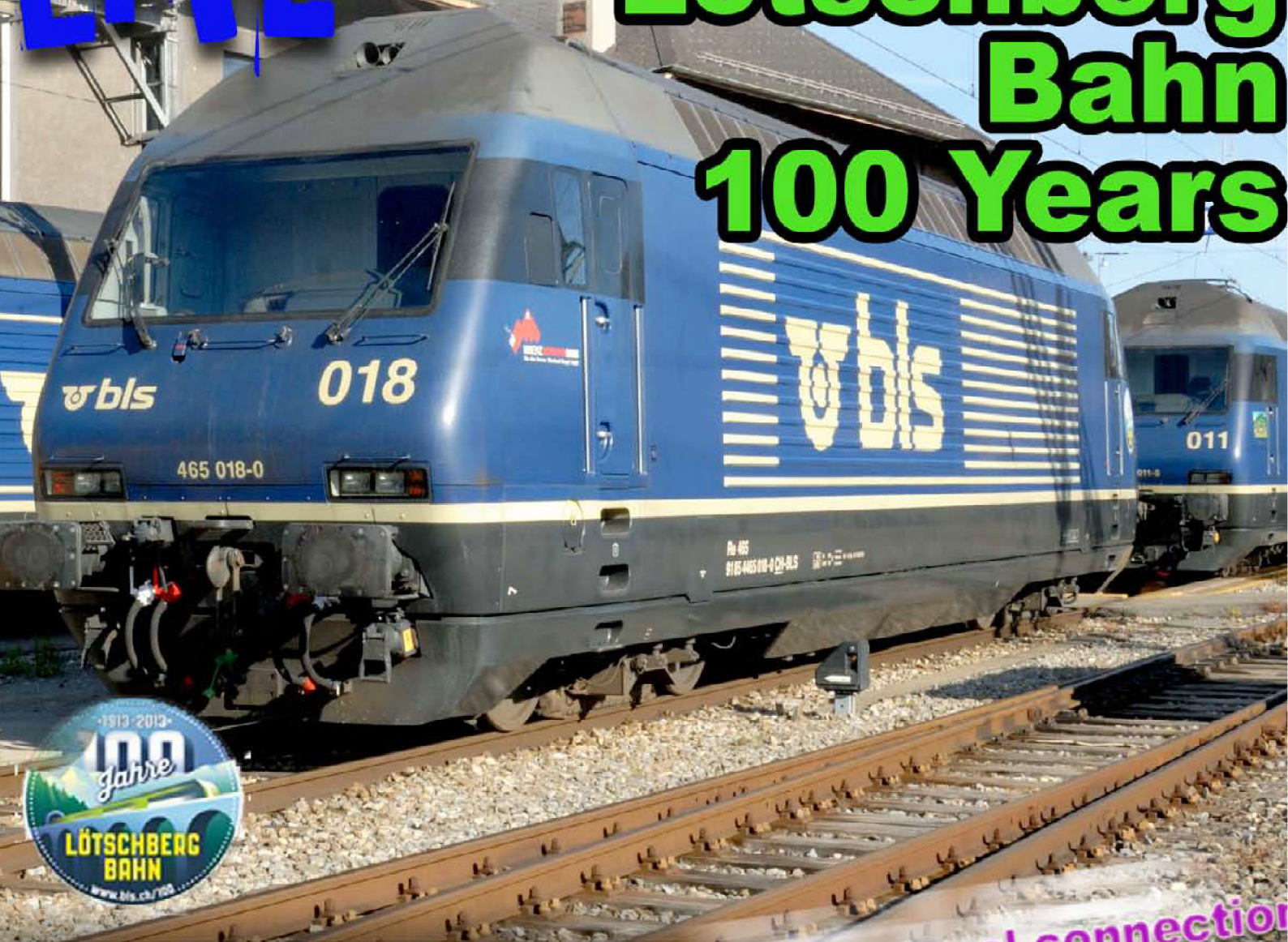


# **Train** *online*

**LITE**

**Lötschberg  
Bahn  
100 Years**







## Foreword

Reaching 100 years is not something that happens every day for that reason the Swiss Railways BLS celebrated the Lötschberg centenary with several special circulations, exhibitions and light and sound shows on the ramp of the Lötschberg.

We wanted to pay tribute to this important communication axis with an article about this anniversary.

Another theme of interest in this issue is the opening of the railway services between Spain and France, for the first time in the same gauge.

Have a nice trip with us.!

Enrique Dopico

Director revista TREN

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**Train** online

Number 17 - Feb. 2014

# Summary

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## Point of view



## News



## España y Francia connected by AVE



## 100 years of Lötschberg Bahn



más en la versión completa

**Tren** online

## Model News



## Test 352 Electrotren



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Author: Mikel Quintana - Coal train at the line of Samper with locomotives 319.212 y 319.203



Author: F.Javier Rebollo Gil - Coal train in the port of Navas with 333.366 locomotive 12/11/13





# The locomotive 289-015 returns to the track

FOTO: IGNACIO MARTÍN YUNTA

After four years in Integria workshops in Villaverde, the locomotive 289-015 has returned to the track in excellent condition thanks to the work performed by shop personnel.



Thanks to the collaboration of Renfe Integria, 289-015 locomotive is in excellent condition, both externally and internally.

The work has enabled the locomotive passing the large type R intervention, while the paint shop has recovered the original colors of the locomotive and its original typeface.

The result is a impressive locomotive, already historical, in excellent condition both mechanically and exterior, where the original livery looks of this series had forty units, all dual voltage to 3.000 V. / 1500 V. and suitable for freight and passengers trains.

After passing various tests on track, the locomotive was commissioned to towing the Christmas train between Madrid Delicias station and Pinto, hauling the usual composition of "Wooden Costa" Car.

The railroad museum plans to use this engine in its tourist trains under catenary lines.





# Alstom celebrates 10 years of the tram without overhead

**Alternative systems to the use of the catenary (APS, batteries, flywheel and supercaps) can eliminate the visual and architectural barriers, fully integrating the tram system's architectural heritage.**

Alstom celebrates 10 years of the installation of the first tramway without overhead system with APS technology (Power On Ground). The first Alstom tram with this innovative system was installed in Bordeaux a decade ago, beginning commercial service with APS in three lines simultaneously. In this town, a third of all urban tram network [1] runs without catenary, removing visual barriers in the historic center, declared World Heritage Site by Unesco.

The APS system is a Alstom proprietary technology that consists of the installation of a third lane that serves as power supply system. The third conductor rail, divided into sections, one is energized and transmits electricity when the tram runs on it, avoiding any risk to other road users (pedestrians, bicycles and motorcycles). The ten years of experience without incident guarantee its safety. Furthermore, the different applications of this technology shows that the levels of reliability, availability and maintainability of the APS are fully comparable to those obtained with conventional catenary.



Currently, APS technology is already installed or under construction in 8 cities and 239 trams [2], well equipping part of the tram network (Bordeaux, Angers, Reims, Orleans, Tours and Ecuadorian city of Cuenca) or covering the entire tram network (tram Dubai is the only worldwide circulation entirely with APS without overhead). In other cases, it has opted for without overhead systems that combine different technologies, as in the case of Rio de Janeiro tram, which use both the APS system as "supercaps" all the way.

Currently, Alstom offers technologies without overhead available in the market: feeding ground (APS), batteries (store energy for use in another city without power system), supercaps and flywheel (recovering braking energy ).

[1] The Bordeaux tramway network has a length of 44 kilometers. Of these, 14 used the APS system (Feeding Ground)

[2] Bordeaux (100 trams), Angers (17 trams), Reims (18 trams), Orleans (21 tram) Tours (21 tram), Depression (14 trams), Rio de Janeiro (37 trams) and Dubai (11 trams)





# The cog railway Montserrat receives the traveler a million during 2013

AUTHOR: SANTI COMPTE

For the second consecutive year this railway gets a record of travelers / visitors to the mountain of Montserrat.



The award is ahead of last year in a week.

Roser Canut Rock resident in Cabrils (village located inside the Maresme in the province of Barcelona), accompanied by her husband, two children and friends, has been the graceful person with the prize to the person he bought the ticket for the millionth cog railway, consisting of an annual subscription for Montserrat zippers and Vall de Núria, plus a weekend for two in Port Aine and dinner at the Brewery Moritz Barcelona. In addition, a Montserrat rack train will on the side of it, writing their name, like the graceful last year. The award was personally delivered by Mr. Enric Ticó, president of

the Railways of the Generalitat de Catalunya, in the square of Montserrat Rack and where the station is located Montserrat Monistrol

That is advanced to the event last year, has been as a result of the period of greatest tourist concentration is especially true in summer this year has increased the capacity of most travelers, with a train from the Vall de Nuria reinforcement. A timely and temporary action that has offered an image that at certain times and for many it was unusual, although it is the same company, their trains look very different colors and logos.



Million traveler receives his award.

On 11 June this year, the cog railway Monserrat met ten years of commercial operation. This rack is the second that has had this mountain on which the Monastery of the Virgin of Montserrat is located. The first was in operation from 1892 to 1957 in which the result of an accident, the entire path was removed. Years later, after various studies conducted by the Generalitat de Catalunya to assess which mode of transportation was the most suitable, definitively decided by this means of public transport, carrying out a new path through which flows the current cog railway, facilitating access to different walkers / pilgrims who flock to this mountain of Montserrat.





# The international passengers connection between Spain and France is a reality

AUTHOR: SANTI COMPTÉ

**On Sunday morning, December 15, the Minister of Development of Spain and France's transport chief minister inaugurated this international link with a journey into 100 series AVE between Barcelona and Perpignan**

**The international connection passengers between Spain and France is a reality**



After about twenty-five years of promises, and the consequent delays for various reasons (more political than economic), Spain is finally connected to the European rail internationally traveler network without transfer or interchanges.

At present, the international connection is provided by the participating companies Renfe and SNCF under the slogan "In cooperation," each of them provide a differentiated material.

Renfe offers for this relationship ten trains AVE 100 series manufactured by Alstom and remodeled in the workshops of the Sagra, connecting the cities of Madrid and Barcelona to Marseille to Toulouse and Lyon, reaching Montpellier

SNCF TGV Duplex provides 10 trains, which made the connection between Barcelona-Sants and Paris-Gare de Lyon, these trains have high capacity traveler due to its two floors.

Prior to the inauguration, at 9 hours and twenty minutes the TGV train 9702, departing to Paris, made the first direct commercial travel between the two cities. On this train, as usual, had the presence of numerous fans and railway enthusiasts, who from other Spanish cities and Barcelona itself, turned up the experience of being the protagonists of the first international trip traveler without connections intermediate, most people who for various reasons had to move to the neighboring country, reaching this train to the city of Paris with 123 people (25% occupancy) and ten minutes behind the schedule.

## The inaugural train AVE 100 series

Was composed of unit 21 AVE S100, who was stationed on track 5 of the Barcelona Sants station and had his departure at 11.30



*Train drivers of both companies and controllers, who have given service to the inaugural train, pose for the press*



*Renfe and SNCF trains share the same tracks wide.*



hours. In the minutes before arriving the various authorities, including the Minister for Territory and Sostenibilitat Mr. Santi Vila, political representatives of the nation as Interior Minister Jorge Fernandez Diaz together with Minister Ana Pastor and the French minister arrived Mr. Frédéric Cuvillier, government delegate in Catalonia Ms. Maria Llanos de Luna, consuls of France and Spain, the Barcelona City Council councilors, parliamentarians, and other civil and military authorities.

It attracted wide attention to those attending the opening ceremony, joint couples national police and the French gendarmerie inside Sants station, as train drivers, train staff and cafeteria, composed of pairs of Spanish and French , which went virtually unnoticed, given the discretion of their uniforms

Photo of rigor, in front of the unit, with the ministers of Spain and France, SNCF and Renfe directors

On time train departure to Perpignan, without intermediate stops along the way, which is done in 75 minutes. The cities of Girona and Figueres, are crossed, and finally reaches the Perthus tunnel, inside megaphone announces train crossing the border between France and Spain.

Arrive at Perpignan station, more pictures of rigor and transfer by coach to the Palace of the Kings of Majorca, where parliaments were performed.



## Inaugural parliaments

Following speeches by the presidents of Renfe and SNCF, the minister Ana Pastor spoke, who in his inaugural speech, cited as one of the historic landmarks of this rail link both countries, promoting coexistence, communication, progress , welfare and economic development deserving citizens of both countries. Stressing that this connection serves as a strategic link for Spanish and French cities to be connected by

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rail with the rest of Europe. In the words of the minister: "In our agreement all European citizens benefit. Merge also trains people unite, unite people, to advance the integration of citizens of the European Union."

Indeed Barcelona, right now is closer to Paris , London or Brussels, despite the distance that can separate , with an acceptable time against the plane trip , if you want to enjoy a train ride , becoming a " hub" rail due to its strategic location . Not so in our homeland , Barcelona to Santander nearly thirteen hour trip , Barcelona to Cartagena, nine hours of travel, Barcelona, Valencia, similar to Barcelona Madrid Atocha AVE times. Spain despite being the second country with more miles of high speed, long way to go to join Spanish cities in a more acceptable commercial time we have left. One of the major axes of the railway, is the Mediterranean corridor , which despite still being one of most dense rail traffic, has a stretch of single track between trains sharing Long Haul , Regional Middle Distance and freights.

The Ministry of Development has guaranteed that from early 2014, infrastructure works to remedy this situation were made, but continue to be hot patches to a railway network that for years had to be put solution. The third lane and widening of the track, again, partly solve this infrastructure deficit.



TGV Duplex en  
Barcelona Sants.



The ideal would be separate the two gauges (UIC and Renfe) circulating segregated into two parallel corridors, which allow different rail traffic.

Finally, speaking the French transport minister Frédéric Cuvillier, who take the opportunity to inform the audience the opening ceremony, the future creation of the commission, to conduct the study of high speed network in the section between the cities of Perpignan and Montpellier, without specifying dates (come election time in France), starting timid applause from the audience at the moment the way Barcelona Paris perform at 6.25 h. too long for a high-speed train, due to the period between the two cities listed above section, is performed by conventional tracks, even today, and is not suitable for high-speed circulation. This is an unfinished agenda for years by the French state, which apparently wants to resolve right now.

### Talgo Trenhotel Elipsos

With the commissioning of this service between Barcelona Sants and Paris Gare de Lyon, the service had been doing the Talgo hotel train Elipsos between the two cities



has been completed. Coincided with a strike by French railways (SNCF) leading to early retirement of this train, and it prevents the desired farewell by a large group of fans who wanted to make graphic testimony of this last trip.

### Evaluation in the first week of circulations

Since it goes on sale and takes 42,000 rail tickets issued for these relationships. They have traveled during this first week 8,142 people, 1,641 corresponding connecting Barcelona to Paris, Barcelona Perpignan 1,324, 1,192 and 665 Barcelona Barcelona Montpellier Narbonne.



Other relationships, such as Vilafant Paris-Figueras 426, Figueras-Perpignan Vilafant 180, Paris Girona 140, Girona Perpignan 130.

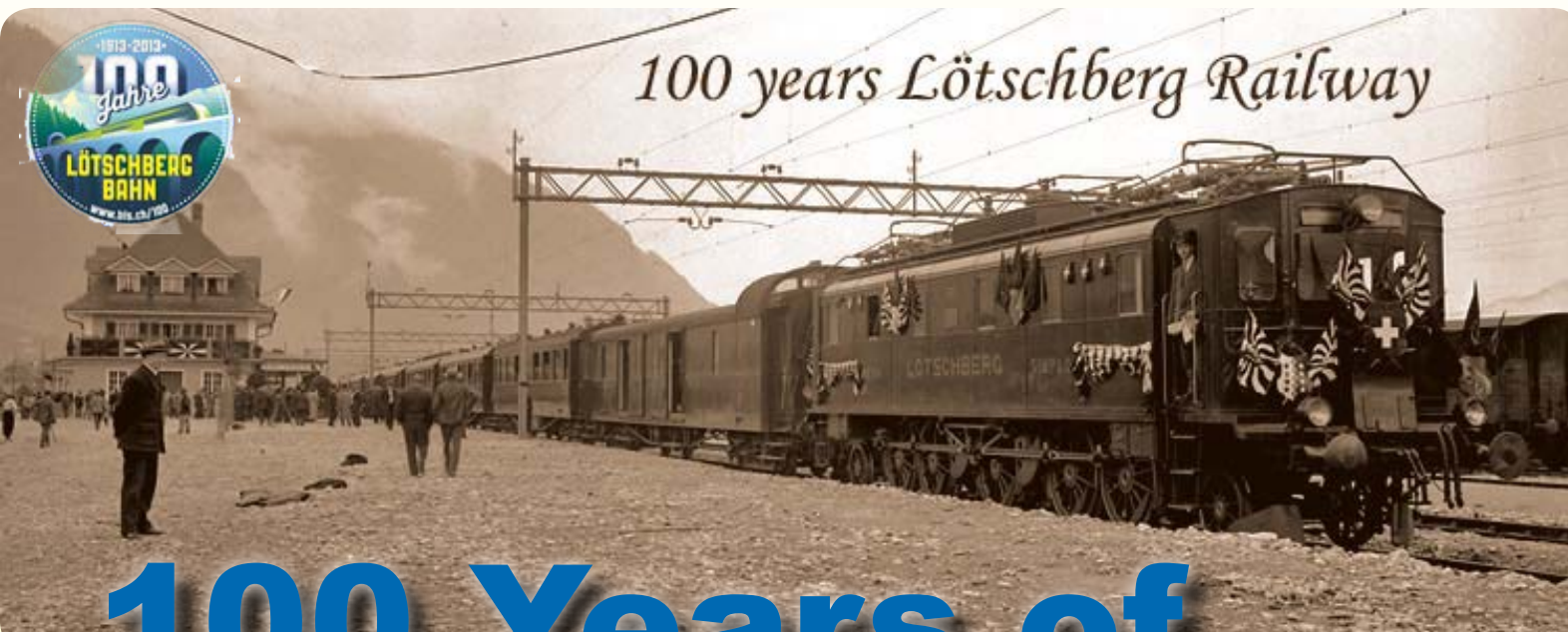
May not be an expected numbers for these relationships, whether coming schedules to fit business needs, may increase demand for these trains.

### The station France Barcelona

Station France from Barcelona, has regained some of its glory. A station has gone through several vicissitudes, and has been ready to be closed to rail traffic for the realization of a macro library. From Sunday the 15th, the three circulations Euromed trains bound for Valencia Joaquín Sorolla four to Alicante and back, plus the corresponding train hotel Barcelona - Granada and return, Alvia Barcelona-Valencia Joaquín Sorolla - Madrid Puerta de Atocha the regional express departing Valencia North Station and the various services Rodalies de Catalunya, give new life to this station.







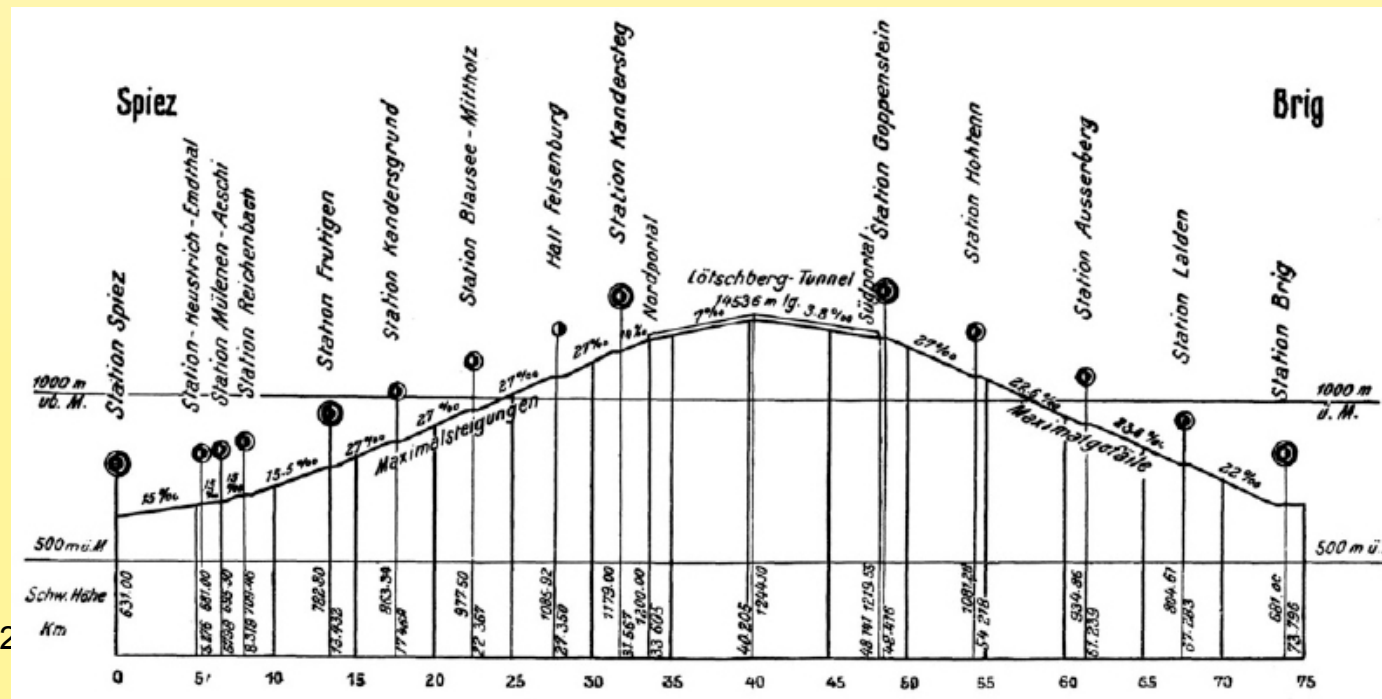
# 100 Years of Lötschbergbahn

Photo: BLS

AUTHOR: Enrique Dopico

The opening of the Gotthard line in 1882 led to the canton of Berne to project a transalpine line which avoids displacement of the transverse axis north-south transport.

This new line, which connects the Bernese Oberland with Valais across the Lötschberg massif began construction by the "Berner Alpenbahn-Gesellschaft Bern - Lötschberg - Simplon" on July 27, 1906.



The construction of the line began on October 25, 1906 in Kandersteg with the drilling of the first tunnels. The project included the construction of a long tunnel as the main work, with a length of 14.6 km and a maximum gradient of 7 mils, reaching the height of 1200 meters, specifically 1239.5 meters high at its central part, with a downward slope from that point on both sides. This Lötschberg tunnel called available within three curves in difrente radio. At the north end of the tunnel is located station Kandersteg in the Canton of Bern and with his mouth from the south side is Goppenstein station belonging to the canton of Valais.

Work on draft of this tunnel was completed in 1911, but until 1913 could not enter service.

The 74 miles of line have slopes reach up to 27 mils.

Photo: BLS



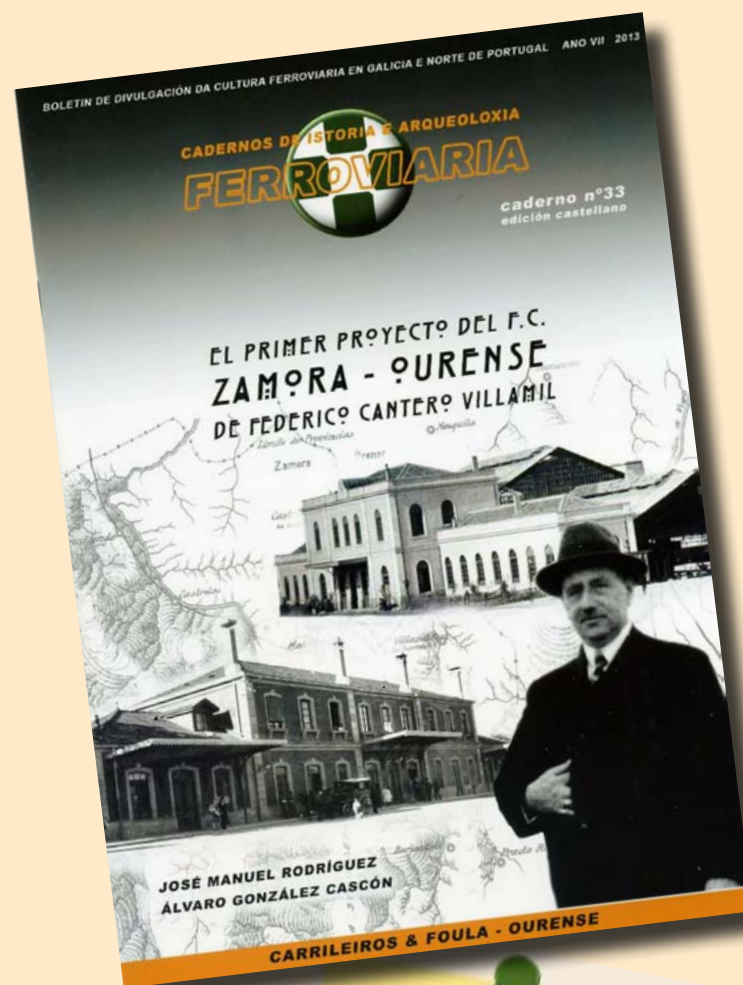




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## Ferroviissime

The French magazine Ferroviissime is renewed with the first edition of 2014. In this new issue new styles and interior designs are introduced to show more exceptional size images of French trains, with more and better thematic and special articles. No doubt it is the French railway magazine better quality.



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## Cuadernos de arqueología ferroviaria

### The first project of the F.C. Zamora - Ourense

The book edited by Carrileiros & Foula, describe the proposed construction of the railway between Zamora and Ourense, background and studies with abundant drawings and photographs. As always, these notebooks bring us a little closer to the history of our railways.

## 100 Jahre Lötschbergbahn

On the occasion of 100 years of the magazine Eisenbahn Kurier Lötschberg edit this special issue outstanding with numerous historical and current documentation of this line. An interesting look at the whole engine that has circulated for this line item, as well as an interesting guide for hiking near the train line is included, allowing the amateur photographic find interesting points.



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## BLS Lötschbergbahn

Eisenbahn Journal magazine dedicated a special issue in 2013 to Lötschberg that includes a DVD with both old interesting actual scenes, as current circulations over the line. Inside the special highlights the numerous documents that both historical and current offers.



# FERROMODEL

## RENFE "Arco" cars



In previous issues of our magazine, and we talked about the next-to-market of a new brand of national model railroad, with the announcement of a first N scale model to be followed by others in H0 scale.

The Ferromodel firm has just launch their first models, which form a set of cars "Arco" Renfe scale N.

The set is composed of A9T BRT-2003-2803 + + B10T-2213 cars, which correspond to the Preferred classes, Café and Coach respectively.

Models feature highly detailed and excellent finish.

Include kinematics and coupler that respect the NEM standards.

This first series of cars will follow new standards in Grandes líneas and Renfe Operadoral both in sets and individual cars in order to expand the compositions.



These cars have traveled large part of Spain performing both day services as some compositions of replacement or reinforcement night, detailing best known as the García Lorca (Barcelona - Sevilla - Málaga - Badajoz - Granada - Almeria), the Portbou - Murcia, or Camino de Santiago (Basque Country - Galicia).



## Roco Hoppers set LKAB

In the catalog there are several brand ROCO set hoppers which can form long mineral compositions hoppers hauled by locomotives LKAB. The long Swedish mineral trains can break the monotony of their composition with this new set that includes two special cars, one unpainted, decorated in gray and the other painted in yellow, with the number 1000 on the side, to celebrate the same number of cars built the same type.



## FLEISCHMANN Locomotive ES 64 U2 Wiener Lokalbahnen AG

WLB (Wiener Lokalbahnen) was created in 1888 and since then has made rail transport both on their own lines, as in the third-party network with its own locomotives. For this reason it is very common to find electric locomotives of "Taurus" family belonging to WLB in lines DB or ÖBB very frequently.

The model produced by Fleischmann has three pantographs to circulate under different types of power. It has close coupler, flywheel, digital decoder socket and white / red lights under the direction of travel.





## FLEISCHMANN Locomotive E 60

We can now have images reproduced by Fleischmann locomotive E60 with high quality more accustomed to the brand.

In this model the multitude of small details perfectly reproduced, as the hood, each door blinds, which have a very realistic draft, along with numerous pieces made of metal or photo-double pantograph wiper. The model shown is for the DRG version in original condition.

Inside the locomotive has a decoder socket, and lighting using LEDs. The versions available are analog, digital sound and alternate with sound, to be followed in time version of the DB with the same model.



## Diesel 10800 RENFE



The beautifully reproduced diesel locomotive 10800, Renfe by Mabar will be reproduced on scale N announced for this year by the Spanish manufacturer.

The model will be available in periods III and IV, with close coupler, socket to digital decoder and white / red lights under the direction of travel.



## ARNOLD Modelos RENFE 2014



After learning of the main novelties of the brand ARNOLD for 2014, we focus on two of the announcements by the firm in the hands of the Hornby group. First include the announcement reproduction a steam locomotive "Mikado" 141F, which we are sure will be a reference model for N scale enthusiasts, that he finally may have a superb Spanish model steam locomotive, which surely give much play.

The other model, not least awaited by fans is ALCO diesel locomotive 1600 RENFE. A model that allows numerous decorations, both Renfe, green or silver versions as well as versions of private operators as well as to provide a basis for a future 1800 series of Renfe.



## ALITREN

### Special series



The WWW.ALITRENONLINE.COM store has launched a series of tanks with different decorations made on Spanish business models that have been painted with the permission of the different brands. A success and a chance to have exclusive models.



## *Electrotren*

RENFE models 2014

Like the firm ARNOLD, ELECTROTREN has issued its new products for 2014, including the return of the electric locomotive RENFE 277, still no photo of the prototype, together with the AVE series 100 ALTSTOM in current version of RENFE OPERADORA.

The real novelty of 2014 and very interesting versions can provide is the RENFE series 470 electric unit, shown in current colors and can be replicated in other settings and decorations in the future.



# FERROMODEL

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# Locomotive 352 Talgo *Electrotren*



AUTHOR: REDACCIÓN

In order to ensure the traction the new trains Talgo III that were put in service to replace trains Talgo II in 1961 Talgo rolling began testing a prototype of the future series III train, starting at the same time by Renfe and Talgo studies to equip the new trains to be built with a locomotive according to the benefits expected of them.



Photo I.M. Yunta



Photo I.M. Yunta

After analyzing the different proposals arrived from various manufacturers have opted to the offer from the German Krauss-Maffei, which consisted in adapting the Diesel-Hydraulic V-200 locomotive in service in the German railways since 1960.

The adaptation was to change the shape of the locomotive to harmonize with the train which was destined, a task that must be complex for German designers, who were forced to cut 4,290 cm. the V-200 to 3,290 cm. The 2000-T, nothing more and nothing less than a meter high.

Other adaptations occurred in the hydraulic transmission in order to achieve higher speeds, as well as changes in the bogies.

The result was a diesel locomotive, which for 38 years has commercial services at speeds of 160 km / h, something unique in the history of the railroad, not only Spanish, but worldwide.

## Características Renfe 2000-T/352

Constructor	Krauss-Maffei / Babcox & Wilcox
Transmisión	Maybach-Mekydro HM (May K-10 U)
Motor	Maybach-Mercedes Benz MD-650/1B
Rodaje	B'B'
Velocidad máxima	140 km/h. (en 1986 a 160 km/h.)
Potencia nominal	1.470 kw. (2.000 Cv.)
Esfuerzo de tracción continuo	20.800 kg. a 19 km/h.
Número motores diesel	2 (4 tiempos sobrealimentado)
Potencia nominal motor (UIC)	1.200 cv. a 1.500 r.p.m.
Número de cilindros	12 en V
Freno neumático	Aire
Freno dinámico	No
Capacidad combustible	3.600 l.
Peso total	76 tm.
Peso por eje	19 tm.
Cabinas conducción	1
Mando múltiple	No
Calefacción al tren	Si

The initial order of locomotives included ten machines, dividing the order between Krauss-Maffei five locomotives and Babcock & Wilcox of Bilbao with other five machines, leaving as an option to purchase another five more locomotives. German locomotives were the first to be built, arriving from Germany to Irun in early 1964 on their own, settling in this town new axes Ibe-





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