





In this new stage we begin the publication of interesting articles about other railroads, as interesting Mexican railroads, of which we will talking in an upcoming issue.

Modeling tests will continue to rise with more and better tests that allow to evaluate the models in more detail, offering at all fans our unique and objective viewpoint.

Have a nice trip with us.!

Enrique Dopico Director TRAIN Magazine

#### **NOVEDADES VIESSMANN KIBRI**





#### Sistema de encaje

El sistema de encaje **Kibri**, mediante agujeros o grapas, permite un montaje exacto, sin deslizamientos. Esto permite reducir al mínimo el uso de pegamento y evita los antiestéticos restos de pegamento que tanto afean.

Esta técnica permite un montaje exacto de los puntos de unión y las esquinas de las paredes. Además reduce el tiempo de montaje respecto a las maquetas tradicionales.

#### Sistema de inyección en dos colores

Un sistema de prepintado y pintado posterior permite producir piezas en dos colores, como por ejemplo las ventanas y los cristales. Esto permite reducir el número de piezas y facilita el montaje que resulta, de este modo, más sencillo.

Evita que restos de las piezas afeen el resultado.







H0 edificio de pisos con tiendas en la planta baja. Incluye el set de inicio de iluminación.



Trenes Aguilo

FAX 93 394 09 35





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El proyecto Ferrolinera de Adif



Metro en Ciudad de Méjico



Técnicas de Taller Ensuciado



Pruebas Quitanieves ROCO



Ferias Portugalete



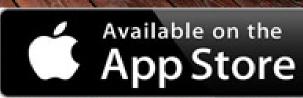




TREN MAGAZINE
IS THE PIONEER
PUBLICATION OF
ONLINE CONTENT
ON THE RAILROAD.

DISCOVER EACH CURRENT ISSUE THE RAILROAD, TRAVEL OR ITS HISTORY,

ENJOY YOUR PASSION
BY THE MODEL WITH
OUR TESTING AND
REPORTS







Si necesita más prestaciones de su central digital ....

## Intellibox II

#### La leyenda continúa

Además de las funciones de la clásica Intellibox, incorpora una gran pantalla retroiluminada, información en texto y con íconos, velocidad en Km/h, hasta 32.768 funciones especiales de locomotora en DCC, reloj interno, control de carga del booster interno y de los externos LocoNet, información de la posición real de los trenes en la maqueta y Direct-Drive en colaboración con LISSY o MARCo, trayectos activables por contacto de retromódulo, ayuda contextual en pantalla, conexión USB al ordenador y muchas otras funciones ...

Más información en tiendas especializadas y en

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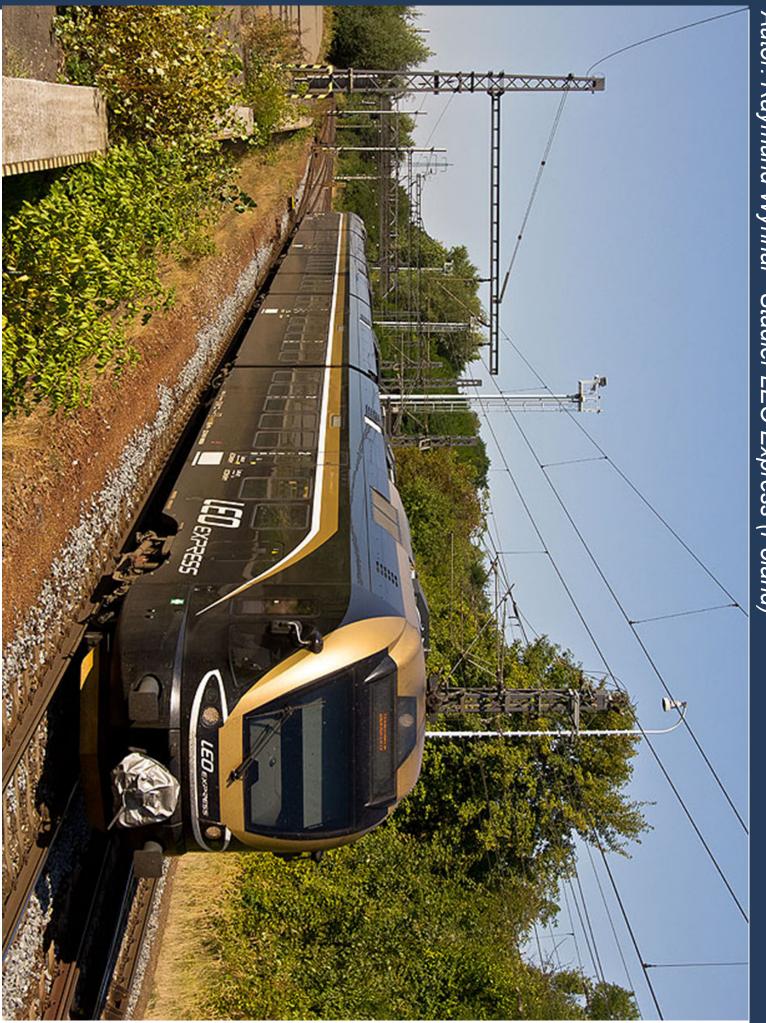








PHOTOS FROM THE READERS



PHOTOS FROM THE READERS

## Ferrolinera Adif

AUTHOR: Redacción

The purpose of the project is to develop Ferrolinera recharge facilities for electric vehicles from the electric railway system and also from renewable energy systems.

Ferrolinera The project involves the installation of charging stations and battery in logistics centers, making ADIF railway network in the largest aggregator of charging points for electric vehicles. Ferrolinera project began with the Ferrolinera I, developed in the laboratory energy of ADIF in Cerro Black (Madrid), integrating the energy System Advanced Energy Storage (SA2VE) recovered from braking trains and from a solar photovoltaic system.





The project developed a basic charger marquee for the two types of energy and stood on its cover solar PV field. This project continued to develop Ferrolinera 2.0, which was integrated into two projects called REINDUS , one using energy recovered from braking trains from high-speed catenary, which feeds a charging point - first system for public utistation Málality ga Maria Zambrano.

In parallel, the second project was developed , called Generate, in which developed the prototype of a system for generating mixed wind / photovoltaic power

recharging which will be elecgeneration used the installed in vehicles. CTF of Malaga. tric Finally, the project Ferrolinera 3.0, in development at Cerro Negro LE, adds to previous developing a hybrid storage system based on supercapacitors and lithium ion batteries, an improvement of solar PV field and the development of management system and local integration of several charging points and interralación with the user.

#### **Ferrolinera**

It is a ADIF patented system for electric vehicles recharge. The power supplied to the vehicle is the energy generated by the train during braking (electrical braking).

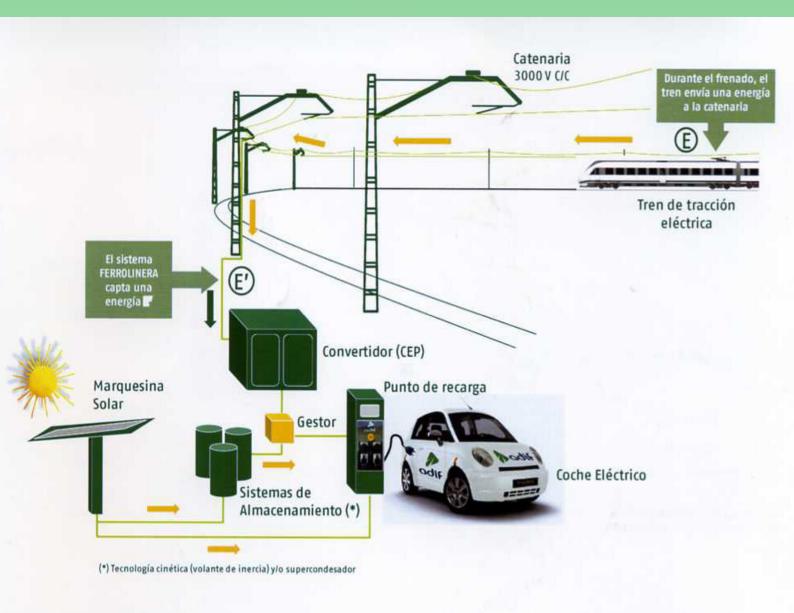
From the energy generated in the braking power, a party may be returned to the catenary to be used by other railway vehicles moving in the same feeding area, another part is dissipated as heat. But if there is a consumer in the same line energy can be returned to the catenary.

The project Ferrolinera, orbit by absorbing this energy is wasted and stored for later distribution to electric road vehicles.

Ferrolinera system consists of the following main elements:

- Electronic Power Converter, for connection to the catenary.
- Storage System, used to optimize the load cycles.
- Point to recharge, slow or fast load for vehicles.

ADIF has an extensive network of parks, distributed throughout the Spanish geography, in places where the influx of vehicles due to its location is great.





Time on parking decks ADIF is usually long, often coinciding with the workday, allowing the user to offer refills slow several hours.

Another is the user profile that demands quick reloads less than 1 hour.

Together ADIF has over 15,000 stations spread over 13,000 km. lines.

A simple calculation of braking such a high speed train generate 25 kW / h, which braking extrapolated to 180 at each station such generate the required charging power to supply 100 electric vehicle.

These loading, from the ecological point of view, would lead to prevent the release into the atmosphere of more than 5 t. CO2 per station per day.

The project Ferrolinera has aroused great interest among energy agencies and other railways, the potential for recharging electric cars that implies.

#### The Flywheel

The storage system using flywheel battery is essentially a mechanical, formed by a body which rotates about a central axis.

The type of energy that is stored in a flywheel is called mechanical energy (kinetic energy).

The driving power is provided by an electric motor coupled thereto by this motor the steering wheel speed of rotation increases to a value that keeps nominal charging stably.

The energy return is done by running the engine as a generator. In this process, the flywheel is slowed down to a minimum value, thus generating alternating load cycles that can store the energy in batteries.

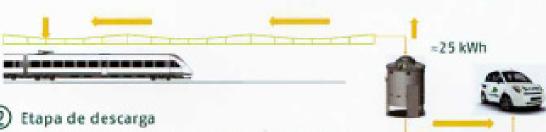
This process of braking energy recovery throughout ADIF network would generate savings of around 8% of the electricity consumed traction.

#### El volante almacena la energía eléctrica en energía mecánica (cinética)

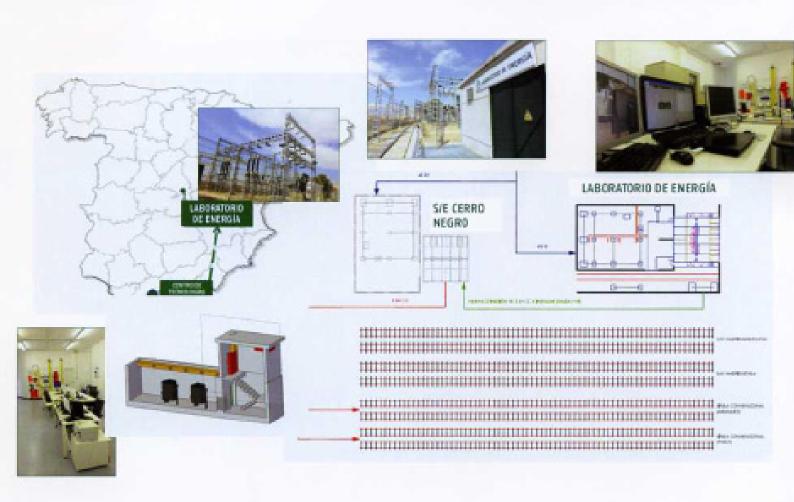


55 kWh 350 kW 6500 rpm

- ~25 kWh 25 kWh Etapa de carga (ALMACENAMIENTO)
- Tren frenando y devolviendo energía a la catenaria (25 kWh)
  - Esa energía alimenta al motor del volante y éste comienza a acelerarse hasta su velocidad nominal (6.500 rpm)
  - Al llegar a esta velocidad, el motor deja de alimentarse
  - El volante espera la correspondiente consigna de descarga



- (2) Etapa de descarga
  - El volante recibe la consigna de descarga
  - El motor se comporta ahora como generador
  - Suministra la energía eléctrica a la catenaria y/o al vehículo eléctrico hasta una velocidad de giro mínima (~900 rpm)



The ADIF hub for the development of electrical tests in railway traction network is **ENERGY LABORATORY.** 

The Energy Laboratory is a facility for testing with different experimental technologies that can, or will, be spent on rail traction system both ADIF, as other operators.

This laboratory is a facility suitable for testing requiring tensile stress ADIF network.

Unlike other existing laboratories, this is connected to the electricity grid rail, providing a unique test bed for testing the elements for electrical substations and testing of power electronics.

The power of this laboratory is using a 45 kV underground line. 2x1 has power transformers 6.6 MVA.

High Voltage Mains.

Technical room and control room.

#### Ferrolinera 3.0

This pioneering project in the world, includes the installation of 40 charging points in large Spanish railway stations and up to 8 in the smallest.

To get the energy will be used three sources, the tension of the catenary, recovery energy generated by braking trains and energy produced by photovoltaic panels located on the roofs of the system themselves.

All this energy is stored in proprietary systems to avoid , insofar as possible, their lost. The estimated cost of each charging station is about 6000 € approx .

Ferrolinera 3.0 has been developed in the Railway Technology Centre ADIF in Malaga, with a demonstrator at the Laboratory for Energy and the other in Málaga María Zambrano station, participate also Green Power, Isofotón, MP Systems, the Andalusian Institute of Technology and the universities of Seville and Malaga.

The project has been funded in part by a grant - de1.485.268 euros amounting IN-NPACTO program of the Ministry of Science and Innovation, which aims to foster the creation of cooperative agreements between agencies for conducting R & D + i that help to encourage innovative activity , mobilize private investment , generate employment and improve the country's technological balance .





The first point of recharge made available to users by the Railway Infrastructure Administrator (ADIF) is now in service at the station Vialia 'Maria Zambrano' of Málaga where the first Ferrolinera as charging point for electric cars.

It is the first facility of its kind to be put into service in Spain and allows simultaneous charging of two vehicles.









#### Fácil implantación de hierbas

#### NOCH Gras-Master 2.0

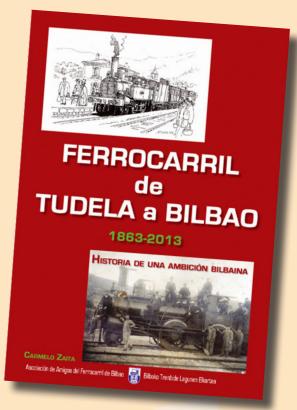
Con el NOCH Gras-Master 2.0 de la segunda generación, NOCH logra hacer de lo bueno lo mejor.

La potencia del aparato implantador NOCH Gras-Master 2.0 se ha podido aumentar un 25 % en comparación al modelo anterior. A partir de ahora 20.000 V garantizan un trabajo más confortable.



60135 Gras-Master 2.0 € 149,99







#### Notebooks Archaeology Railway

#### Linha Do Dao

The book number 32 edited by Carrileiros & Foula, describes the Portuguese "Linha Do Dao" also known as the branch of Viseu.

Built metric gauge, was opened in 1890 and remained in service until 1988, date on which trains stopped running their routes.

As always, these books bring memories that seem forgotten for many.

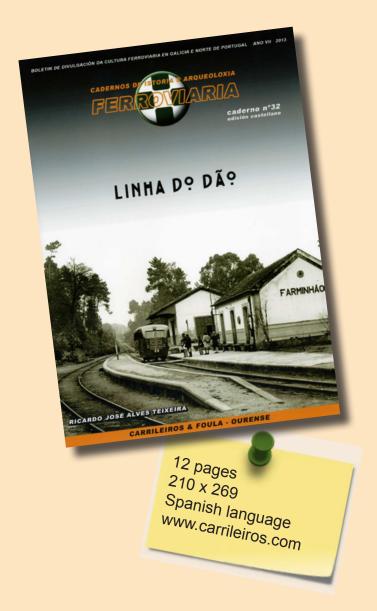
#### 150 years

#### Tudela to Bilbao Railroad

The Friends of the Railroad of Bilbao has published this interesting book written by Carmelo Zaita, resume to commemorate the 150th anniversary of this Railway.

Throughout its 8 chapters describe the background and first projects as well as the construction and operation of the same, without neglecting the human factor railroad employees.

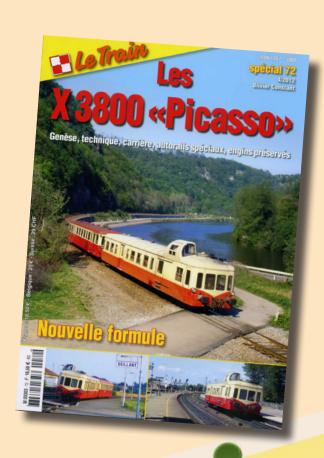
The book is completed with various statistical tables and a portfolio of photographs of great interest.



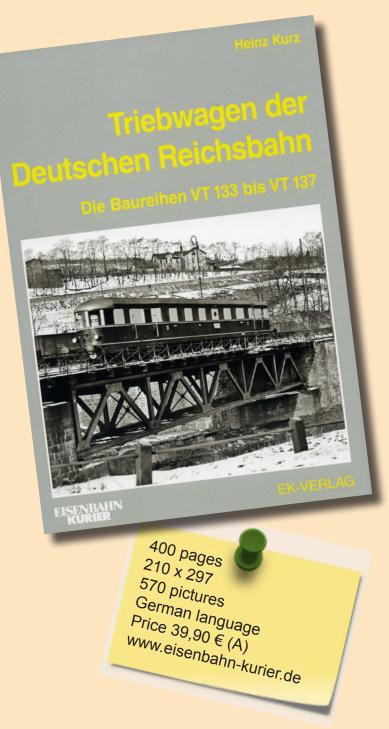
#### Deutschen Triebwagen del Reichsbahn

This interesting issue is addressed from the beginning, starting with the first trials of the Prussian railways and Württemberg, later continued by the Deutsche Reichsbahn until his last days as a railway administration.

The book abounds in the development of this type of self-propelled vehicle, which eventually grew in size and performance. Definitely an interesting book for lovers of automotive diesel.



100 pages 210 x 297 French language Price 16,50 € (F) www.letrain.com



#### Les X3800 "Picasso"

The special No. 72 of the magazine Le Train analyzes in depth the known automotive diesel X3800, nicknamed "Picasso" of the SNCF.

The reader may find this interesting number project start these vehicles, their technical and design solutions as well as services to which they were assigned in the past and today preserved vehicles.

#### Rocco Locomotive BR 115 DR

One of the most versatile locomotives DR is the series 115 and her sisters, because this model has had many versions and variants throughout his long career.

Among several versions available, now available version of the DR 115 in its decoration better known under the reference 72837.

The model has five pole motor, NEM 652 connector and socket for connecting digital couplers.

Externally the locomotive has numerous well reproduced details and quality, such as handrails, horns, grids, etc..

Definitely a model very interesting.





#### <u>FLEISCHMANN</u>

#### Locomotive 55.25-56 limited edition

To commemorate the 100th anniversary of the construction of the locomotive Prussian G 8.1 Fleischmann offers to fans a special series of this locomotive in DRG and DB decoration.

The model features realistic sound, digital hitch and flickering light in the boiler.

Available in digital DCC sound with reference 481374 to DRG version and digital version with sound DCC 481 375 with reference to the DB version.

Both models feature a detailed boiler full of pipes and fittings that give the model a stunning look.





#### Livestock landing

The known landing animal, still present in many stations in our network is one of the elements offered PARVUS to acclimate and enrich the details of our models.



#### Nuevos freight wagons







Among the novelties announced by MF Train, find new registrations and new references for November.

New Auto transporters:

Transfesa Spain ref.N33211 Registration: 24 71 427 0 042-3 RENFE Transfesa France ref.N33235 Registration: 24 87 427 4 100-7 SNCF New Bobineros:

- 2 new models and N32019 Ref.N32018 Cadefer Registrations: 32 71 467 3311 5 32
   71 467 3 328 9 Renfe.
- 2 new models and N32017 Ref.N32016 Railsider Registrations: 34 71 467 9010 5
   E-RSDER and 34 71 467 9 014 7 E-RSDER
- Special series bobineros JJ92 with "Final Light Functional" Ref N32021 New Registration: 32 71 467 3048 3 - Flashing red light and independent from each of the lanterns, just like in reality.

MFTrain This circuit is developed exclusively for this model and works by batteries, which means that it does not interfere with his shooting and smooth operation.



## ALITREN Tank wagon Savin

Birth of a new online business and with a brand new, ALTREN online is that the web www.altrenonline.com has to offer specialized second hand models, mainly from N scale to which he adds his role handicraft manufacturer, surprising us with a first N scale model that reproduces SAVIN wine tanks, decorated on TRIX based on limited series of 50 units that can be purchased only on their website.

#### Photos of the prototypes





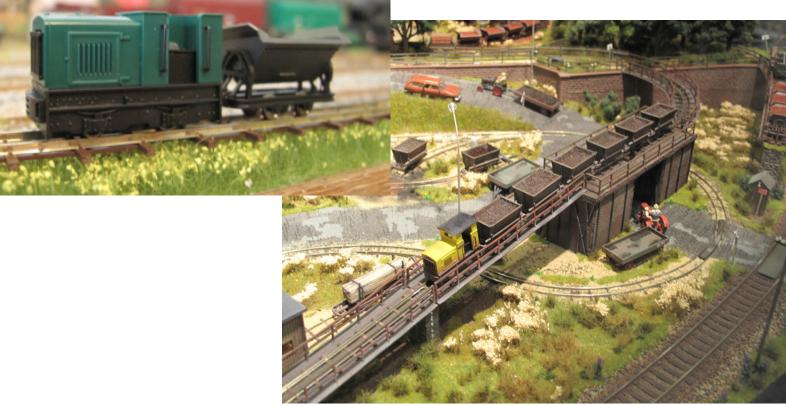
## Feldbahn H0f

Now available the interesting industry gauge train set NOCH Feldbahn. These tiny trains, which we saw in the last edition of the fair in Nuremberg can create highly realistic scenarios.

The set 12000 consists of current transformer, oval of track, locomotive and two wagons.

In a future article we will see how to integrate our magazine this train on a model and know its history.









#### Coachs RENFE serie BB-1600

Are now available for sale new cars MABAR BB-1600, featuring four new references

81621 - BB-1602 in period III without numbers UIC.

81622 - BB-1608 in period III without numbers UIC.

81623 - BB-1615 in period IV with numbers UIC.

81524 - BB-1611 in period IV with numbers UIC.

These cars, of a high quality, feature exceptional termination, with a lot of details mainly at the ends, where the doors and intercom are look a lot of accessories and an accurate finish.











#### Coachs RENFE serie 2000



Ferromodel late September announced advances in its first product, the 2000 series cars N scale RENFE called "ARCO". Posting new pictures of their prototypes, and by the end, we can see some magnificent results that impress with their level of detail to be a scale model N.

In addition, an updated market information and seems to be on sale in November or December of 2013, say from the brand.

The website has updated content regarding cars "ARCO", where you can see numerous pictures and videos of the final prototypes that are already in final production and will soon be able to see your final colors of decoration.

Ferromodel attended the Fair "N" scale Portugalete 2013, where many fans were able to observe closely the product and its functioning in situ testing a circuit which consisted of winding paths R1, R2 and R3.

More information: www.ferromodel.com.



## Electrotren

#### Baracaldo and Santurce

The new steam locomotives 030 "Baracaldo" and "Santurce" are now on sale. These very affordable models are a great opportunity to encourage new fans, while purists may provide the least of these cute models of locomotives in their models, ideal for environments harbor or secondary.

Both models feature NEM 651 connector for digital decoder.



## Workshop Techniques

## Dirtying our trains

AUTHOR: REDACCIÓN

Seeking greater realism in our trains, many fans are released to get dirty locomotives and cars trying to reproduce the degree of soiling that often accompanies these vehicles in real life, as they usually can only see bright and clean trains soon to be put in service or after passing through the paint shop which is quite unusual.



For those who do not conform to their trains run by the model completely fresh and clean every day and want to reproduce more faithfully its normal wear and tear can appeal to soiling and aging them.

For this finally various manufacturers offer numerous solutions that can increase the realism of our trains, but also our imagination and products to anyone can help to achieve this goal.

Moreover, in the final years some manufacturers include references to source his products delivered dirtied and definitely a good initiative.

As a first step before the start messing our rolling stock we find actual images of the same material used state reflecting habitaul dirt, which usually accumulates and the type of dirt that looks.

Is not the same dirty diesel locomotive always exposed to dirt from its own exhaust, along with typical transport dirt and line running, dirt which has an electric locomotive in its upper part, where usually accumulate dirt from the catenary pantograph grease,

Busch graffiti sheet includes a plastic applicator to place the desired pattern on the surface of the locomotive.



After a first test in a N scale model, the result of graffiti BUSCH is perfect giving the model a totally realistic





# Snowplow Beilhack SBB

#### AUTHOR: REDACCIÓN

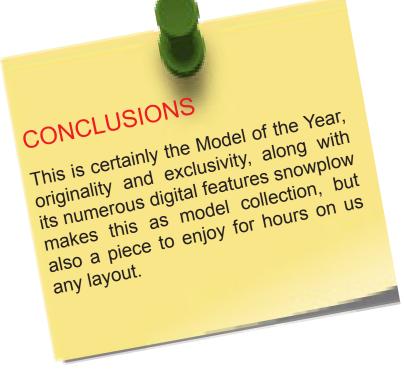
The need by the Swiss railways to Gotthard line keep free of snow necessitated the purchase of two diesel engines snowplow after removing of the service the veterans steam plows.

The protective measures against avalanches and improving different parts of the line, made it possible to dispense with large rotating machines to think about buying more small and versatile machines.

In 1980 the order is placed for two locomotives to the company specialized in snowplow Beilhack, Rosenheim (Germany), with proven experience in this type of machine



Our Valoration	
General Finish	
Detail	
Paint and inscriptions	
Running	
Packaging and instructions	
Ratio Price / Quality	0.00



## III modular meting at Portugalete

#### TEXT AND PICTURES: J.CARLOS PALOMERA

Organized by the Association AGRUNORTE Club N of Spain and the Area of Culture of the City of Portugalete, the meeting was attended by 22 club members and guests groups, and representatives of the Directive of the European federation and clubs INGANET Finland, Great Britain, Germany, France, and Switzerland





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