2013 we were awarded several major contracts for the supply of steam generator tubes valued at $20 million. With the growth of business in CIS, we have maintained sales momentum in the EU, through the North American Free Trade Agreement (NAFTA) and the Middle East. We have secured several major projects in the automotive, oil and gas and power generation industries."

As the company looks towards growth Viacheslav commented: "Brazil is an interesting market from the point of view of downstream and upstream oil and gas consumers, however our presence is relatively limited. In 2014 we plan to extend in upstream segments by gaining more insight into customer needs through following the certification and approval process and providing the recently developed products, including the 15 meter long furnace tubes and pipes to the market."

As the market opens, Viacheslav indicated the importance of growing the business: "Major resources in our R&D department are focused on reduction of production cycles, developing new products, increasing equipment reliability, and environmental efficiency. But alongside the products, in the fast growing market of today, human resource has become a significant competitive advantage, enabling better results. There are difficulties in attracting fully developed professionals for positions in production as this market is quite narrow. Therefore, the main focus of our company is creating conditions for keeping succession in the work, with young promising qualified employees geared-up to meet the business challenges."

The company operates staff training and development programmes designed to enhance the talent pool, covering staff development at all levels. Technical training is arranged in the company providing national certificates, ensuring highly skilled production staff. "We

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have established a Corporate University based on the principles of self-improvement and action based learning. This is a full-scale series of courses based on the cases and business practices, focused on balanced development of management talents incorporating management tools mastering, leadership skills and decision-making as well as the art of strategic thinking."

Through the university a new programme, launched in October 2013 has been developed for middle management. Participants receive training from experienced and successful leaders and have the opportunity to demonstrate their own capabilities. Additional programmes include strategic and operational management and leadership skills, and a language school. "Every employee has an opportunity to join the training process, enabling professional growth and to becoming more effective in the position," added Viacheslav.

In 2014, Centravis is aiming to further increase its sales volume, as Viacheslav concluded: "The key focus markets for this target will include CIS, NAFTA, the Middle East, Asia, Africa, and Brazil. Major growth is expected in instrumentation tubes and hollow bars, furnace tubes, specialty heat-exchanger tubes, boiler tubes and general tubes and pipes for, amongst others, the oil and gas industry. We are confident that we can fulfill orders of any complexity, based on the individual requirements of each customer." OSG

Centravis
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Services
Global supplier of high-quality solutions in seamless stainless steel tubes

Integral support

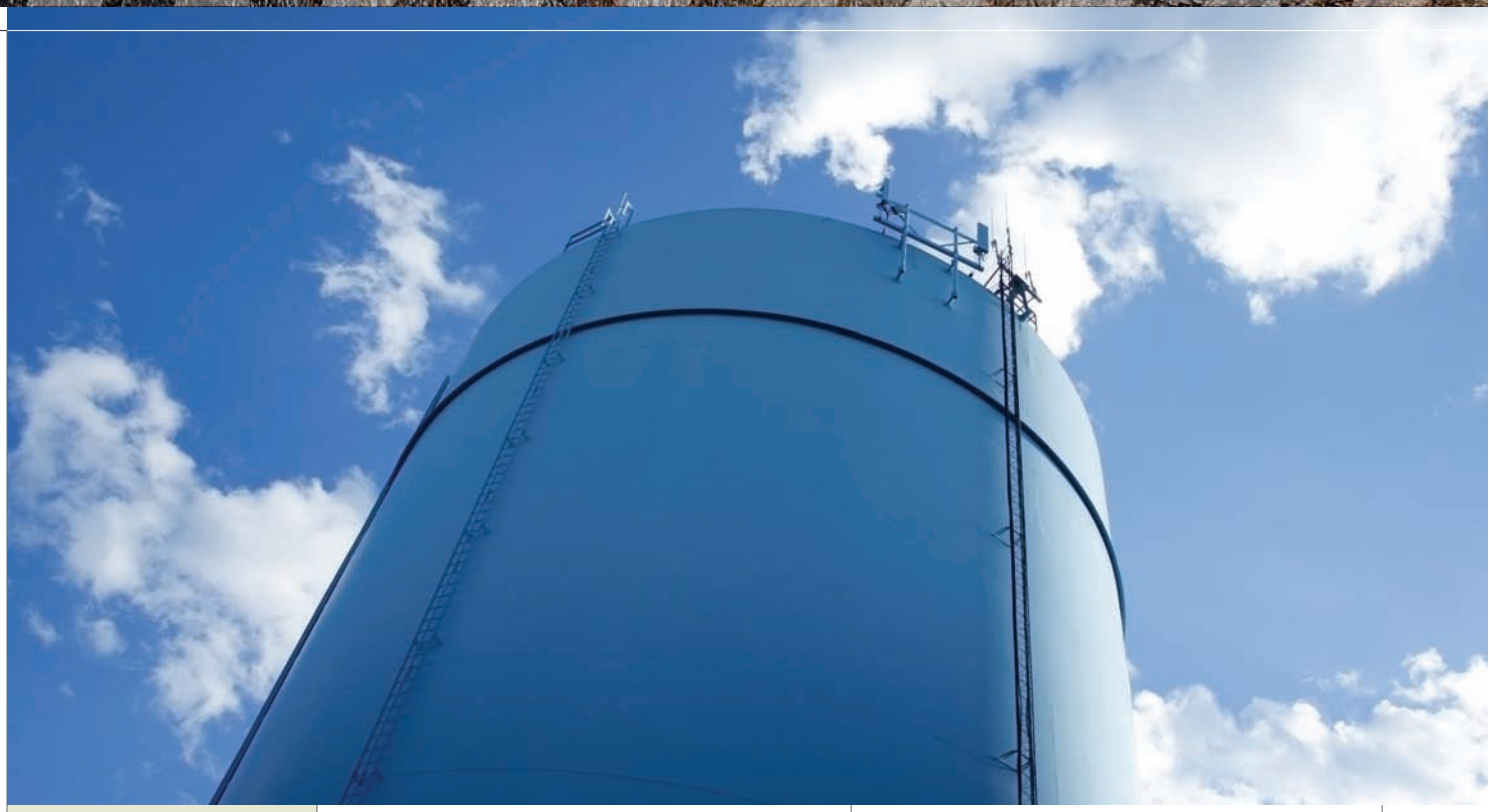
Leading European independent bulk liquid and gas logistics service provider Simon Storage has eight terminals based in prime locations in the UK, Ireland and Germany, where it handles more than 250 products and blends for its diverse customer base. With a combined liquid storage capacity of 1.28 million cubic metres, or more than eight million barrels, the terminals are capable of providing complete intermodal solutions for many of its customers through the receiving and distribution of products via ship, truck, rail and pipeline.

Aware that effective asset development ensures a consistent ability to meet the current and future requirements of customers within the oil, gas and petrochemical sectors, Simon Storage has focused on progressive expansion since its inception more than 80 years ago. Since its early days, the company has grown both organically and through a multitude of strategic developments and acquisitions; an approach that has resulted in facilities and infrastructure that can adapt to the evolving needs of the markets it operates in. This dedication to consistent improvement also enables the terminal to provide wholly integrated, cost-effective solutions to specific storage and handling demands for products such as petroleum or potable alcohol.

An integral link in a long supply chain, Simon Storage offers flexibility to its returning and long-term customers through the adaptation of its systems. As an infrastructure owner and operator, Simon Storage has the engineering expertise to develop bespoke solutions for complex customer requirements. Previously in *European Oil and Gas Magazine* in May 2013, the company was then involved in a major contract with Centrica Storage Ltd (CSL), a 100 per cent owned subsidiary of Centrica, for the receipt, storage and redelivery of gas condensate. As part of this agreement, Simon Storage built

two new 3000 metre cubed carbon steel tanks on time and within budget that are based alongside dedicated pipelines for the handling of products and redelivery of condensate to the sea. Incorporating internal floating roofs to minimise vapour emissions and adding externally stiffened roofs to boost internal volume, the bespoke tanks are also wholly compliant with stringent safety standards and regulations.

Now fully operational, the contract comprises of Simon Storage receiving gas condensate, a



P&I DESIGN LTD

P&I Design Ltd are pleased to have worked with Simon Storage for over 20 years, providing instrument, electrical, consultancy and design, together with installation and commissioning and 24/7 support services across the group. Following the Buncefield incident in 2005, P&I Design Ltd have been involved with a number of industry and competent authority working groups and have implemented many BS EN 61511 compliant systems. Other areas of expertise are process design, training and competency demonstration. P&I Design Ltd's multi-disciplined team are capable of projects from design conception to commissioning, with no project being too small.

bi-product of natural gas production, into storage at its Immingham West terminal from CSL's processing plant in Easington, East Yorkshire directly via pipeline. These developments coincide with the completion of Centrica Energy's multi-million pound York Project, a major programme for the construction of a gas platform and pipeline for the processing of raw gas extracted off the York Field, 34 kilometres off the York Coast. Once extracted, the condensate is stablised for utilisation in an array of industries, such as fuels and petrochemicals.

With a high customer retention rate, Simon Storage announced the provision of a specialised storage and handling solution for Prayon Group in November 2013. A leading producer of purified phosphoric acid, Prayon has signed a long-term contract where 85 per cent of concentrated purified phosphoric acid produced at its Belgium based plant is received into storage via Immingham East's deepwater jetty on the UK's East Coast.

Product will be stored in dedicated stainless steel tanks at the terminal before it is distributed by road to Prayon's customer base in the UK. To ensure customer satisfaction and absolute safety, Simon Storage refurbished two stainless steel tanks; both of which were fitted with overfill protection systems, heat conservation lagging, automatic tank gauging and external heating systems that are thermostatically controlled to maintain the required in-tank temperature. Furthermore, the quality conscious firm added a dedicated stainless steel import line for the purified phosphoric acid, as well as dedicated road tanker loading facilities such as a completely closed road loading system that incorporates metered batch controlled loading and an associated remotely operated shut off valve that is capable of closing in the event of detected overfill.

Based on the south bank of the river Humber, Simon Storage's Immingham Terminal is strategically located to offer logistical advantages to customers operating in the North Sea. Offering shorter, more direct routes to and from Europe's major ports, Immingham Terminal is regularly expanded and improved to ensure superior handling services in line with customer and market demand. For example, in January 2014 the company announced the arrival of new waste storage and handling capabilities at the terminal complex, which was recently granted an Environmental Permitting Regulations (EPR) Part A permit for the handling of both hazardous and non-hazardous bulk liquid wastes. On top of this, the terminal was also granted Radioactive Substance Regulations (RSR) permits for the handling of NORM (naturally occurring radioactive material) products that tend to originate in the North Sea.

Forming part of the UK's most comprehensive storage facility, the company's Immingham East and Immingham West terminals offer cutting-edge logistics infrastructure and a broad spectrum of benefits for exporters and importers aiming to optimise distibution. On top of this, both terminals are COMAH (Control of Major Accident Hazards) top-tier sites that are active participants in the CDI-T (Chemicals Distribution Institute – Terminals) inspection programme.

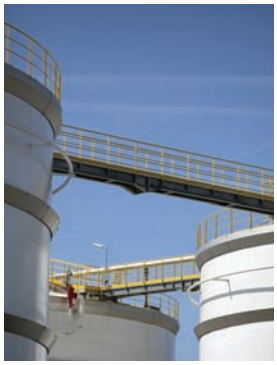
Now licensed for the storage and handling

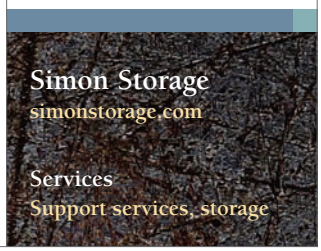
of NORM products, Immingham joins the company's other terminals at Seal Sands on Teeside and Velva Liquids in Tyneside in the handling of bulk hazardous liquid wastes, thus ensuring a more comprehensive portfolio of storage solutions and disposal routes for its customers. Included in this range are contaminated liquid wastes from offshore installations such as NORM waste streams stemming from the decommissiong programme in the North Sea, chemical wastes, and recovered products like mono ethylene glycol and drilling fluids that emerge from a vast array of industrial activities.

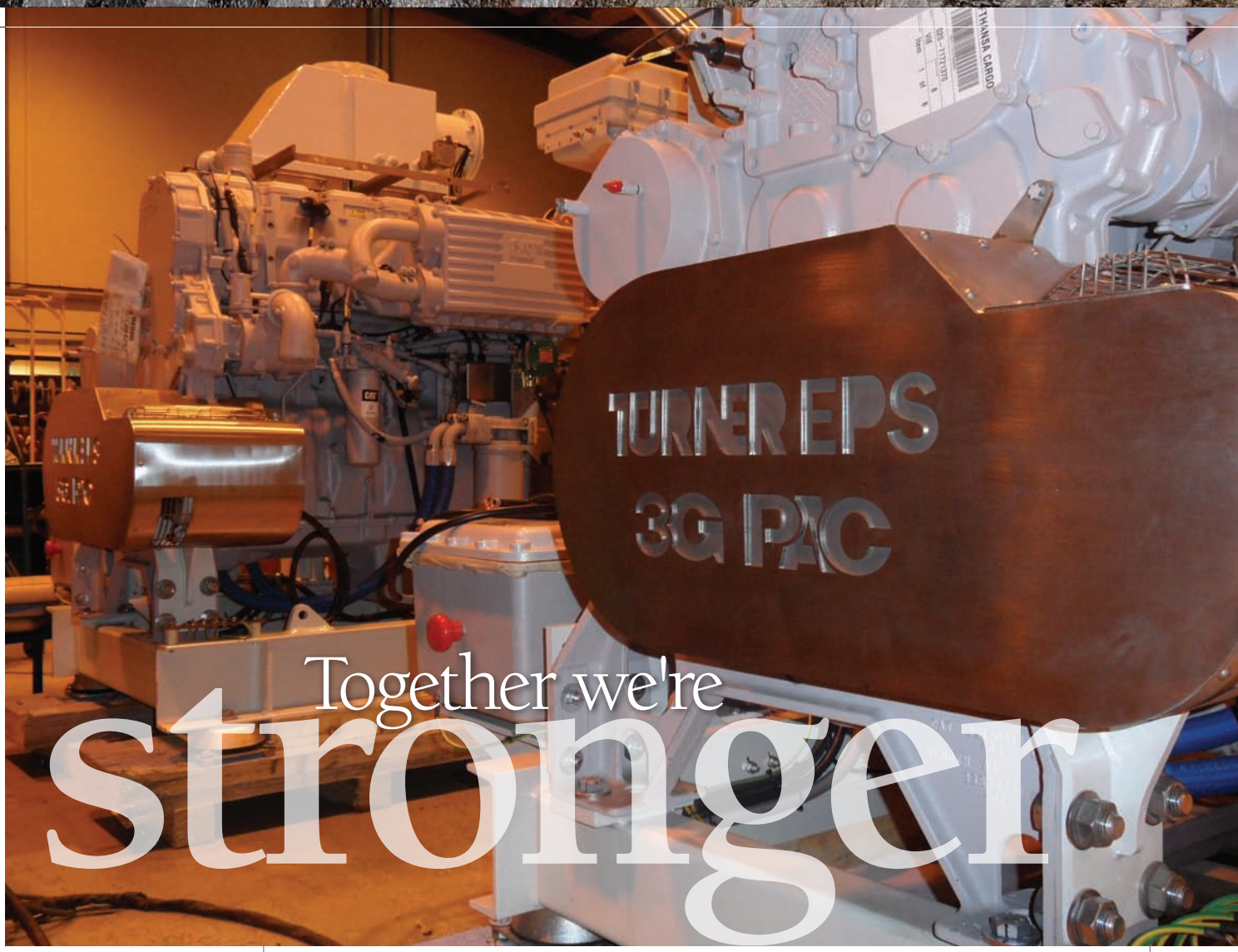
As a company that thrives on diversification of its product handling services, waste management and industrial cleaning is just a small part of Simon Storage's overall business, which includes the blending and storage of a comprehensive range of petroleum and petrochemical products, refined products such as liquefied petroleum gases, chemical products, vegetable oils and renewable fuels. Indeed, it is this ability to respond to market requirements through operational diversity that ensures continued financial strength during turbulent market conditions in certain areas.

As commercial and environmental trends within the waste storage and recycling sector continue to develop at a swift pace, Simon Storage's strategic investments are a sign of continued growing demand for high quality, innovative waste management solutions. Boasting the capacity, licenses and long-term knowledge that is required to store an impressive multitude of recovered product and waste streams, the company's terminals on the East Coast lead the way in waste handling.

Looking ahead, the company is all too aware that the UK market, particularly the North Sea, is fairly mature and is therefore paying increased attention to opportunities in and around Germany and Denmark, where its parent company acquired facilities last year. Searching for energy infrastructure development opportunities in Europe, Simon Storage will utilise its tried and tested strategy of acquisition and organic development to ensure ongoing provision of cost-effective, innovative solutions to the tanks storage market. OEG







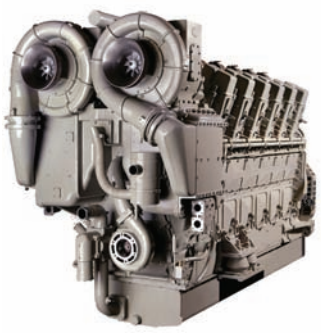
Together we're stronger

Turner EPS was officially formed during 2009 by the merger of four sister companies into a single entity, providing world-class products and services to a wide range of industries within the global marketplace. Today Turner EPS delivers its diverse portfolio of bespoke products and services through four divisions that service the power generation and support markets. The formation of Turner EPS reflects the wider Turner Group's corporate philosophy that 'together we are stronger' and allows Turner EPS to offer far reaching turnkey solutions.

The four operational divisions that make up Turner EPS include Turner Engine Powered Services, Turner Engine Powered Solutions, Turner Explosion Protection Systems and Turner Engine Control Solutions, and together the Turner EPS divisions represent one of Europe's largest single-source providers of maintenance and repair services, bespoke design as well as build solutions and control systems for power generation systems

Although all of the four divisions operate underneath the Turner EPS umbrella, each brings with it its own history and area of expertise. Specifically, Turner Engine Powered Services was formally known as Turner Diesel Limited and provides a comprehensive and diverse range of diesel engineering and support services from basic, pre-planned and response maintenance of standby or emergency generators and UPS systems to the installation, maintenance, overhaul and repair of prime power units in both on and offshore applications.

Alternatively, previously operating as Tisley and Lovett Ltd, Turner Engine Powered Solutions is recognised as a European market leader in the design and supply of bespoke special project engines and power generation systems for the offshore oil and gas industry, as well as the specialist industrial marine market. Commenting on the services that have made the solutions division a market leader, business development manager Gary Peacock says: "We have unrivalled and extensive experience in the design and build of continuously rated emergency standby generator sets, as well as fire pumps and generators for offshore applications. These are normally unmanned installations with extended internal service requirements and typical design and build packages range from 20



kilowatts to three megawatts."

Turner Explosion Protection Systems offers comprehensive conversions for category 2G and 3G equipment with its 2G PAC and 3G PAC diesel engine passive protected equipment packages to a range of industries. Within the offshore sector the explosion protection division provides 3G PAC engine packages that incorporate exhaust gas cooling, flame arrestors and ex rated electrical control and safety shutoff systems. These also incorporate diesel and gas pump and compressor drivers, including generating sets for a range of engine brands that are selected for their suitability and compatibility for hazardous environments.

Turner Engine Control Solutions is the fourth division within Turner EPS and is based in the Netherlands with operations within the UK, Abu Dhabi and soon to be Saudi Arabia in the Middle East. It offers complete turnkey solutions for control and power management systems for electrical and mechanical governors, gas and steam turbines, compressor, engines and pumps for the offshore and petrochemical industries. It has many years of experience in the upgrade of all kinds of electrical and mechanical control systems that includes the design and fabrication of control panels and cabinets, which is all carried out in-house.

The management of the four divisions under one brand enables Turner EPS to deliver a broad range of turnkey products and services as Gary elaborates: "The power generation market is a very competitive environment and there is no question that some companies have found it difficult since 2008 to make a profit and manage their costs. However, Turner EPS has kept ahead of its competitors by continually investing in the business and diversifying the products and services that it can offer."

Furthermore Turner EPS enjoys the benefits that are provided through its membership of the wider Turner Group, which has a long history and great deal of experience on hand to support all of its ventures. "The Turner Group is a third generation family-managed group of companies," says Gary. "The background of the group is that it was originally founded in 1912 and since then it has grown organically as well as through acquisitions. It enjoys a turnover of around £270 million and a reputation for profit retention, which gives it a solid financial base from which to operate. There are 24 Turner companies at last count and although they are an incredibly diverse group of businesses, the focus is always to push for first-class service to all of its customers in every activity."

A huge benefit to both Turner EPS and its clients are the close relationships that it enjoys with some of the biggest suppliers and manufacturers throughout all of the markets in which it operates. Turner Engine Control Solutions for example, has a close relationship with Woodward and is able to provide bespoke retrofit and new build solutions to meet the diverse needs of its clients. "Turner Engine Solutions is one of only five global channel partners for Woodward and we have specific responsibility for the UK, Benelux and Middle East," Gary explains. "Our Woodward business is growing in the Middle East. We are opening another office in the region to deliver Woodward control solutions via our agent distribution network."

Additionally, Turner EPS also supplies Capstone microturbines as an alternative solution that compliments its extensive range of diesel engines. Capstone microturbines offer a vast range of benefits given that they can be powered using only minimal wellhead gas to provide continuous loads. Additionally, they are available in cost-effective stainless steel packages, suitable for operation in hazardous environments. The turbines also offer a number of energy cost-reducing benefits and are designed to be light, compact and quiet, operating at only 65 decibels at ten metres (C65 Model).

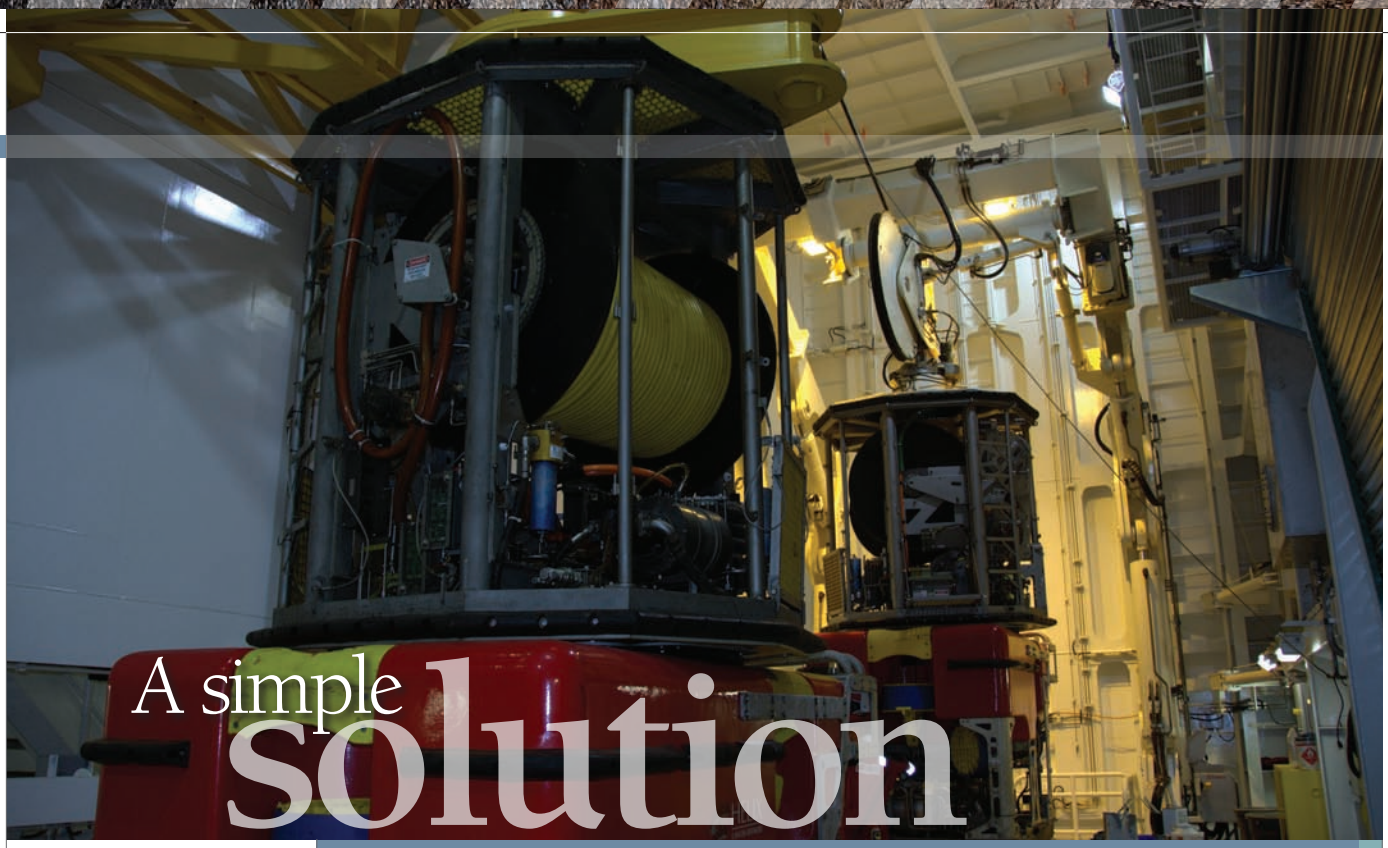
Capstone microturbines will be an important focus for Turner EPS during 2014 as the company sees them as a highly beneficial product that, within the UK certainly, have yet to be fully taken advantage of. As well as raising the profile of Capstone's impressive technology, Turner EPS will seek to expand its business in all markets although the Middle East is currently a very interesting and buoyant region.

The Turner Group recently celebrated its hundredth year in operation and commenting on the breadth of service on offer from Turner EPS and the wider group, Gary concludes: "We can think of no other comparable group operating within the same market sectors that embrace a greater diversity of service." O&G

> A huge benefit to both Turner EPS and its clients are the close relationships that it enjoys with some of the biggest suppliers and manufacturers throughout all of the markets in which it operates

Turner EPS
turner-eps.co.uk

Services
Power generating products and services



A simple solution

Operating under its philosophy of 'improving by simplifying,' SEAONICS AS is a Norwegian company with the main area of focus being the design and production of innovative lift and handling equipment, as well as associated solutions for the marine and offshore industries. The company was founded in May 2011 and successfully managed orders valued at several million Norwegian Kroner during its first year in operation. Today, SEAONICS continues to strive to supply market leading products and unique solutions to its clients.

In only a short time SEAONICS AS has distinguished itself as a trusted supplier of offshore lifting and handling equipment across a number of sectors including reservoir exploration, subsea construction and offshore supply. Additionally, the company differentiates itself from many of its competitors in that it supplies solutions for ocean trawling and oceanographic activities. While operating in a diverse coverage of market sectors undoubtedly protects SEAONICS from the turbulent nature of the maritime environment, there are also many similarities between the two industries, for example the demand for equipment. As SEAONICS' sales manager Jan Kjarstad explains: "The reason we stay involved in this area is that modern trawler winches operate 24/7, 365 days per year in extremely rough weather and harsh conditions. It acts like a proving ground for our products because if our winches can survive this kind of treatment then they are more than capable of operating in the oil and gas industry, so it is a mark of our overall quality."

The success of its strategy of offering a technically innovative product portfolio across a far reaching collection of applications is illustrated by the continued growth of SEAONICS in the years following its inception. During 2013 for example, the company enjoyed a turnover that doubled on the previous year, reaching 170 million Norwegian Kroner. Similarly, in terms of growth since SEAONICS was last featured in *European Oil and Gas Magazine* during May 2013 it has doubled its staff to include as many as 40 employees between its Norway and Poland offices.

Commenting on the factors attributing to the company's growth Jan says: "We have seen increased sales and have grown very well into the offshore market, which accounts for most of the revenue. However, the strong supply of equipment to fishing vessels has also led to an increase of sales."

The increased revenue is partly due to the success of the SEAONICS Launch and Recovery Systems (LARS), which have performed very well in field operations. They are driven by permanent magnet motors with low gear ratios and increased efficiency. The LARS systems have increased the credibility in the market and have led to several repeat purchases. In addition we are now also delivering moonpool hatches and side doors, which are designed to improve the working conditions and safety for the crew. This completes the Launch and Recovery System as a complete package for the ship owner.

SEAONICS offers different types of drive solutions. The SEAONICS hybrid drive unit gives increased redundancy, speed and power. The hybrid drive unit is a state-of-the-art solution for safe load holding, speed and acceleration on winches, cranes and other advanced handling equipment. The machinery is powered by a combination of hydraulic and electrical motors. SEAONICS' hybrid solution reinforces redundancy, with two separate and independent drive systems controlled by a SEAONICS patented control system.

The hybrid drive unit boosts speed and power, yielding an increased flexibility of available speeds at different loads, with regeneration of electrical power to the vessel.

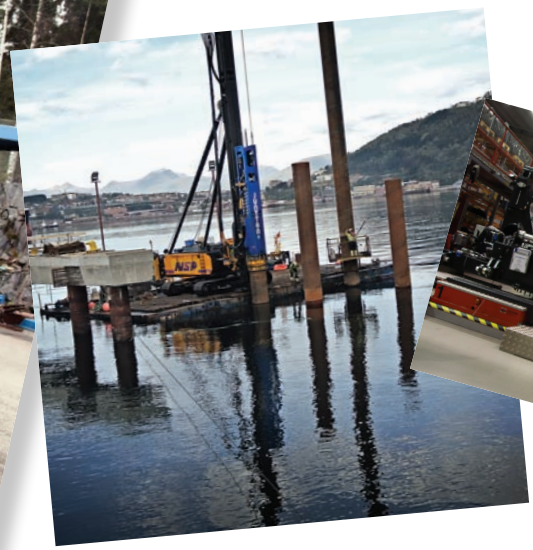
SEAONICS is now targeting the Inspection Maintenance and Repair (IMR) market through a partnership with Castor Drilling Solutions, which specialises in offshore drilling equipment. The complimentary competence between the two companies has been combined in the development of module handling towers for IMR vessels together with ship owners and end users, with good results.

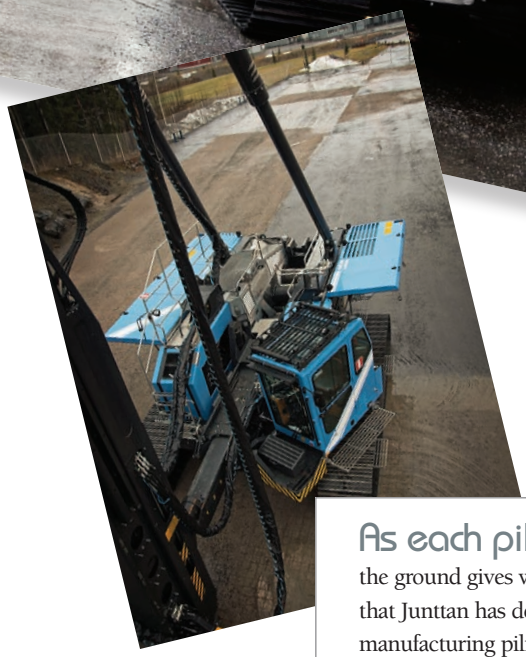
Working with a host of trusted partners and suppliers, SEAONICS has built a strong network of clients and continues to grow. One such example is Oswald Elektromotoren GmnH of Germany, which supplies electrical machinery at a premium quality. SEAONICS has for a long time successfully employed Oswald PM motors with permanent magnets within its systems.

As 2014 continues SEAONICS is optimistic that it will enjoy further growth and success well into the future, as Jan concludes: "Of course there are a lot of challenges, there are many competitors out there and as a company we need to be in every area of the market with unique solutions that are also produced economically. It can be a very competitive market, however the future looks very bright, we have new customers and new products in development and we are looking to grow more. We are continuously working with customers and end users to improve their operations." O&G

SEAONICS AS
seaonics.com

Services
Lifting and handling equipment for marine and offshore





The hidden design

As each pile is driven down, the ground gives way to the depth of experience that Junttan has developed in its 35 years of manufacturing piling equipment. The roots of the business reach back to the 1960's to a Finnish foundation company called Savon Varvi. In 1979 Junttan developed and built the first hydraulic piling hammer, and four years later in 1983 it constructed the first purpose built and fully hydraulic pile-driving rig.

Its portfolio represents the world's leading pile driving rig range, multipurpose piling and drilling rigs and deep stabilisation machines. Additionally the product range consists of hydraulic impact hammers, rotary heads and powerpacks. Clients can be certain that in using Junttan's services they will be granted an uncontested ease of transport, excellent stability, quick and precise pile handling, extensive inclinations and top piling performance. Throughout the world its rigs and equipment have become respected for quality, reliability and performance.

Every construction project has its own distinctive features, and depending on the type of soil, there are substantial differences in how the piling should be taken care of. Junttan's comprehensive experience and knowledge of a wide variety of piling methods ensures the best possible solution for every situation.

In January 2014, the business announced additions to its range. Discussing the launch, Tommi Lahteinen, the director of marketing and distribution, begins: "The PMx26-28 Series comprises our biggest full blooded pile driving rigs. All rigs are equipped with complete telescopic leaders and other Junttan unique features that produce the most efficient pile driving operation." In the three decades of operation the company has developed a basic structure and component layout that has been modified, based on its field experience, to completely enhance ease of operation and maintenance, safety, stability, increased transportability, structural strength and reduced weight and wear and tear. "Our hydraulic system has been completely renewed and the innovative X-control system of the series has been further developed for the most convenient and productive operation as well as highest fuel economy," he continues.

"Being purpose built in every detail for the most efficient pile driving operation has been the concept that has made the Junttan range famous all over the world. Recently we introduced the renewed, new piling generation in the smaller range of PNx20, 22, 24 and 25. Now we have completed this range of authentic pile driving rigs with PMx26, 27 and 28 models, of which the PMx28 is the biggest complete pile driving rig Junttan has ever built. We have had the bigger PM30 and PM40 in our range as well, but they don't have telescopic leaders, essential for the top pile handling performance. It is a common setup amongst the other brands though," explains Tommi.

The R&D department has been a key factor to the success of the business; not only through developing new equipment, but additionally, it assists in helping customers maintain the productivity and capability of their rigs. "To help our customers in selecting the right size of equipment, we can evaluate the ground conditions and perform driveability analyses. For any special requirements our customised

product development team makes sure that our customers get the right kind of equipment for the specific needs.. Further, we have a team of technical personnel who can provide customised capacity and ground pressure calculations for any special cases, carried out in accordance with international safety standards and regulations. We don't just design great products, but we add value to the ownership throughout the lifecycle," he adds.

In 2014 the business will officially launch its products at CONEXPO, the international gathering place for the construction industries. Held every three years, the exposition showcases the latest equipment, products, services and technologies. "Attending big fairs is not very common for us because our business is so niche. Typically we go to more dedicated events, specially targeted for deep foundation specialists. But exhibitions such as Bauma Munich and CONEXPO have a status that attracts all visitors and all serious construction equipment manufactures attend. We also see that North America is one of the markets with the most potential for the big X-series rigs so it is a great place to introduce our product," says Tommi. Although the product is not officially launched until this exhibition, the industry is already reacting to the products and Junttan has seen a lot of interest. "We're expecting a bright future for these rigs," he notes.

Junttan is well known throughout the piling business sector, in every continent and country, renowned for high productivity, ease of maintenance, high resale value, and importantly reliability. With a client base that consists of world leading construction companies, it also attracts a number of smaller contractors. Set to continually develop throughout the next 12 months, Tommi concludes: "We shall keep on launching new innovative products that keep us at the forefront of the industry. We want to help improve the customers' profitability and working methods by providing superb solutions that combine efficient foundation products with valued services. Our vision is not to be the biggest, but the most successful piling equipment manufacturer in the world, as well as the most desired partner to our customers and interest groups.

"Today, we have already a large range of equipment, complete rigs and hammer and power pack set-ups, working in the oil and gas sector across the world from the oil sands of Canada to the LNG terminals of Australia and beyond. Our target is to help to construct the related infrastructure in the quality and speed that this growing sector requires." OSG

> Being purpose built in every detail for the most efficient pile driving operation has been the concept that has made the Junttan range famous all over the world

Junttan OY
junttan.com

Services
Designer and manufacturer of piling equipment

Accessing the inaccessible

Height Specialists, based near Rotterdam began weaving its web in 1995, and once secure in its anchors, acceleration into heavy industry began in 2000 specialising in rope access in offshore and onshore activities such as chemical plants. The company has two offices from where in the last few years it has grown in the European market, undertaking projects in Scandinavia and offshore in Dutch and UK waters.

Rope access is a method for working at heights utilising ropes, climbing harnesses and other materials to enable access to working locations in difficult and inaccessible situations. It is a method of access that has been tried and tested for over 20 years. As an alternative or complementary use against conventional systems like scaffolding, suspension bridge constructions and lifting platforms, the techniques and materials have been specifically developed for use in areas like construction and the manufacturing industry.

As business settles in to the new year, 2014 will be far from a slow start as Rutger Lieverse, business development manager explains: "We expect to grow very quickly in the first six months of this year. We noticed last year that the Baltic States were quickly growing and made the decision to open a new training facility in Lithuania with a strategic partner, and that has developed strongly."

Whilst retaining its main European market interest in Scandinavia, UK and the Dutch waters, activity has grown on onshore projects in the UAE such as Abu Dhabi and Dubai, where it will develop a more permanent presence in the next years. As the market in Africa grows, the business is additionally operating in Ghana and Nigeria.

"When we first started trading, rope access was less common, and at first thought to be unsafe. But as the feeling towards the technique has changed we are finding more that clients are open for discussion to decide what is the best option for the situation. The market is sometimes looking for a combination of scaffolding systems with rope access. In this respect the market is strong and we are able to draw on our experience and adapt our position.

"We are operating with some big scaffolding companies on combinations of scaffolding and rope access. Our specialty is rope access but with strategic partnerships, such as those with the scaffolding companies, we can provide combined specialities," reveals Rutger.

The focus within the oil and gas industry is centred on inspection, maintenance, and modification. "The first activity is inspection work, and is always the start to deciding if there are any maintenance or modifications that are required to an installation or structure. We work

together with the big companies to conduct the surveys and we combine techniques to operate in the best way for the client," Rutger begins. In its interests surrounding maintenance, it covers coating, electrical, insulation, installation, repairs and welding. Developing from its maintenance programme, Height Specialists can carry out modifications such as engineering, lifting operations, installations, deck extensions and lifting new accommodations. He continues: "We train our employees to the highest level in rope access but also on techniques from external trainers."

The employees of Height Specialists regularly undergo training at its official Industrial Rope Access Trade Association (IRATA) training centre and attend Master class courses in the use of specific tools, project management and social skills. The training courses are set up and delivered in accordance with international standards and each project is assigned its own supervisor to guarantee the security and quality of the operations.

Focusing on the conditions that the business operates in Rutger advises: "The challenges are to keep the quality as high as possible, delivering what the client needs whilst ensuring maximum levels in safety. When considering the scale of some of the projects we are involved in, the biggest challenge is ensuring the team works together to deliver that quality. It is these considerations that we are keeping in mind as we grow within the UAE and Africa. In tendering for the operations, we may not be the cheapest company to operate in such countries, but because of our notable reputation, our services are demanded. If the operating conditions are not right we will change them, as the most important factor is that operations are performed to a really detailed level of safety.

"Some operations are undertaken as part of major projects for shipyards. Most of the time it is possible for the cranes or scaffolding systems to perform the main scope of work, but there is still a big demand for rope access. We carry out a lot of work on super structures and also below heli-decks and similar situations where it is hard to build scaffolding systems. Often the time frame available for the work rules out normal access techniques. Rope access can be used solely or in a combination with other solutions such as crane or scaffolding systems."

With the undertaking of projects in new territories, Rutger begins to look towards Height Specialists' future position in those regions: "The amount of work is growing more vigorously than we expected, particularly in the UAE with onshore infrastructures. There are many high buildings that require maintenance, but also in the Abu Dhabi region the new offshore market is gaining momentum, and although there are many rope access companies, it is our focus on safety and quality, that makes our company a good competitor for that market." Maintaining this reputation, the business is showing similar success in Nigeria and Ghana.

The main focus for the company during the next three years is to raise the revenue in the offshore market alongside other areas, as Rutger explains: "Our long-term vision for growth is focused in five directions. One is offshore, the second is the petrochemical and process industry, the third is the energy and renewable sector and the fourth is infrastructure such as buildings and bridges. Training, advice, personnel and equipment are also of upmost importance and this makes up the fifth focus of Height Specialists.

"To be successful in this industry we need to continue demonstrating our focus and commitment on safety, as well as maintaining standards on quality of workmanship and communication. It is this approach that keeps us working where others simply are unable to perform," Rutger concludes. O&G

> The challenges are to keep the quality as high as possible, delivering what the client needs whilst ensuring maximum levels in safety

Height Specialists
heightspecialists.com

Services
Rope access inspection, maintenance and modifications for on- and offshore inspection and maintenance services

INNOVATIVE ARCTIC MOORING SYSTEM

Unique Mooring Spread Development in the Barents Sea.

A major Norwegian exploration company needed two complete pre-lay mooring spreads for developmental drilling in the Barents Sea.

IOS InterMoor was selected to provide these systems based on their industry expertise, equipment and service capabilities. IOS InterMoor will use its innovative approach to overcome difficult seabed soil, complex positioning of wellhead templates and flowlines, and harsh environmental conditions.

That's Mooring Expertise.
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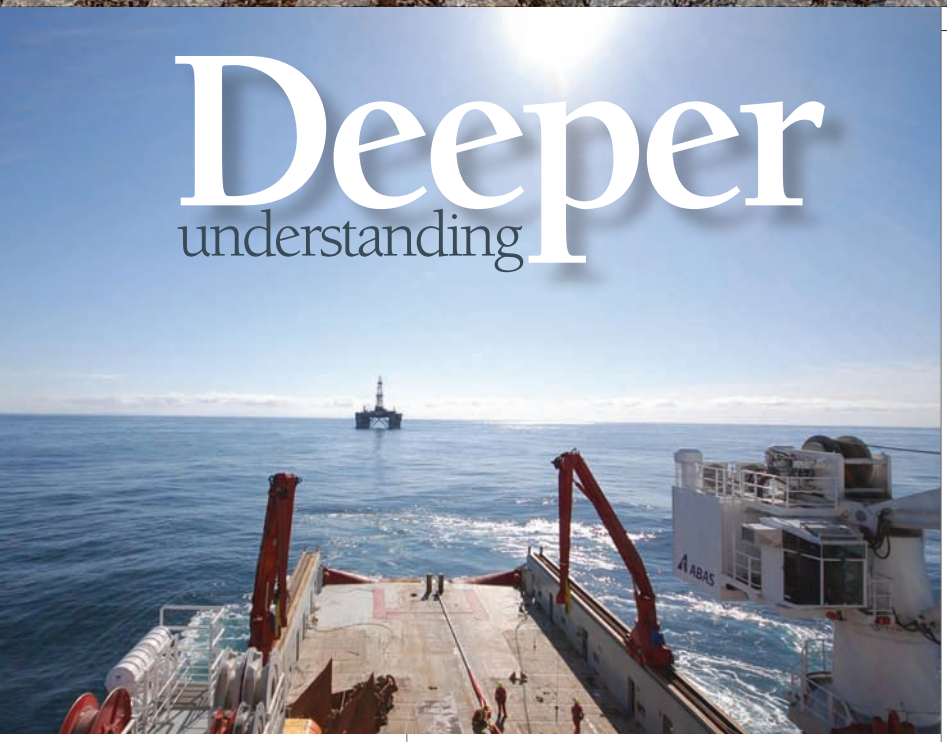
Deeper understanding



When it was last featured

in *European Oil and Gas Magazine* during May 2012, Ross Offshore had recently completed a merger between the former incarnation of the company and Odfjell Well Management in 2011. Each company brought with it several years of operation and experience that were combined to meet the anticipated increase in production across the Norwegian Continental Shelf (NCS).

Today Ross Offshore operates with a turnover of around NOK 600 million, with around 130 employees and approx 150 further consultants. Ownership of the company is divided between Odfjell Drilling and HitecVision, who each control 40 per cent of the business, with the remaining ten per cent held by minority shareholders and management. The result is a unique blend of financial and industrial ownership that is highly active and extends a high level of competency to the company.

Since 2012 Ross Offshore has expanded its operations to include a subsea and well intervention branch, so that it now operates a total of five dedicated divisions. The other areas in which the company specialises in include drilling and well, resources, marine and logistic, and subsurface. Through this breadth of expertise Ross Offshore is able to facilitate the execution of wells from the planning stage through to drilling and final well report. Cross-disciplined teams from each of the company's areas of expertise carry out regional evaluation and seismic acquisition, data processing and geological model building. Furthermore, it is able to provide seasoned professionals within the drilling and well disciplines, to comprehensive package of procurement, logistical and marine operations associated with these areas.

FEDEM TECHNOLOGY

Fedem Technology is a Norwegian engineering company offering services in the areas of oil and gas, renewable energy and marine industries. The company is headquartered in Trondheim. The projects often involve structures and systems exposed to irregular waves and large movements/ vibrations, resulting in a complex load history and a corresponding dynamic response.
Fedem Technology performs strength and fatigue analyses of rigid and flexible riser systems for drilling and production, and has assisted Ross Offshore in several projects since 2010.

The operator's operator

The company's mission is to provide clients with effectiveness and efficiency beyond their internal capacity, and to provide knowhow on areas where the operator's maybe lack in experience. To date this has provided capacity and competence to some of the sector's most successful operators, including Statoil, Wintershall, VNG, Premier Oil, Det norske and Suncor.

A key strength for Ross Offshore is in the trust its clients have in the company to carry out works in-house through its own work processes, while incorporating those of the customer. Its company management system (CMS) incorporates quality, health and safety and environment management systems. Further to this customers are afforded full confidence, as Ross Offshore CMS is in full adherence to ISO 9001:2008 and ISO 14001:2004. As part of its adherence of the CMS and ISO standards, Ross Offshore employees are expected to assume responsibility for their own safety and adhere to its corporate philosophy of doing the job right and safely the first time, following rules, procedures and professional standards, complying with the company's core values and business conduct procedure, expanding competence through lessons learned and experience transfer, focus on environmental aspects and demonstrate respectful behavior.

The majority of Ross Offshore's operations are located within the NCS, and as of January 2014 the company has entered into an agreement with Hannon Westwood to act as its exclusive Norwegian representative. Hannon Westwood has provided board level insights to the UK government and key opinion formers for over 18 years. Its flagship Atlas Intelligence Service, which delivers expert technical and commercial insight is vital for upstream companies and financial institutions. Access to Hannon Westwood's unique blend of technical and commercial intelligence will further define Ross Offshore as an invaluable partner on the NCS.

Another key development for the company, which occurred as recently as February 2014 was the final acquisition of 100 per cent of Ross Engineering. Ross Engineering was originally founded in 2008 and specialises in design, drilling, completion and work of wells within the oil and gas and geothermal industries. Previously Ross Offshore owned 40 per cent of Ross Engineering adding considerably to its knowledgebase, as Ross Offshore CEO Frode Losnedal elaborates: "This represents a great contribution for Ross Offshore. Ross Engineering has already added a considerable amount of

knowhow, and with this we will expand our business to areas such as land-exploration and geothermal drilling. We look forward to incorporating Ross Engineering to the already strong and firmly based Ross culture and welcome them as full member of the 'family'."

With these developments and a strong knowledgebase, the future will be exciting for Ross Offshore. It is currently engaged in a long-term contract with Statoil, which took effect as of January 2014 as an extension of its previously existing contracts. As part of a working relationship between Ross Engineering and Oilspec AS, the contract is set to last for a minimum of five years, with further options that could see the agreement in place for as long as ten years. Ross Engineering will be focused on areas such as geology, geophysics, reservoir technology, production technology, petrophysics and production data management.

"This is a significant contract for Ross Offshore. We have worked with Statoil for several years in many areas and this will further strengthen our relationship. The contract confirms our position as a key

provider of drilling, well, exploration and petroleum technology. Ross Offshore see it as a privilege to be able to continue to develop with such a major actor on both the NCS and internationally," says Frode.

Throughout the coming years Ross Offshore will continue to offer its expert services on the NCS and seek to achieve further organic growth. In doing so it will follow its core values of operating in a safe, accountable, competent and flexible manner. The company is at the forefront of finding creative solutions to new or existing challenges, with a firm focus on development for the future. OEG

IOS INTERMOOR

Established in 1986, IOS InterMoor is Norway's leading supplier of mooring equipment and related rig moving services to the offshore oil industry along the entire Norwegian coast.
In partnership with Ross Offshore, we provided pre-lay mooring systems in support of drilling rig activity for several oil companies over the past years.
By focusing on availability and quality at all levels, we satisfy our customers' requirements and expectations for products and services.
Solid financial and technical resources help secure our position as the vendor of the future for traditional and hi-tech mooring solutions and related services to customers such as Ross Offshore.

Ross Offshore
rossoffshore.no

Services
Consultancy, engineering and project management solutions

Niche expertise

Above
Castor Inline Compensator design

"We established Castor Drilling Solution AS (CDS) in 2011 and have been operative for more or less two years; today we are focused on the offshore market and all types of equipment related to drilling, and well intervention vessels," begins Oyvind Vaagland Reiten, chief executive officer at CDS. "We are mostly active with IMR operators and drilling companies. We have until now been working with developing a strong product base of different tailor-made equipment for various drilling and IMR operations such as plug and abandonment, top hole drilling and module handling. All of our engineering is carried out internally to deliver customised solutions for our customers."

With a vision to become the preferred partner of customers requiring drilling equipment, solutions and engineering services within the global offshore market, CDS offers rig solutions and modifications, riser analysis, failure analysis, dynamic simulations and mechanical integrity services to rig operators, ship builders and oil companies. Based in Kristiansand, in the centre of the NCE NODE cluster (Norwegian Offshore & Drilling Engineering) CDS is run by a team of experts, boasting long-term experience within the offshore drilling systems industry. The innovative firm is focused on niche markets that require custom-made products within heave compensation, riser tensioning, hoisting and handling systems.

CDS is well prepared to deliver complete heave compensation packages and riser tensioner packages to the offshore market, as well as ensuring a full range of aftersales support services. CDS' core product range includes drill string compensators (Castor Drill string Compensator (CDC)) and heave safe systems (inline heave compensators and coiled tubing lift and compensating frame (CCTLF)), as well as riser tensioning systems including conductor tension units (CTU), wireline riser tensioners (WRT) and production riser tensioners (PRT). Other products available include a variety of niche rotating equipment, pipe handling equipment, drillfloor equipment, air and nitrogen systems and well intervention systems. Flexibility is the key word here; CDS can tailor all products to successfully meet the demands of its customers.

Furthermore, CDS uses its extensive engineering knowledge to carry out services such as product developments, system modifications, engineering studies, multi-discipline simulations, dynamic modeling, damage analysis, material analysis and mechanical integrity assessments.

"Establishing us in a mature market is a challenge because we have to prove our unique capabilities in order to be pre-qualified for the different customers. This is time consuming,

...now and in the future

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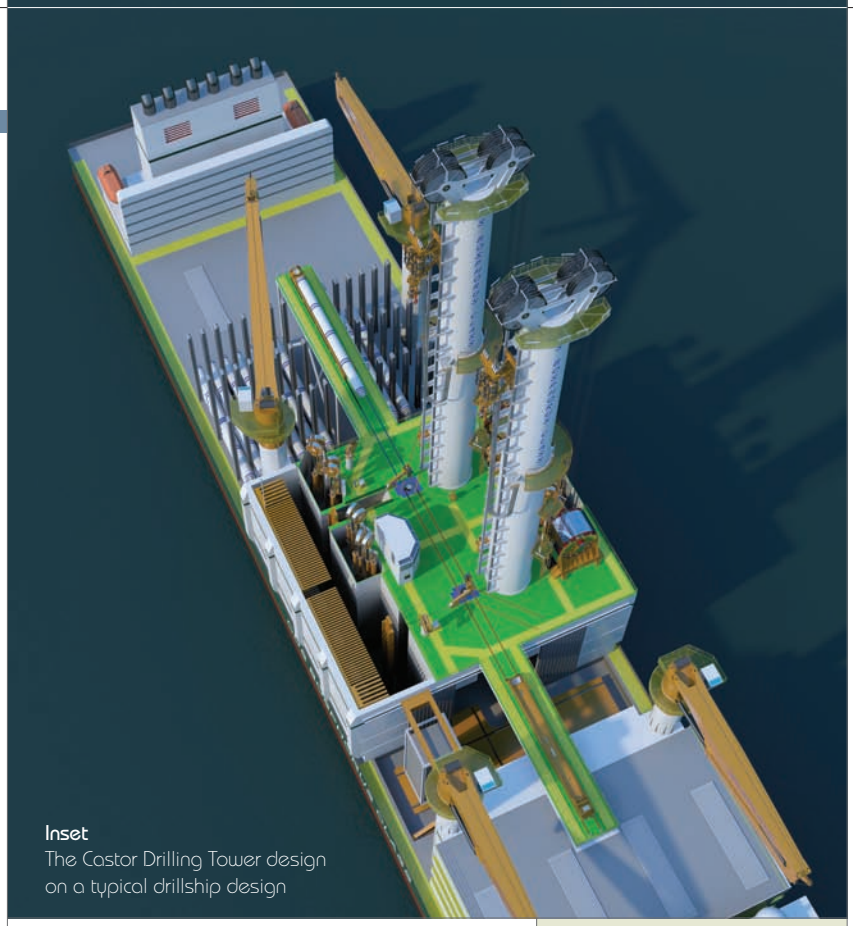
but we are so far making good progress and have been embraced by several large customers also together with our co-operating partners. Our achievements in the work of mechanical integrity analysis, multi-discipline system simulations and multi-body dynamic analysis, means that we can work in-house to fully understand the characteristics and verify how the overall tensioning and compensation systems will perform i.e. all the way from the baseplate on the sea bed to each hydraulic component and sensor comprising the complex systems," highlights Oyvind.

CDS provides Riser Analysis for better insight into the dynamics of riser systems and other load configurations connected between the sea bed and a floating DP vessel in various offshore environments. The software used for the Riser Analysis is Orcaflex

CDS also uses Simulation X for 3D to accurately account for how all the sub-systems interact, these analysis services offer system visualisation at various modes of operation ensuring impressive benefits such as, enhanced engineering efficiency, cost reduction during product developments and early system testing. The simulations provide a valuable tool during the validation of the multitude of drilling, hoisting and motion compensation systems and sub-systems in accordance with specific requirements and or regulations during the engineering process.

Typical examples of simulation and analysis projects includes forces on well heads from the riser system and tensioning system, global riser analysis, anti-recoil control settings, landing and retrieval of BOP, accuracy of active heave compensation (AHC) systems; WOB variation for both passive and active drill string compensators, tension variation for inline compensators during a well test, 'what-if' analysis of systems, wire rope endurance analysis, material selections and failure analysis due to breakdown of protective coatings and corrosion damage.

In 2012 Seaonics AS entered into an agreement to acquire a 34 per cent share in the company from an unrelated party. Seaonics AS, is a joint firm between ICD industries AS and Vard AS (former STX OSV). By giving Seaonics a new insight into the demands of the offshore market, the acquisition provides both firms an opportunity to merge their knowledge and develop innovative integrated solutions.



Inset
The Castor Drilling Tower design on a typical drillship design

"I think the two companies fit together well, we are a strong team, especially towards the well intervention and top hole drilling market. Our core competence is within offshore drilling systems, while ICD and Seaonics have a lot of experience in marine operations; by working together we have products to offer these new sophisticated operations on smaller ships as well as integrating products to maintain subsea installations," says Oyvind. "We are strategically located, CDS is in the midst of the drilling cluster of Kristiansand, while Seaonics is based in the maritime cluster in Alesund on the west coast, so we are hoping our complementary knowledge will be a perfect match for developing integrated solutions."

At the forefront of the market for using 3D design and simulation tools for multi-discipline multi-body dynamic analysis, CDS has the knowledge to generate operational input that can be used as a research platform for future product designs. "Our focus is on customised solutions for drilling through the development of specialised products for the existing drilling market; we are now introducing a new and highly improved drilling hoisting tower and compensation system with potential of being the future preferred drilling solution in the coming years. Based on this we hope to be one of the new and innovative players in this market with focus on optimised solutions for offshore drilling and IMR equipment," Oyvind concludes.

FINCANTIERI

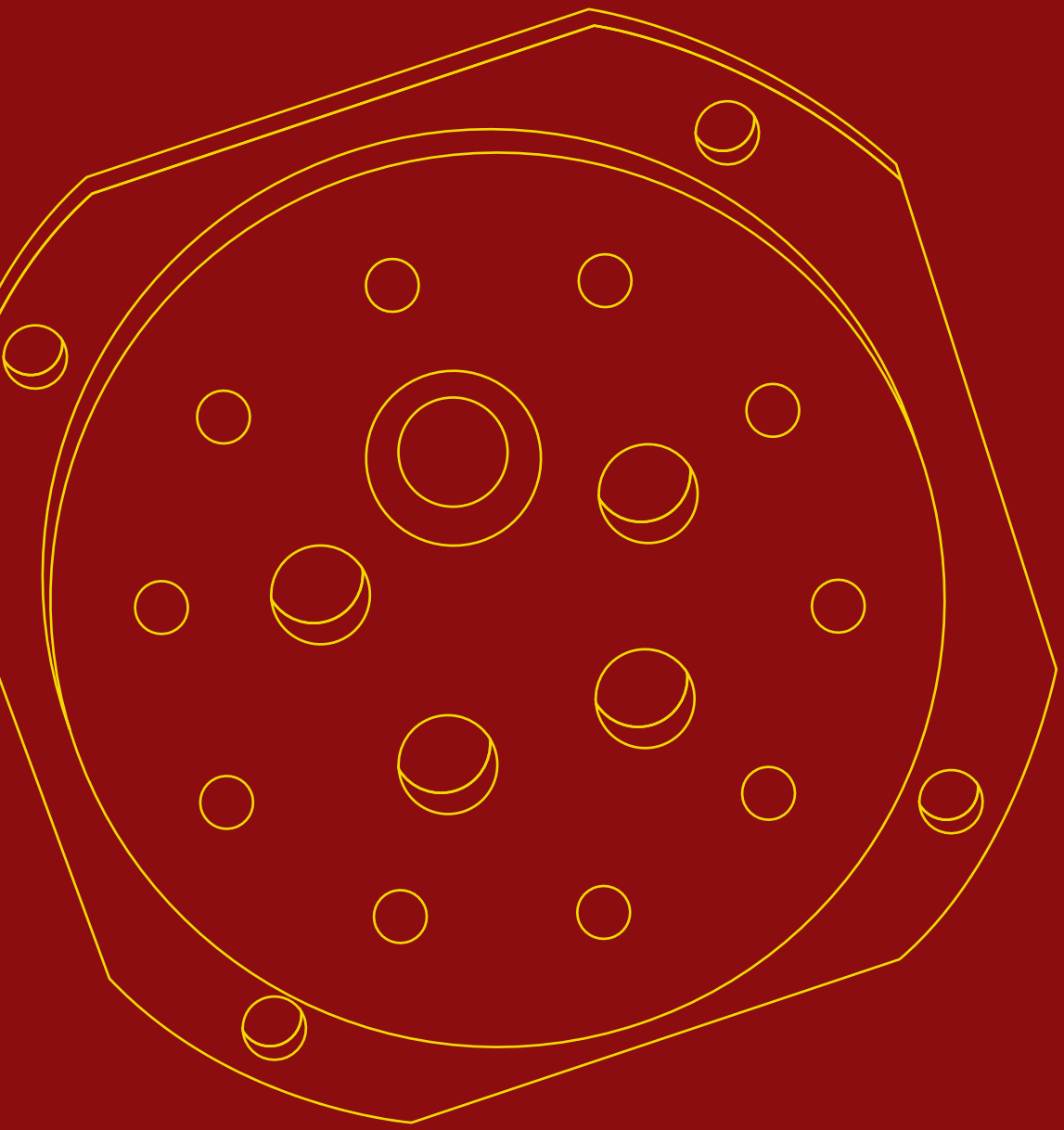
Fincantieri, the fourth largest shipbuilding group in the world after the acquisition in 2013 of Stx Osv, renamed Vard, owns through Vard and Seaonics a participation in Castor Drilling System (CDS), and through its Offshore Business Unit has started a new joint development with CDS for a new drillship codenamed 'Gemini', around this innovative drilling system.
The project will be presented at the next OTC in Houston.
Fincantieri is designing a fully integrated and very efficient vessel which will enable the client to achieve 'a new way of drilling'. Benefits of the vessel will include increased operational speed, high levels of efficiency, improved safety and more comfort for the crew on board.

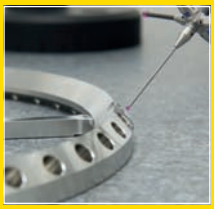
Castor Drilling Solution AS
cds.as

Services
Offshore engineering and drilling equipment provider

MUZ

Engineering and Machining





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The right balance

For close to 70 years KRAL AG has delivered market-leading solutions in liquid handling applications. Today the company continues to innovate in the field of pump and flowmeter technology, providing world-class products that assure its customers' competitive edge. As such, from its headquarters in Austria KRAL services clients operating on a global level. Alongside this it operates a second business within the US named KRAL-USA. Furthermore it employs a global network of representatives that ensures that wherever its products are required, KRAL is on hand with the appropriate solution.

The company was originally founded in 1950 with a product range that included domestic water pumps, electric motors, industrial water pumps and gear pumps. Throughout the years as the company has grown, it has developed its product range to meet the needs of five targeted market sectors. These are marine, chemical engineering, mechanical engineering, oil and gas, and power generation applications. With dedicated branches focusing on each of the company's specified market sectors, KRAL delivers bespoke products and services to meet the specialised requirements of its clients.

Within the oil and gas sector specifically, KRAL manufactures a comprehensive range of American Petroleum Institute (API) compliant pumps, pump stations and pump systems as well as precision measuring instruments. The company understands that safe operation is paramount within the sector with regards to personnel, equipment and the environment. Additionally, KRAL recognises that every drop of product is important and therefore strives to deliver innovative solutions of the highest quality for the processing of petroleum and other liquids. An important application in which KRAL is able to enhance the performance of its customers' operations is in fuel consumption. The KRAL Volumeter re-measures the diesel fuel that is delivered to engines to ensure that they run at their optimum operating point. Furthermore, Volumeter also measures the flow of fuel from the storage tanks so that throughout multi-engine systems a full spectrum of measurement is taken to eliminate costly waste. Measurements include engine-related fuel consumption, the quantity of fuel within storage tanks and the amounts extracted from tanks.

KRAL also provides the means to display, log and store flow data, enabling customers to evaluate the measurements and further facilitate efficient operation. The company's systems provide a centralised display of the fuel consumption of all of the engines within a multi-engine system. Furthermore, systems can be further expanded in accordance to the client's needs, meaning that a bespoke solution is available for every application. Complex measuring tasks are made possible through the integration of individual flowmeters throughout the system.

When it comes to handling and directing fluid, KRAL has the right solution with an extensive portfolio of screw pumps with operational pressure capacities ranging from between 87PSI to 1740PSI. With a wealth of focused experience that dates back to the company's inception, KRAL is able to deliver some of the best pumps on the market. All of its screw pump products are designed and manufactured in-house and the company's certified quality assurance system is fully EN ISO 9001:2008 compliant to guarantee the highest quality and consistency. KRAL screw pumps are designed with long-term operation and reliability in mind and are coated with a special surface treatment that further ensures problem free performance.

The first-class standard of KRAL fabrication is achieved through the selection of optimum materials from trusted suppliers such as MUZ, which represents an important strategic partner to the company. Finally, every screw pump is certified with a performance test at the company's production facility before shipment and distribution through its partners worldwide. KRAL screw pumps are then delivered to the oil and gas sector with applications in compressor lubrication, turbine lubrication and booster module separators for offshore platforms. Its pumps are also employed within the sector as transfer and burner pumps, meaning that the company's product portfolio enjoys a wide footprint throughout the market. Operationally KRAL screw pumps provide a host of benefits that differentiate them from alternative products, for example they offer high delivery rates with relatively small space requirements in comparison to other pump types. Further to this,

KRAL screw pumps offer exceptional control capabilities and low-pulsation transporting. The delivery rate of a screw pump is strongly dependent on speed; in contrast to other pumps KRAL screw pumps have linear delivery rate characteristics, meaning that they can be controlled inexpensively and with ease through the use of a frequency converter.

When transporting liquids pressure pulsations represent a danger to operations that can damage pumps, systems and even the pumped liquid. A further advantage of the screw pump design is that it feeds product conserving and therefore causes considerably less pulsations than piston and gear pumps. The pumped liquid is not pressed and there are no pressure pulses that can damage the piping and other components or trigger vibrations. An additional advantage of the KRAL screw pump design is that the solution operates very quietly.

KRAL AG is also highly committed to aftersale service as well as delivering world-class fluid handlling solutions. The service that the company provides begins from the moment a client chooses KRAL as its operational partner. Its highly competent engineers are on hand to offer assistance in installation and commissioning to facilitate an efficient and smooth start up on site. Furthermore, its staff are always on hand to carry out or oversee routine maintenance and a constant supply of spare parts is always maintained to ensure that client's needs can be met at a moments notice. Repairs and maintenance can be carried out both in-house and onsite, and all work with KRAL Volumeters can be verified and tested at the company's in-house calibration facility that is fully ISO/IEC 17025 compliant.

With a long and consistently innovative history and strongly established support network of distributers and agents, KRAL AG is on track to continue to supply market-leading fluid handling solutions well into 2014 and beyond. With a broad range of market segments and clients, the company is able to adapt to changing market conditions to ensure that while one market becomes slow it is able to grow and expand in other areas where business is more buoyant. This delivers a turnkey package that makes KRAL AG an established market leader. O&G

KRAL AG
kral.at

Services
Pumps and fluid handling solutions

MUZ

Below
Mr. Markus Wegrzyn, CEO of MUZ

MUZ - INTERNATIONAL SUPPLIER

The metal processing company founded by CEO Mr. Markus Wegrzyn in 1999 has specialised in the production of complex machined parts since it was established. Over the years, the company expanded into the production of milled parts, and an annual growth rate of more than ten per cent has allowed MUZ to increasingly invest in modern production.

Its machinery now includes 11 fully automated CNC machines. All lathes are equipped with bar feeder, parts gripper for the removal of the finished parts from the machines with driven tools and Abgreifspindeln that allows the complete production of turned parts from bar up to DM 65. The multi-function turn-milling centre can completely restore MUZ complex turned parts up to 260 mm diameter in one setting.

The service line of Mr. Wegrzyn's team extends from the design according to customer requirements, to the production of prototypes with the necessary devices and tools, the procurement of all raw materials, manufacture of parts including all heat treatments, and production of small series up to batches of 50,000 parts per month.

Since 2003 MUZ has been certified by TÜV according to EN ISO 9001:2008 Austria. To ensure the metal processing department creates only high quality products, this facility is equipped with the best tools and measuring devices. The purchase of a ZEISS Type ACCURA II 3D measuring machine in 2013 was another important step in allowing MUZ to guarantee only the highest levels of quality. Further investments in machines and the manufacturing plant are being made in 2014.

Among the customers of Mr Wegrzyn are international corporations such as Oerlikon, WIKA, LIEBHERR, KRAL AG and IVOCLAR DENT. MUZ supplies in the car motifs area, mechanical engineering, plant construction, pressure and thermal currents tower technology but also in dental technology customers in Austria, Switzerland, Germany, Norway and Sweden.

The strength of the Austrian parent company means MUZ is to be able to react quickly to customer requirements, offer short delivery times and 100 per cent quality.

Game changing designs

With more than 20 years experience as the exclusive manager of the Seafox fleet, globally renowned Dutch firm Workfox BV has evolved into a leading service provider in the accommodation and crane support, well testing and workover construction, and decommissioning support sectors of the wind and oil and gas industry.

Established in 1991, the Hoofddorp based company began operating and managing self-elevating accommodation and maintenance support units in the North Sea; viewed at the time as a niche market, Workfox BV was in an advantageous position when the demand for these vessel types grew steadily over the years. All specifically designed and constructed for operations in harsh offshore environmental conditions, particularly the Southern North Sea area, the Seafox fleet offers versatility and efficiency when providing solutions to customers with a diverse range of requirements.

As more stringent regulations were enforced in the oil and gas industry in 2006, companies were pressured into finding a more green and sustainable way to operate. During this time of change, oil majors also began embarking into deeper waters and more challenging climates, which resulted in personnel spending increased periods of time offshore and higher demands for improved quality in regards to accommodation standards. Dedicated to quality and safety in all operations, Workfox invested in major upgrades and refurbishments to ensure its Seafox units were completely compliant with the standards and legislation enforced onto the North Sea. Since then, the company has retained an ongoing high standard of hygiene and comfort for its accommodation units through a continuous improvement programme, which is developed and closely monitored with the assistance of clients.

Capable of year-round operation in water depths up to 70 metres, the Seafox fleet offers ample deck space and multiple cranes on board, while its accommodation capacity reaches up to 235 crew in both single and double cabins that all meet the latest stringent high standards of comfort and hygiene. However, comfort and hygiene are just two key requirements for employees in the oil and gas industry of today; to deliver a pleasant, enjoyable and entertaining life on board the units, the company has added high quality leisure facilities such as a cinema, a gymnasium with cutting-edge work-out equipment, internet and e-mail facilities, a satellite entertainment system and client meeting rooms and offices.

The company's ability to find solutions to the changing needs of an evolving industry through researching and anticipating future

market demand over the next two decades is a key reason behind its long-term success and retained market position. For example, upon realising a new kind of vessel was required in the renewable energy sector, Workfox came up with a game-changing concept in 2009 with the Seafox 5, which was developed to service traditional activities such as well intervention and construction and decommissioning while also being capable of operations in a broad variety of different conditions as required for wind turbine installations.

Once the concept of the ultra-modern, new build self-propelled installation jack-up vessel was created, Workfox developed a close partnership with Keppel Fels, the offshore and marine division of Keppel Corporation and the most experienced jack-up builder in the world. Built as both a ship and a platform in Keppel Fels shipyard in Singapore, the highly versatile Seafox 5 boasts a range of unique features to help it bring energy to homes over the next ten years. With a more operator friendly design, the vessel is able to meet all installation and support requirements in water depths up to 65-70 metres in the Southern and Central North Sea for customers in the oil and gas and offshore wind industry.

Capable of performing turbine foundation installations, turbine installations, well services, platform services and turbine hook-up and maintenance services, the Seafox 5 can handle high demand with its ability to deploy on a daily basis; it also boasts a 7000 tonne deckload carrying capacity, enabling it to carry ten 3.6 megawatt wind turbines or four heavy foundations that weigh in at more than 1000 tonnes. Other features include the biggest heavy-lift pedestal of its kind, which is capable of hoisting 1200 metric tonnes, two forward retractable thrusters for shallow water sailing, and high standard permanent accommodation and leisure facilities for up to 150 persons on board (POB).

Christened in August 2012, the Seafox 5 has since completed its first wind installation project at the DanTysk Offshore wind park, based in the German North Sea; ending on the 13th December 2013, the project involved the installation of 80 monopiles and transition pieces for the main contractor Aarsleff Billfinger Berger Joint Venture (ABJV) and owner DanTysk Offshore Wind GmbH (DTOW). Following this, the vessel arrived back in Esbjerg, Denmark, for demobilisation and mobilisation for her next project with Maersk Oil in Danish waters. Providing accommodation and construction services alongside platform Tyra SE-A, Seafox 5's second project is a step away from the offshore wind industry and a move into the oil and gas industry.

Reflecting a decrease in the offshore wind construction market, the contract offers full operation for the vessel before she heads to the Hejre field, Denmark, to service the operations of Dong Energy E&P. Announced in February 2014, the contract with Dong Energy E&P is the latest of a multitude of contract awards for the firm, which includes an extended contract with Siemens AG for the Seafox 7 and hook-up support at the Juliet and Cygnus fields in the Southern North Sea. Meanwhile, existing clients have added Seafox units to their upcoming programme period for the provision of asset integrity and frequent O&M services.

Workfox's decision to focus on innovation and the continuous improvement of its operations, while remaining open to market demands in an at times turbulent economy has held it in good stead. Not afraid to step out of its usual boundaries to deliver groundbreaking solutions, Workfox used its expertise and capabilities to provide a solid foundation for future success in a turbulent industry. O&G

> Capable of year-round operation in water depths up to 70 metres, the Seafox fleet offers ample deck space and multiple cranes on board, while its accommodation capacity reaches up to 235 crew in both single and double cabins that all meet the latest stringent high standards of comfort and hygiene

HEINEN & HOPMAN ENGINEERING

Like Workfox, Heinen & Hopman Engineering is a renowned name in the offshore sector. Both companies share a complete dedication to reliability and quality. And just like Workfox's jack-up units, Heinen & Hopman's premium HVAC products can withstand the harshest environments. Knowing how much its personnel appreciate the safety and comfort offered by Heinen & Hopman's heating, airco and cooling solutions, Workfox has been partnering with this Dutch specialist for over 20 years. Nothing but the best will do.

Workfox BV
workfox.nl

Services
Operate and manage accommodation and support units

Safety in stock

Stopsave is the only height safety specialist in the north of Scotland and whilst other companies have height safety equipment available, Stopsave is the only company that has focused upon this area exclusively. Having spent his entire life in the height safety industry including servicing, training and product development, Bill Davidson founded the business in 2000.

RB Farquhar Limited bought Stopsave in July 2012 and with Bill taking an advisory role in the company, Michael Shand took the role of managing director. "It was clear that we had bought a very well run company, with excellent people employed both in the office and in the workshop. Since the acquisition, our philosophy has been to focus on maintaining and if possible improving service levels," explains Michael.

The company has the largest height safety hire fleet in the UK, with around 4000 pieces of equipment including inertia reels, harnesses, fall arrest lofts, tripods, rescue kits, karabiners and scaffold hooks. Operating as an exclusive service agent in the north of Scotland for Miller/Honeywell and Tractel it is also an agent for Ridgegear and Checkmate amongst others, supplying all leading height safety manufacturers equipment including ISC, Petzl, and DMM.

Tractel is part of a world-leading height safety manufacturing group and Stopsave is proud to be associated with it, and the quality of its excellent products. Discussing the arrangement Michael notes: "I believe Tractel recognises that we are a well-run, well-established business, which can assist them to promote their products in Scotland. We were particularly pleased to sign an exclusive service agency with Tractel as this allows us to get know their product in a way no other distributor in the area can."

With customers including Stork Technical Services, Cape, ATR, EMM, Bibby Offshore, Oceaneering, Bilfinger, Reel, Global Integrated Services and Enermech, it is driven to achieve client satisfaction. "Customer service is absolutely key for Stopsave and it is what the company has been founded upon. We offer a 24-hour service turnaround when required and as the one of largest stockist of height safety equipment we meet extremely tight lead times. We collect and deliver daily throughout Aberdeen and Aberdeenshire," says Michael.

Stopsave holds a unique position in the industry. As a distributor and a service agent, the business can inspect and certify all the products that it provides. "All height safety equipment requires yearly service, however many customers who work in the harsh offshore environment actually request six monthly servicing, which we are happy to provide.

"When a client buys a new piece of equipment from us we fully inspect and certify that item before dispatch, a service not offered by the majority of other distributors. In addition, in the next few months we will be launching a web-based system for all our customers, which will allow them to monitor the status of all their certification on line. This will work a red, amber, green system with items requiring re-certification changing to amber one month prior to the date, and items that are past re-certification date

changing to red in colour. This will assist our clients in ensuring that only fully certified items are being used," Michael explains.

The introduction of the web-based certification programme will assist clients at no additional cost. As Stopsave continues as a height safety specialist it also looks for additional niche products to offer to customers, complementing its services, as Michael adds: "Our edge comes from the service we offer. We understand that time is money for our clients and projects cannot start without the required height safety equipment. Being able to offer products for hire as well as sale is also critical."

Rescue plans are now a key requirement when using height safety equipment, and being prepared to undertake a rescue should a fall occur is vital. Along with Stork Technical Services, Stopsave developed the Stopsave Rescue Kit. The advantage of this rescue kit, compared with others that use a telescopic pole, is that in difficult weather conditions offshore there is no requirement to try and 'catch' the fallen individual with a pole. Instead, through the use of a rope grab and a recoverable inertia reel a safe rescue can be undertaken, lowering or raising the individual to safety.

The business has developed, also with Stork Technical Services, the Scaffold Anchor. The product is a solution for situations when workers do not have an anchor point to attach their inertia reels or lanyards to. The Stopsave Scaffold Anchor, which allows for easy attachment to scaffolding nearby, was nominated for a safety award in the Offshore Achievement Awards 2013.

Focused on the future of the business in 2014, Michael concludes: "We will maintain and improve our service to existing clients, whilst looking for new opportunities. We are currently in discussions with a key UK manufacturer in regard to launching an entirely new product range, and we will decide on this venture later in the year. The next 12 months hold a number of opportunities to get involved with our clients abroad and we are in the early stages of discussion in these areas." OSG

> The company has the largest height safety hire fleet in the UK, with around 4000 pieces of equipment including inertia reels, harnesses, fall arrest lofts, tripods, rescue kits, karabiners and scaffold hooks

Stopsave Limited
stopsave.com

Products
Range of height safety equipment for purchase and hire

LARCO

Larco is one of the largest ferronickel producers in the world. Every day, we are at the forefront of the mining, smelting and export of ferronickel. Most major manufacturers of stainless steel are successfully using our granulated ferronickel in their factories.

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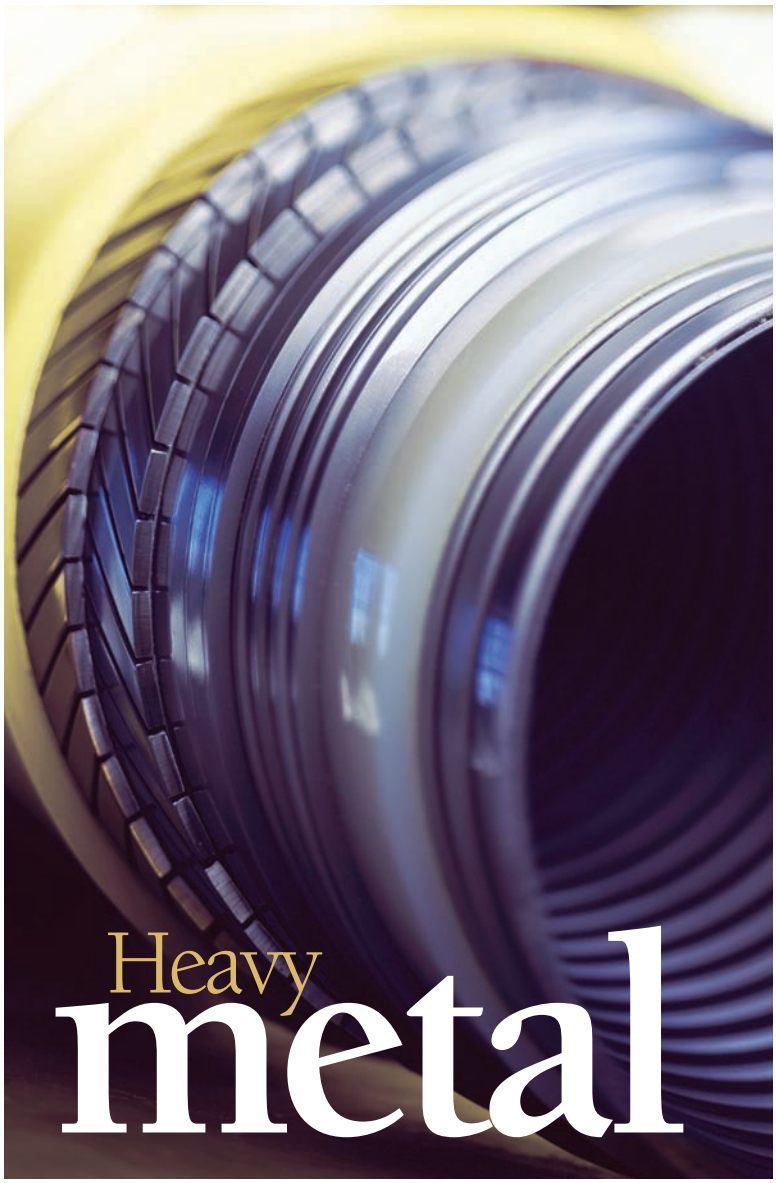


Heavy metal

Above
Global unlimited. Courtesy of NKT Flexibles
Oil and Gas, flexible pipe, Nyby, coil, Thin strip, LDX 2101, Duplex

Below
Production units and locations, Production units, Machinery and processes, Outokumpu, Stainless, Applications, Cold Rolled

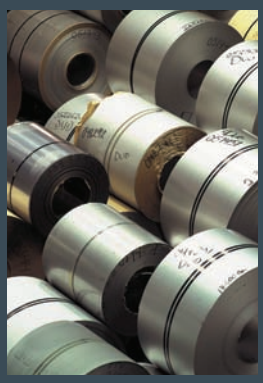
With a legacy that traces back more than a century, Espoo headquartered Finnish firm Outokumpu has evolved from its beginnings as a mining and multi-metal company to become the global leader in the development of Duplex stainless steel. A key figure in the rise of the stainless steel industry, the NASDAQ OMX Helsinki listed group has a long history that is as old as stainless steel itself. Invented more or less simultaneously in Germany and the UK in the early 1900s, stainless steel was followed by the invention of duplex stainless steel in Sweden a few years later. Today, following the strategic acquisition of Avesta Sheffield in 2001 and Inoxum, the stainless steel segment of Thyssenkrupp in 2012, Outokumpu benefits from a wealth of expertise in metals and advanced materials as well as the widest product portfolio in the market.

"As the global leader in stainless steel, we employ more than 15,000 professionals in more than 40 countries who work to create advanced materials that are efficient, long lasting and recyclable - helping to build a world that lasts forever," says Dr Bernd Beckers, head of high performance stainless marketing. "Stainless steel is an ideal material to create lasting solutions in demanding applications from cutlery to bridges, energy to medical equipment; it is 100 per cent recyclable, corrosion-resistant, maintenance-free, durable and hygienic."

At a transitional time of global megatrends such as economic and population growth, urbanisation and mobility as well as climate change and a distinct shortage in natural resources, Outokumpu's stainless steel offers sustainability and cost efficiency through a longer lifecycle than that of more traditional materials. "You only need to look at today's headlines to be reminded of the global economic situation – we're facing challenging times, and yet experts are promising long-term economic growth. This, and an increasing world population, means constant growth in industrial and consumer demand, because stainless steel is needed in many of the more demanding applications," highlights Bernd.

A key supplier of stainless steel to the oil and gas industry over the last 50 years, Outokumpu's portfolio comprises of high performance austenitic grades, Duplex grades, high temperature grades for clients requiring high performance stainless steel as well as martensitic grades, ferritic grades and standard austenitic grades for clients requiring standard stainless steel. The company's products include hot rolled plate Quarto, tubes, cold rolled strip, hot rolled white strip, hot rolled black strip, bars and rod coils. "Our products can be found in upstream and downstream applications, from oil and gas production to transport and storage, refineries, LNG plants and petrochemical units. Tried and tested in these extreme conditions, we have earned approvals from leading oil and gas firms on a global scale," says Bernd.

Outokumpu supplies materials and products to a broad spectrum of applications within the oil and gas industry, including riser pipes and casing tubes below sea level and process piping, above sea level. Furthermore, it supplies piping systems and ballast water piping for seawater handling and tube plates, heat pump panels, and heat exchanger plates for customers requiring heat exchangers. "As wells go deeper and systems become heavier, the industry reaps major benefits from Duplex stainless steel



with its superior mechanical strength," says Bernd. "At Outokumpu we have pioneered the development of Duplex, delivering nearly 40 per cent of all Duplex production in the world today and we continue to actively develop new duplex applications for the industry."

It is at the company's Avesta Research Centre, based in Avesta, Stockholm, that it develops advanced instruments for material characterisation and also simulates production processes. Indeed, many of Outokumpu's most innovative stainless steels were developed at ARC, such as 254 SMO, 153 MA, LDX 2101, LDX2404 and its most recent duplex stainless steels product segment, the FDX 25 and FDX 27. Showcased at the three day Indian Oil and Gas Expo in February 2014, the FDX 25 and FDX 27 boast increased formability that allows the use of duplex grades in applications that were previously too complex to be suitable. Being able to meet the demands of applications with high formability demands including heat plate exchangers and flexible pipes and pumps, it is certain to increase Outokumpu's global market share, which is presently at 12 per cent.

Another example of the company's innovative developments is the enhanced duplex grade EDX 2304, which, due to enhanced levels of mechanical strength and resistance to corrosion, is particularly suitable for oil and gas structures that will have their lifecycle extended by up to 40 years. Receiving NORSOK approval in November 2013, the EDX 2304 was also showcased at the Indian Oil & Gas Expo in February 2014. "Typical applications for EDX 2304 within the offshore industry are topside structural components such as fire, blast and relief walls and doors, structural pipes, pipe supports, clamps, cable trays and ladders," explains Bernd.

Keen to retain its global customer base, Outokumpu is more than a supplier and focuses on providing stainless steel solutions through added-value services. "In addition to material supply, we deliver tailored solutions that include training in stainless steel grades and selection, guidance in welding and other technical services," highlights Bernd. Other services include surface finishing, bending, edge preparation, project administration and package solutions.

With an impressive history of growth and innovation behind it, the future looks positive for Outokumpu as it continues to develop its comprehensive range of duplex subsea piping applications for the offshore sector. On top of this, the forward-thinking firm is continuing to gain full Det Norske Veritas approval for offshore use of its whole product range in line with major plans to expand further into the oil and gas and power industries.

"We have clear priorities for 2014, to finalise the Calvert ramp-up, implement EMEA restructuring, implement savings programmes and improve customer satisfaction through enhanced delivery reliability," explains Bernd. "As stainless steel innovation continues and new applications are developed, the demand for stainless steel will continue to grow. However, industry over capacity and slow economic growth are creating short-term challenges for the market, which is why we are focusing on further cost savings and benefits to customers to help us find a way out of these troubled waters. We are the new global leader in stainless steel, and to ensure we continue delivering value we are putting our customers first." OSG

> A key supplier of stainless steel to the oil and gas industry over the last 50 years, Outokumpu's portfolio comprises of high performance austenitic grades, duplex grades, high temperature grades for clients requiring high performance stainless steel as well as martensitic grades, ferritic grades and standard austenitic grades for clients requiring standard stainless steel

Above
Production units and locations, Production units, Machinery and processes, Outokumpu, Stainless, Applications, Cold Rolled

Above left
Degerfors, production site, plant, Outokukumpu

Outokumpu
outokumpu.com

Services
World-leading developer of Duplex stainless steel

Welling up

Below
Hussein Elsisi, business development manager for Expro Middle East & North Africa

With a mission to deliver high quality well flow management to the oil and gas industry; Expro uses its 40 years of experience to offer custom-made solutions for its global customer base. Originally headquartered in the UK, the company has expanded and now has six regional head offices around the world. With 5000 employees across 50 countries, Expro offers a truly global service. Operating internationally and developing close working relationships locally, Expro confidently offers its customers a highly personalised, knowledgeable and competent solution to meet the most challenging of requests anywhere in the world.

"Expro started in 1973 as a well testing company based in Great Yarmouth in the UK; once the company expanded into well flow management we began offering services such as metering, sampling and analysis as well as slickline, drill stem testing (DST)/tubing conveyed perforating systems (TCP) and cased hole services across the Middle East," says Hussein Elsisi, business development manager for Expro Middle East & North Africa. "Our six headquarters represent each continent, with offices in South America, North America, Europe CIS, Southern South Africa, the Middle East/North African region and Asia. We like to be in close proximity to our customers so they feel comfortable and confident with our abilities to attend to their requirements."

Highly trained personnel are a necessity for operating safely in any environment in the oil and gas industry. To support evolving client needs while also ensuring it is in an excellent position for ongoing growth, Expro is committed to the development of its staff through employee and management development programmes. "Training is something at the core of our company focus, benefiting Expro's growth as a whole. We have a strong workforce with a breadth of highly skilled staff," says Hussein.

Today, one of the leading companies in the world for well testing expertise, the global business offers customers a comprehensive range of tailor-made, high quality solutions. Expro provides a range of products and services across six areas of capability including: explorations and appraisal testing, subsea safety systems, drilling and completion, flowback and clean-up, production and well integrity, and intervention. Services include surface well

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testing, data services, flarestack services, clean-up packages, flow back packages and extended well testing (EWT).

Across the world, Expro provides its customers with well testing services that cover exploration and appraisal testing, development well clean-up and unloading and in-line production testing. On top of these standard packages, the flexible firm's dedicated and highly skilled engineering team provide custom-made solutions for extended well tests, limited flow tests and high flow rate tests.

Often based in remote and harsh environments with difficult operating conditions, extended well testing projects are used to generate and boost cash flow from production before a permanent production facility is brought online. The substantial reservoir information provided from the service can then be used to evaluate the reservoir in real time, establish its behaviour, assess productivity and commercial benefits of an oilfield, and determine a field development plan of action.

Offering a complete well test package, Expro integrates its versatile test packages, subsea systems and DST capabilities with onsite fluid analysis, data acquisition and metering services to provide customers comprehensive support throughout well test projects. Operating in this manner has led to the company witnessing significant growth in the Middle East over recent years, as Hussein states: "North Africa and the Middle East has been a two speed market for us over the last 12 months, which is due to political issues in North Africa causing slow growth. The market here is not as bullish as the Gulf Sea; however, following a number of contract wins our market in the Middle East has significantly grown. Over the next year, we anticipate Algeria to move past its issues and for Expro to expand in this market, and for the Middle East and North African region to grow overall."

As the oil and gas industry moves into deeper waters and more extreme locations, Expro has invested in the field of DST to meet the demands of both existing and emerging markets. Using a dedicated DST engineering team that is guided by experienced DST professionals, Expro develops in-house tools with wholly safe functionality and increased efficiency to meet a well test project's unique objectives. For example, the company's ExACT (Expro Annulus-Operated Circulating and Test) tool combines the functionality of a downhole shut-in ball valve and a multi-cycle circulating valve

for well kill operations. Furthermore, its state-of-the-art Self Fill-Tubing Test Valve (SF-TTV) has a unique, patented, bi-directional tubing-to-tubing bypass, which results in the debris tolerant flapper never leaving its seat, and being unable to wash out.

One area of the business to witness massive growth over the last two years in the Middle East is Expro's DST services, with which the firm has vast operational experience from the successful completion of over 400 DST jobs in more than 20 countries across the globe. Using specified tools, rated to 15,000 psi and 350 degrees Fahrenheit, the company has 25 years experience of successfully providing solutions to major oil and gas firms such as Shell, Total, BP and Texaco. Furthermore, by adding ultra modern new-generation DST tools to its product portfolio, Expro is capable of providing integrated solutions during the explorations and appraisal phase of any well, regardless of its environment.

Following a successful 2013, the future looks positive for Expro as it continues its focus on the Middle East and North Africa, specifically developing its burgeoning interests in Oman and Iraq. "We began operations in Oman in 2013 and expanded in Qatar earlier in 2014; we will also hope to establish business in Kurdistan in 2014. We strive for profitable growth; next year we will focus on Kurdistan, Saudi Arabia and Algeria. Looking further ahead we will continue to build on our brand for excellent service quality and reliability while also trying to grow organically," concludes Hussein. O&G

SPECIALIST SERVICES

Specialist Services is very proud of its long relationship as a key international supplier to Expro. The high quality and exacting standards required by Expro's operational activities require a partner that can meet these standards (ASME, API, CE, NORSOK, DNV, BV, ABS, ATEX and IECEx) and comply with the varying geomarket certification requirements. Specialist Services has built a reputation over the last 30 years of delivering high quality compliant equipment that enhances its client activities and service delivery capabilities. With a wide range of products available Specialist Services provides Expro with well test packages, early production systems including separators, heaters, burner booms, tanks, and manifolds. Additionally Specialist Services provides a variety of modular buildings for many different applications for on or offshore activities. Its list of products includes wellhead buildings, mud logging units, labs, offices, workshops, wireline/slickline and accommodation units. All of which can be offered as a temporary or permanent solution through either hire or sale models. The company's equipment is highly mobile and designed as moduralised products to enhanced logistics and deployment requirements. Equipment can also be trailer mounted depending upon operational needs.

Expro Middle East & North Africa
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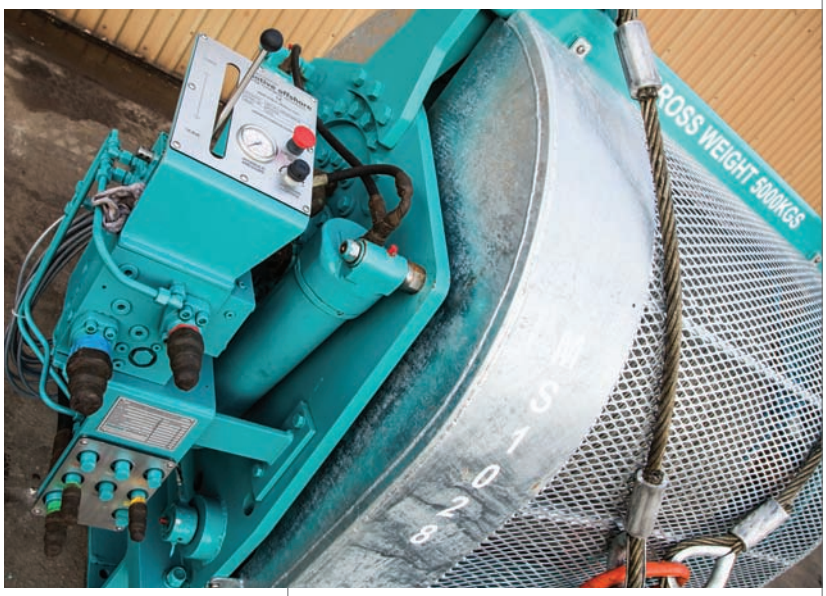
Services
Well flow management

Getting motivated

Below
James Gregg, founder of Motive Offshore

Four years ago just north of the Cairngorms National Park in Scotland, James Gregg found inspiration to take a step that would change many futures. With 14 years of intensive industry experience, James established Motive Offshore as a manufacturing and rental company that specialised in high capacity winches, wire rope spooling and inspection, umbilical deployment equipment including tower drive systems and tensioners, and specialised subsea equipment such as subsea baskets, subsea winches and test weights. Today the company's services encompass in-house design engineer, fabrication, machining, assembly, testing and highly competent personnel for offshore operations.



Over the past two years the business has significantly grown and today employs 81 people. James is supported at Motive Offshore by two other directors, Dave Acton and Bob Smit, who also have previous experience within the industry.

"Our products and services are focused around marine solutions, in particular, winches and associated equipment, and are available for rental and for sales. We also have a service division with all our staff available to work both offshore and onshore, servicing, operating and installing equipment," says James. The core aspect of the business is the design and manufacturing of equipment in accordance with its sales catalogue of standard equipment, he explains: "We offer products that have been tailored around what the industry demands, taking into consideration modern health and safety and other legal requirements. As a result, we only supply up-to-date, modern and new equipment.

"Much of the equipment in the oil industry is crude and old fashioned, and although it is fit for purpose, as time goes on the industry looks for more efficient and safer ways for completing tasks. Our research and development department consisting of engineers and draughtsmen takes a lot of existing technology and seeks to develop and improve it." Motive Offshore is committed to serve its customers, meeting their needs and expectations, but also striving to exceed them. Having adopted the principles and requirements,

it gained ISO 9001: 2008 accreditation, signifying a major milestone in the company's history. The comprehensive, co-ordinated quality management system has been implemented across the whole company and embraces all of the activities that impact upon its customers.

The design, development and provision of equipment is an asset to the industry, but it is the people that really make the difference. "One of our major unique selling points is our focus on staff. The core value for us is being serious about our people, and this is client driven. We have completed various studies and feedback has been, from a sales and technical point of view, that clients want to be dealing with people that know what they are talking about," explains James.

Consistency throughout projects with minimal staff changes is an attribute that has supported the success of the company and James remains committed on this path: "We are very focused on maintaining our high level of staff retention, making sure the right people are suitably qualified and competent for the position they are in, and generally we are creating a positive culture within our organisation. That is driven from the very top, and it is our core belief that if we focus on our people the other aspects of our business will function considerably smoother.

"All our staff undertake legislative training and are competent to do the work, but we also concentrate on social and cultural coaching and training, which we feel sets us apart from the competition and provides us with a competitive advantage." In support of this, the business has established an organisation called Team Motive, explains James: "The purpose of Team Motive is to reinforce our corporate and social responsibility, encouraging staff and other stakeholders to engage in team building exercises. As a community the business focuses on raising money for charity through a variety of challenges, and our staff feel stimulated and rewarded."

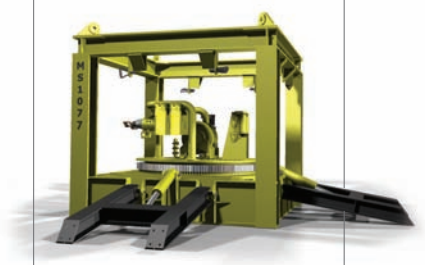
Commenting on the marketing focus for the business, marketing and PR specialist Vivien Rae explains: "We initially grew organically and utilised a number of James' contacts within the industry, but we quickly reached a point where we needed to concentrate on marketing ourselves further in the oil and gas industry. One of our focuses is looking towards promoting our business at exhibitions, and this year hope to be attending ONS in Norway. Exposure is the main importance of such events, supporting brand awareness of our products and services, and to establish more business. It is also an opportunity to be face-to-face with our clients."

James adds: "In October 2013 we established an organisation in Norway, trading as Motive Offshore AS. Our role in Norway is still in its infancy, but it is growing. Over the last 18 months, the market has been extremely buoyant, and generally the industry is booming. We see that this growth is due to a number of factors, namely the drive in the industry to operate in deeper waters, coupled with the tendency to go for subsea production and processing rather than traditional topside investigation. Any equipment that goes subsea needs winches and such products so the market is growing."

In November 2013 the business opened up a sales office in Aberdeen, enhancing its position in the UK domestic market where, combined with Norway interests remain high. However, with the motivation to keep on progressing James is already looking ahead: "Our next strategic move will be into Brazil, having already established a business partner there, and further ahead we will branch into the Middle East." The energy and oil and gas industry worldwide is growing with an increased focus on health and safety particularly after the oil spill in the Gulf of Mexico. The world-leading safety regimes in the North Sea are being implemented across the globe, which has led to the increased demand as old equipment is scrapped and replaced with new. "There are a limited number of companies offering our services, and we are filling a gap in the market. Our work is mainly with Tier 2 marine contractors but also other emerging marine contractors worldwide," he adds.

Following the two-year period of aggressive growth, the business looks set to increase turnover and appoint additional personnel. "Our main focus is becoming more established in the UK and Norway over the next 12 months. Long term we are targeting the growth of the business with an international footprint, whilst extending our portfolio of services. We are very innovative, continually developing new products, and it is a trend that we will move forward with, developing off-shoots of our products utilising the same skill sets and manufacturing facilities that have led to our success so far," concludes James. O&G

Above
The Motive Offshore team



BRIDON

Bridon's new sales and technical support office in Aberdeen and significant investment in a state-of-the-art manufacturing facility, Neptune Quay and the Bridon Technology Centre, provide a clear demonstration of commitment to the continued success of manufacturing and R&D in the UK, and the oil and gas industry in the North Sea.
Working closely with supply chain leaders such as Motive, Bridon offers tailored solutions for challenging offshore projects from a comprehensive product portfolio of market leading rope technology combined with expert local support, worldwide.

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