



The History of Elettren

ITALIAN GAUGE 0 PRODUCTS FOR THE CONNOISSEUR

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2 Introduction

Italy is famous for manufacturing beautiful products. In Northern Italy, the beauty of products is combined with excellent and innovative technology. Ferrari is perhaps the most famous example. In the model train world, there are also a number of examples such as the products of the makers Pocher and RivaRossi. Slightly less known but just as beautiful and well-made are the 0-gauge products from the company Elettren.

I do not remember why I came to the idea to make a booklet on Elettren. The history of Elettren however gives a good reason to write a book on it now; Armando Ravasini started Elettren 75 years ago in 1946. The train maker Elettren is still in business so this is the history of Elettren "the first 75 years"; may many productive years follow. The book has a focus on the products made by Elettren through the years and also gives some sparse information on the history of the company of the Ravasini family. When I mentioned to Elettren that I would make this book, Maurizio Ravasini responded that he liked the idea, however I did not succeed in receiving extra information on the history of the company Elettren or the family Ravasini.

This history is written in the English language, which is not my native language but the language I used for all my e-books (http://sncf231e.nl/my-e-books/). It should have been written in Italian but that is completely outside my possibilities. If an Italian reader would be prepared to translate this book, I would support this very much.

The next chapter describes the interesting facts in the history of the company. The chapters that follow discuss the products that Elettren has made. I have used throughout this book the arbitrary classification of Tinplate, CIWL/PLM and Finescale products.

Acknowledgements

Karl Isele, tinplate collector and operator from the Black Forest, Germany, made available a vast amount of information he researched and pictures he made and collected on the Elettren tinplate passenger car production.

Jim Kelly-Evans, owner of the Tinplate Times website (http://www.tinplatetimes.com/index.html) allowed the use of information from the Tinplate Times article on Elettren by Fred Booth.

Franck Schultz from the Paris shop La Caverne du Rail allowed the use of some pictures from his website, these are recognised with the text "Publiée avec l'autorisation de La Caverne du Rail ".

Allen Levy, writer on toy and model trains and founder of ACE Trains, allowed the use of quotes from his texts on Elettren.

Thanks to Tamme, Dick, Jacques and Ludo for proofreading and tips. If any errors are remaining in this book these are made by the author.

Cover page

The picture on the cover page shows Dick's FS E428 with some of my FS and CIWL cars on my garden layout.

End page

The picture on the end page shows the fine lines of an Elettren CIWL sleeping car.

Remarks

Any remarks or comments are welcome, they can be given via fred.van.der.lubbe at planet.nl.

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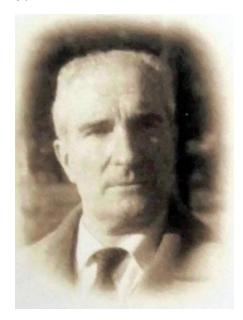
Versions

The first version of this book was published in 2021, also as a printed book in a small edition. Since during the years some new Elettren items were added to my collection I could upgrade some pictures and text, so new versions of the e-book were published on my website

3 Elettren, a family business

The name Elettren, from the Italian "treni elettrici", is of course very appropriate for model trains that are propelled by electricity. Although the number of items produced is not very large and Elettren could be called a niche supplier, the name Elettren (sometimes misspelled as Elletren, Eletren or Ellettren or even Electrotren) is known in model railway circles. North-West of Milan, Italy the Ravasini family started making model trains in 1946 at their home. Over the last 75 years, three generations of the Ravasini family have pushed the state-of-the-art in model train construction and produced increasingly sophisticated models. Taking advantage of the latest in manufacturing technologies, first in stamping tinplate and subsequently in photoengraving and pad printing and today with chemical milling and laser cutting, Elettren trains are renowned for their precision and fidelity to their prototypes.

3.1 Armando Ravasini



Armando Ravasini was born in 1903. His father worked as a locomotive engineer with the Italian Railways and this initiated Armando's interest in railways. When grown up Armando worked as an electrical engineer at the Pirelli tyre factory in Milan and in his spare time, he apparently was interested in radio electronics, since his name appears in an Italian periodical on this hobby. He used his knowledge of electronics and engineering also to design and make electrical driven 0-gauge trains, which were loved much by his son Franco. Some of the trains he made he sold on a commission base, but then he founded Elettren. In 1946 Armando Ravasini produced the first Elettren 0gauge locomotives, models of the Ansaldo 2-B-B-2 heavy electric FS E428 and the Pacific steam locomotive FS 691 in the basement of his house near Milan. Whereas the other model train firms, right after the war, made H0 gauge models instead of 0-gauge trains, Armando Ravasini focused on what we today would call a niche market. He set out to make 0-gauge trains that were intended to improve upon the pre-war trains of Märklin. Surely, the market share was modest, but he had no competition to fear. Elettren trains were in Italy only available in a few stores, such as Noé in Milan and Isacco in Turin. In Switzerland the toy and model shop Franz Carl Weber in Zurich sold Elettren trains. For the latter company, Armando Ravasini supplied its Italian passenger cars and an Ansaldo electric locomotive in SBB green livery.

When Count Antonio Giansanti Coluzzi, the founder of Fulgurex, saw an Elettren locomotive in a shop in Milan he proposed Armando to distribute the Elettren products. This was the start of a 45-year cooperation between Elettren and Fulgurex. After the distribution had been entrusted to Fulgurex, Armando Ravasini had to combine the Italian car frames with car bodies of the CIWL and Mitropa, Count Coluzzi's favourites.

The cars sold by Fulgurex enjoyed numerous successes in European countries. While retaining the very special attraction of the Tinplate Railway, they soon became finer and more detailed. Elettren and Fulgurex, however, wisely refrained from touching the limits reserved for the "fine scale" models, keeping the models "affordable". The Elettren cars retained the solid character of the Tinplate railways.

Elettren's products are highly handcrafted and have a special place in the wide range of toy and model railways. When compared with for instance the products of the other Italian 0-gauge manufacturer Biaggi, the Elettren models were much more detailed with sprung buffers, working bellows and realistic interior.

Armando Ravasini, who has mastered the technique of punching, bending and lapping, always paid particular attention to improving the interior furnishings. He knew how to convey the luxurious atmosphere of the sleeping car compartments to the viewer. His locomotives are made entirely of metal and are made with great attention to detail. Particularly noteworthy are the driver's cabs equipped with pressure gauges and the operating fire box door. Armando Ravasini thus represents the traditions of quality-conscious model making, without losing sight of one of the most important requirements placed on a good toy train, its robustness.

While Elettren started in the basement of the Ravasini home I assume that later they occupied a workshop; as far as I know however all addresses used by Elettren are within a few kilometres of each other in an area some 20 kilometres north-west of Milan.

3.2 Franco Ravasini

Franco Ravasini vividly remembered the war years, at that time he watched his father with admiration, who created wonderful toys in the basement. The story goes that Franco already as a young boy helped his father in creating the Elettren tinplate products. When older he worked in the Elettren workshop and in 1964 he replaced his father Armando as Elettren's boss. Under Franco's reign Elettren and Fulgurex cooperated to introduce the CIWL and PLM passenger car range, see 5, for which Elettren is still famous. Although made in a similar way as the former tinplate range, these cars are much more to scale and follow the real-world prototype of CIWL and PLM cars as much as possible. During that period however also the tinplate range was still produced and new batches of for instance the FS 691 Pacific steam locomotive were made. Although Franco stepped back in 1993 from leading Elettren in favour of his oldest son Fabio, he was still involved as proven by correspondence on orders I had with him in 1995 and 1996. While Franco Ravasini leaded Elettren they were located at the Via Bettinelli in Castellanza.



Above left is Franco Ravasini and at the right one of his successors

3.3 Fabio and Maurizio Ravasini

In 1993 Franco's sons Fabio and Maurizio Ravasini continued the family tradition, becoming the 3rd generation to lead the firm.

They started a new age for the company characterized by the production of new finescale models made with the best techniques - though keeping the then almost 50 years of Elettren's style unchanged. Reflecting changes in the European market, the grandsons of Armando Ravasini moved to finescale reproductions of European passenger cars of FS, SBB/CFF and SNCF and a number of finescale FS steam locomotives. Every detail is reproduced with the utmost accuracy, from the tables of the restaurant car to the shovel used by the stoker to feed the boilers with coal: the finescale models produced by Elettren are perfectly functioning trains and are identical in all respects to the originals they are inspired by, but some 43 times smaller. The brothers Ravasini build these with their hands piece by piece in a unique artisan workshop. Maurizio mentioned: "We are the only ones who have not relocated production abroad. We do everything ourselves, from researching the original designs of the trains of the past to soldering and painting the models". They work an average of ten hours a day and only make 20 models a year.



Above left is Fabio and right Maurizio Ravasini

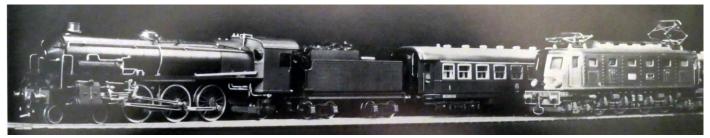
Important for those interested in tinplate trains is that the current generation of Fabio and Maurizio Ravasini is again producing the more traditional tinplate trains. The Elettren tinplate cars introduced in 2008 include German DB, DR and DSG passenger cars of the period around 1939. These models are considered the high-end of coarse scale trains.

Some years after Fabio and Maurizio took over, they relocated their workshop to Via Ariberto d' Intimiano in Legnano and on the letterhead the name Nuova Elettren appeared. A couple of years ago the workshop was again relocated to the current address at Via Comabbio in Marnate.

4 Tinplate style

The first Elettren products were models of an Italian Railways (FS – Ferrovie dello Stato) type E428 4-4-4-4 electric locomotive and a type 691 4-6-2 steam locomotive. Nowadays these might be called tinplate style locomotives but at the time they were made these locomotives were considered to be true to prototype scale models. In a letter from Franco Ravasini to me he mentioned that his father Armando Ravasini called the FS 691 a scientific toy. The two locomotives received passenger cars and freight cars to pull, all in the same style and made for 3-rail electric running. These products, of which some versions still are made by Elettren on special order, are described here as the Tinplate style products.

4.1 Locomotives



In "A Century of Model Trains", New Cavendish Books 1974, Allen Levy showed the above picture and wrote: "The products of Elettren of Italy give us a good insight into how gauge 0 tinplate Märklin trains might have appeared had they continued to develop that range after the war as they possess the same quality of being almost a scale model, yet still a creation of fantasy, albeit with great refinements."

4.1.1 Gruppo E428



The E428 is an electric locomotive. As you might

know I am interested in steam locomotives and have no models of electric locomotives in my collection. Happily, my brother Dick likes electric locomotives and the products of Elettren, so he has a E428. Above left is the version of my brother, while right the original model from 1946 is shown. As you can see detail changes were made during the life time of the model production; the newer model has only one cabin door per side (at the right), while the older model had wrongly two cabin doors per side. I have not done any scale measurements but the length, height and width of Elettren tinplate products is a bit large for the scale of 1:43.5 which is associated with 0-gauge Most tinplate models of Elettren are at a scale of 1:40; the FS 691 model is 58 cm long while the real locomotive was 23 m long which results in a scale of 1:40. The length of the E428 is quite correct for 0 gauge since the model measures 44 cm while the original was 19 m long which gives a scale rate of 1:43.

When my brother bought the locomotive, it would not run correctly, so I did do some small repairs (see right, picture made by Dick). I was very impressed by the detailing and technical layout of the model. The engineering background of Armando Ravasini is clearly shown. Of course, the engine compartment does not look like that of the real engine, but it still looks good. Both driving cabs are fully detailed and do have opening doors and are lighted.







The catalogue text for the E428 mentions:

- Faithful reproduction of a powerful FS express train locomotive.
- Harmonious assembly with injection moulding, machined and cast parts. Easy disassembly.
- Operation with 3rd rail skates or with pantographs using live overhead wire.
- Remote change of direction. White headlights and red taillights change with the direction of travel. Device to prepare the direction of travel when the machine is stopped.
- Luxury finish. Beige body. Roof and frame brown. Pantographs red.
- Minimum diameter of curvature 180 cm; Length over buffers 44 cm; Weight 3.2 kg.

The E428 is made during the years in (small) series, most of these in Brown FS but some in blue FS livery. Further it was available in a green Swiss (SBB) livery; Visible detail and technical changes are made during the production period.

4.1.2 Gruppo 691

I remember well having seen an Elettren FS 691 pacific locomotive model somewhere in the seventies when I started, without

being aware, to collect trains. I thought it was an astonishing nice model, but the amount I had to pay was such that I thought I would never own one. Many years later however I added a 691 to my collection.



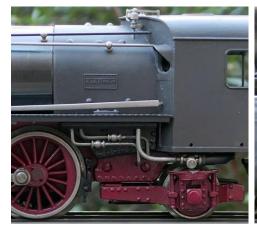
As can be seen in the picture at the right the detailing of the locomotive cab of the FS 691 is extraordinary, even the fire door can be slid open. The specification of the locomotive is on par with modern 0-gauge products:

- Remotely controlled direction reversing.
- Smoke emitted with illuminated and synchronized puffs.
- Operating on 3-rail track.
- Great traction force.
- Detailed and massive drive rods.
- Walkways with imitation of the diamond pattern sheet.
- Smoke door at the front can be opened.
- 7-pole motor mounted on ball bearings.
- Real coal load in tender.
- Headlights in agreement with the direction of travel.
- Minimum diameter of curvature cm. 180; Length between buffers 58,5 cm.; Weight with the tender Kg. 3,900.





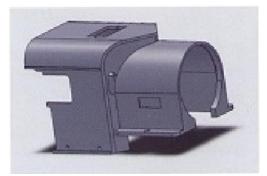
The next pictures show the detailing around the firebox and the valve gear. Notable are the piping, brake rigging and the sand lines. Against current practice the name Elettren is prominently present at the firebox. In my view the Elettren Pacific locomotive compares favourably with some other model steam locomotives from that period, like the Märklin HR Baureihe 01, the Lionel scale NYC Hudson, the Hornby Princess class Pacific and the JEP 141P Mikado. Lionel's famous pre-war Hudson, for example was noted for the detail it used. But where Lionel employed diecast detail, such as the piping on the engine, Elettren used externally applied wire and rod to represent the locomotive's piping.





The Elettren FS 691 was, like the E428, made over the years in small series which had some visible and technical detail differences. My example for instance has no spoked wheels at the tender but others have. In May 1996 Franco Ravasini announced he would make a next series of 10 models (see picture right) and when pre-ordered you could specify AC or DC operation and 2 or 3-rail electrical pick-up.





It is very unfortunate that many Elettren FS 691 locomotives suffer from zinc rot, a destructive, intercrystalline corrosion process caused by impurities in the cast material; the cylinder of my locomotive shown above shows some deformity caused by zinc rot. I have seen Elettren locomotives that were made more recent and already had this problem causing for instance the cab to disintegrate. My locomotive is happily still in running condition. Francis Deshayes of the French train collector's society CFE described in the Bulletin of that society a solution of the problem by 3D printing of disintegrated parts, see left.

4.1.3 Gruppo 746



Based on their FS 691 model, Elettren made a model of the Italian 2-8-2 FS 746 locomotive. Note that the real FS 746 had quite some resemblance to the FS 691, so a model could indeed be based on a model of the FS 691. As far as I know this was only made in small numbers and the model is quite rare. The one shown here has some extra detailing.

4.2 Passenger cars

Pierce Carlson wrote in Toy Trains, A History (1986): "Elettren made only two locomotives, concentrating instead on a very fine line of passenger coaches with elaborate interior detail. The Elettren coaches ...were and still are the best passenger coaches ever produced by any toy train manufacturer". With interior lighting, doors that are spring loaded to open and close, upholstered furniture, cloth bedding and pillows on beds in sleeping cars and cooking gear in kitchens of restaurant cars, Elettren passenger cars are elaborate in the included detail.

Elettren makes cars in 3 different main types. The ones discussed first, and meant by Pierce Carlson, are the tinplate style cars, which are made for 3-rail running. The tinplate style cars are no scale models, but they are much too nice to be called toys. They are shortened, for instance: the Elettren Pullman car has 6 windows; the minimum of a real Pullman car is 7 window.

4.2.1 Classification of the Tinplate Passenger cars

Except for the first cars produced the tinplate bodied passenger cars do have interior lights, for which a wire is expected to run from the locomotive, they have Elettren tinplate style couplers and working rubber corridor connections. Within this type of cars there were many variations made through the years; a very noticeable one is that some of the later tinplate cars had plastic roofs instead of metal roofs. German collector Karl Isele wrote a paper and gave a presentation about a classification of the variations in the tinplate cars and his paper counts 77 pages! Apart from this classification, which will be further discussed in this paragraph, the tinplate cars can be divided in groups, which will be described in further paragraphs, as follows:

- Cars of the Italian railway FS (Ferrovie dello Stato),
- Cars of the Swiss federal railways SBB (Schweizerische Bundesbahnen),
- CIWL (Compagnie Internationale des Wagons-Lits et des Grands Express Européens) cars,
- Cars of the German Railways and the DSG/Mitropa.

The distinguishing features recognised by Karl Isele are:

• Roof and roof vents,







• Car body shape, bellows and grab irons,





• Interior lighting,





• Frame lettering (some later cars had less lettering),



• Couplers and coupler fastenings,





• Frame substructures,





Bogies/trucks,









Based amongst others on the distinguishing features mentioned above Karl Isele recognises 10 different eras in the production of the tinplate Elettren passenger cars. There are however not fixed dates or years assigned to these eras since the Elettren products are not dated. Further an overlap might be possible since changes might have been gradually introduced. A shortened version of the development of the cars through these eras is: "The first cars were simple; they had no bellows, no interior and buffers were unsprung, they did however have full lettering on the frame bars. In next versions interior and later bellows were included and the interior lights had more and smaller lamps. The roof form was getting better and the roof did get shaded paint-layers. The transition from the body to the vestibule was first sloping (45°) and later straight (90°). More bogie types were introduced and the appropriate bogies were used for CIWL cars. The first oval windows on Pullman cars were not divided, later a correct cross division was introduced. Also grab irons were attached next to the doors and later some cars received inset window frames. More car types were introduced including streamlined German types and some cars received better formed but plastic roofs."

4.2.2 Cars of the Italian railways

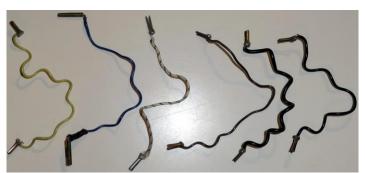
As might be expected many Italian style tinplate cars were made by Elettren to run with their Italian steam and electric locomotives. Shown first is an early version of a first/second class Italian Railways (FS) car. This car does have interior and interior lights but did not yet have bellows and has unsprung buffers.





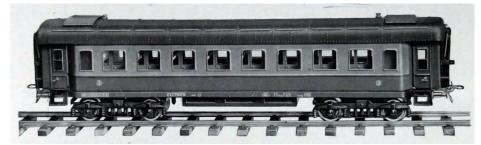
The cast bogie side frames are, like cast part of the locomotives as mentioned above, also prone to zinc rot as can be seen on the deformation caused by zinc rot on one of the bogies of this car; the other bogie is still in good condition. Although it does not look correct the car can still be run.

The picture right shows the unsprung buffers; the absence of bellows and the opening of doors. Elettren chooses not to have a third rail collector on each car for the light but provided a female plug at each end of the car and also female plugs at the locomotives, such that the current could be fed using small wires between the locomotive and the first car and then between each car. The different small wires shown below I acquired with some of the cars; whether these are original Elettren parts I do not know.





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The range of cars made included first-class, second-class, first/second- and third-class cars and luggage cars. Earlier cars had the good-looking two-tone brown (chestnut/isabella) livery; later second-class cars were plain brown while first-class cars were grey. The description given with the third-class car pictured in the catalogue (left) was:

- Reproduction of a model in use on the Italian Railways (F.S.)
- Construction in sturdy stamped sheet metal; Bogies with cast sides, independent sprung
- Removable roof with imitated rivets; Opening doors with handles
- Perfect reproduction of compartment interior Lighting with four 19 Volt bulbs Bushes for taking current
- Sprung buffers; Automatic couplers; Possibility of remote-controlled uncoupling
- Intercommunicating bellows, faithfully reproduced in rubber material, with iron frames, turnbuckles and walkways
- Possibility to push and fasten the bellows against the vestibules, or pull them out and hook them with those of other cars
- Painting in two-tone F.S. colours (as illustrated on the catalogue cover, see 7.1)
- Minimum diameter 180 cm. Length between buffers 42 cm. Weight approximately 1,200 g.



Left is a first-class car with seven sections, the red interior seats can be recognised. Note the lettering on the frame is sparser than on the older car above.

The car right is from approximately the same period. The hue of brown colour however is different. Also, the class lettering type differs. This second-class car has 8 sections.







The next second-class car (shown with open doors) is a later product as can be seen by the inset window frames. The roof is completely smooth and the simple brown colour shows it to be based on an original from a later period. The picture left shows the corridor side, the interior compartment walls can be recognised.



This grey first-class car is a later version with the FS emblem on the car side. This also has the inset window frames and note also the grab irons beside the doors.



To make a complete passenger train Elettren made this Italian luggage car. Since it shows an envelope on its sides it was apparently also intended to transport mail. This car has interior and interior lights. Catalogue number is B-026 and like the passenger cars the length is 42 cm. The catalogue number appeared in the lettering on the frame as can be seen below. The Elettren catalogue number system is however, since there were not many catalogues, a bit unclear. The production index, see 8, provides references to catalogue numbers as far as I could determine.





The picture left shows that also the luggage car has interior like partitions and benches and a table for the conductor.



4.2.3 Cars of the Swiss federal railways

The Elettren E428 electric locomotive was also available in a Swiss SBB (Schweizerische Bundesbahnen) green livery. Elettren

products were also sold in Switzerland, amongst others via the famous and still existing toy and model shop of Franz Carl Weber in Zurich and later via Fulgurex. To go with this green SBB locomotive Elettren made also a range of green SBB versions of their tinplate passenger cars. According to the catalogue these were the same cars as the Italian cars (see 4.2.2)



but with a ribbed roof instead of a roof with rivets. The third-class car with ribbed roof is shown above.



The early Italian first/second class car without bellows shown in the previous paragraph was also available in a Swiss livery and it had the same body and roof as the Italian car.

The first-class car shown below is from a later date and has a roof without any rib or rivet. It not only has SBB lettering on the car side but also on the frame.



The green Swiss luggage car is, except for the roof and livery the same as the Italian luggage car shown above; it also shows an envelope on its sides, so it was apparently also intended to transport mail.



4.2.4 CIWL cars

Count Giansanti Coluzzi, the founder of Fulgurex, was a lover of the luxury trains of the CIWL. I assume he discussed with Elettren to make also models of the Pullman, restaurant and sleeping cars of that organization. A luggage car in CIWL colours was also made, but this was the same luggage car as made for the FS and SBB, the other CIWL cars were unique models of the CIWL cars. These cars, like the other Elettren tinplate cars, went through a number of changes during their production years from the late forties until the early seventies.



The blue/crème Pullman car shown here is a late version with a plastic roof. It is not a model in the sense that the type of Pullman car can be recognised; there never was a Pullman car with only 6 windows. The same car was also made in a brown/crème livery and catalogued as a Flèche d'Or Pullman car, however it did not have golden arrows on its sides, a detail that was not overlooked in the later fine-scale Elettren CIWL cars.





An earlier version of the Pullman car was also sold in a green/crème livery; I prefer this blue/crème livery.



The restaurant car or "Voiture Restaurant" shown left is from an earlier period, it still has a metal roof. Like the Pullman car it does not have a real car as an example; it does not wear a CIWL car number.

The restaurant car interior shows tables set for 2, 3 or 4 passengers and some tables not set.





The passenger left imagines herself unobserved in this Elettren sleeping car. This sleeping car is again a late version with a plastic roof. The compartment side and corridor side window arrangements are of course different as shown below.





An older version (left) shows a metal roof and older type (incorrect) bogies.



The Elettren CIWL luggage car was based on the Italian luggage car but of course in blue livery. Elettren did not add the full text of CIWL (Compagnie Internationale.....) above the windows. At least two different versions of this car were made as shown.





4.2.5 Cars of the German Railways and the DSG/Mitropa

It was a good practice of toy and model train manufacturers to manufacture sleeping and restaurant cars in both the blue CIWL colour as the red DSG or Mitropa colour using the same body. Right shows a red Elettren DSG sleeping car based on the body of a blue CIWL sleeping car with the CIWL type of swan



neck bogies. Most tinplate style Elettren DSG or Mitropa cars however have a smooth sided (streamlined) body and Minden-Deutz bogies as the restaurant car and sleeping car shown below.





The picture of the interior of the DSG sleeping car left shows two compartments. The compartment with the blue settee shows the daytime situation while the compartment next to it is in the night situation with two made-up beds and a short ladder to climb in the upper bed.

More recently (around 2005) Elettren started to make a new range of tinplate cars based on the German "Schürzenwagen" (Apron cars). In this range DSG and Mitropa restaurant and sleeping cars and also German Reichsbahn and Bundesbahn passenger cars were made. Some of these were made in very small series with lettering chosen by the customer.

















Also matching luggage cars were made with their noticeable streamlined look-out on the roof and postal cars without a look-out.





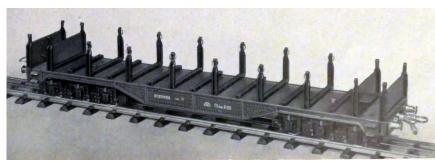
4.3 Freight cars

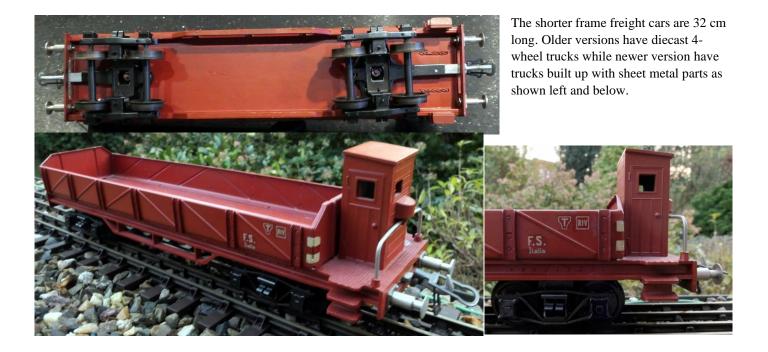
The tinplate style freight cars were produced in the years from 1948 until 1968. As mentioned before some tinplate style items were again produced later, but the freight cars were not. Elettren did not make any freight rolling stock since 1968.

Elettren used two types of frames for their freight cars, a shorter frame for 8-wheel cars and a longer frame for 10 or 12-wheel cars. The larger frame cars were based on an original car for heavy transport. There were two different cars with the larger frame as shown right. First a very special looking transformer car which uses a half coach body next to a transformer. This is a model of a mobile electrical railway substation as used in Italy. Some of the cars made had a 6-wheel truck below the transformer and a 4-wheel truck under the housing. Others had two 6-wheel trucks.

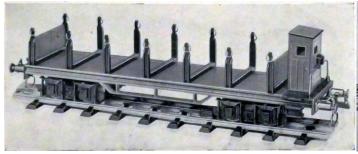


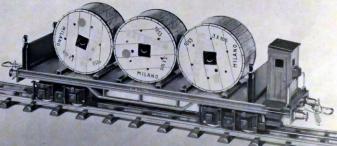
The second longer frame car is a flatcar with stakes, see right. This car has two 6-wheel trucks. These longer frame cars are 44 cm long.





The range of freight cars included a flat car with stakes, a flat car with 3 cable rolls, an open wagon and tank cars in the livery of different oil companies. All cars do have a brakeman's shelter.





The flat car with stakes

and flat car with 3 cable rolls



The open wagon with diecast trucks



and with sheet metal trucks



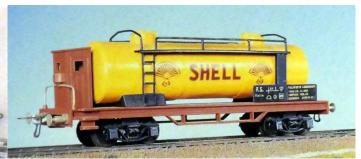
The Standard-Esso car has a silver tank



while the Standard car has a dark red tank



The yellow Shell car with diecast trucks



and with sheet metal trucks.



Other Elettren tank cars were a green BP and a silver Esso version.

4.4 Parts and other products

The only parts shown in the catalogue, with catalogue number SM-02, are the bellows for the tinplate style cars. Other parts, like bogies/trucks, couplers, buffers and wheelsets for the tinplate style passenger and freight cars were also available and mentioned on the Fulgurex price lists of the sixties.

The only other product Elettren made were transformers/controllers. I remember having seen different types, however the one I have is the same type as pictured and described in the early Elettren catalogue. Apart from controlling the speed and direction of a locomotive the transformer also could be used to control turnouts and supply current for accessory lights. The transformer is a high quality and well-engineered product and shows the electrical engineering skills of Armando Ravasini.



As can be seen left the Elettren transformer (upper right) is still in use in my train room, where I run many different trains in all scales and gauges giving the need for different controllers.



The transformer has a large number of outlets to connect not only to the track but also to the turnouts and accessories. The transformer can supply 100VA.

The bottom row of switches seen right is for control of the turnouts.





Adjusting the speed of the train is done with the large pointed black knob. This knob cannot be turned continuous, but has 6 positions, a zero-volt position and 5 positions from minimum 10 to maximum 25 Volt. Having a Voltmeter on a train controller was a first I assume.

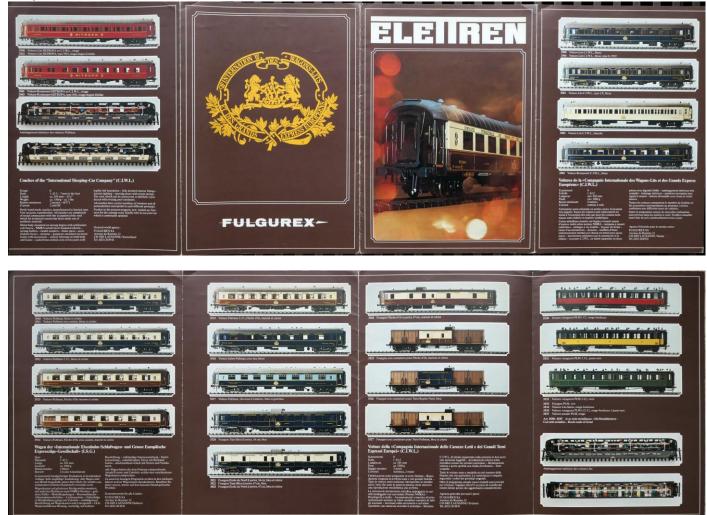
The green light dims when a short circuit situation occurs.

The catalogue mentions: Transformer with primary winding and voltage change device suitable for: 110 - 125 - 160 - 220 VOLT. Frequency 50 periods. So, the controller could be used in many European countries.

5 The CIWL and PLM range

Elettren and Fulgurex worked together from around 1970 to introduce a series of CIWL and PLM passenger cars; Fulgurex as commissioner and designer of the range and Elettren as technical designer and builder. This range, which was made to a scale of 1:43.5, was then considered fine-scale but with their plastic roofs, opening doors and beautiful but still a bit timplate style interior and timplate instead of brass construction, they are a separate category which I describe in this separate chapter. To go with these cars Fulgurex commissioned matching 0-gauge locomotives like a PLM Pacific from Asian builders. A Fulgurex pricelist from 1971 announced the first CIWL cars of this range but still also mentions the timplate range; a 1982 pricelist contains the full range.

To advertise the CIWL and PLM range Fulgurex issued, I assume around 1980, an 8-page leaflet which showed these cars and gave a description in English, French, German and Italian. The page with the large ELETTREN name is the front page when the leaflet is folded correctly while the page with the CIWL emblem and the large FULGUREX name is the back. The front page shows a brown/crème Etoile du Nord type Pullman car; a bit of a miss because this type of cars never wore the brown/crème livery.



The text, which might be difficult to read from above picture is:

Gauge 0, Scale 1:43.5, Length ca. 545 mm, Weight ca 1.5 Kg, Minimum radius 200 cm, 2-rail DC.

Partly hand-made coaches. manufactured in limited runs.

Very accurate reproduction. All coaches are completely of metal construction with the exception of the roof which for technical reasons has been made out of synthetic material.

Metal body mounted on sprung bogies with antifriction axle boxes - NMRA turned steel insulated wheels - sprung buffers - model couplers - brake pipes - accumulator boxes - dynamo - gangways mounted on metal frame with accessories - correct lettering on both body and frame - scaled brass etched crest in two parts with legible full inscription - fully detailed interior fittings - interior lighting - opening doors with return springs. The roof, which can be unscrewed, is faithfully reproduced with riveting and ventilators. All coaches have correct numbers of windows and all particularities correspond to each different prototype. Further to the present program, new models are foreseen for the coming years. Kindly refer to our price list which is continually updated.

5.1 CIWL cars

During the years that Elettren made these CIWL cars they changed the detailing a bit, so newer cars are "nicer" than older cars. For instance, the grab irons are looking better on the newer cars; another change is more detailed underbody. Also, through the years Elettren changed the CIWL number shown on the car; as far as I could verify, they always used a number which was prototypical. Much, but not all of the interior of the CIWL cars and the tinplate cars is based on the same type of tables/beds etc. The pictures below show two kitchens; the one on the left is from a tinplate style car and the one on the right from a 1:43.5 scale car. As can be seen the kitchen unit is the same; the tinplate car has however copper casseroles.





The roofs (right) show the substantial length difference between the tinplate and scale cars.

There are four categories of CIWL cars and Elettren made examples of all of these:

- WL Wagon Lits sleeping car
- WR Wagon Restaurant restaurant car or dining car
- WP Wagon Pullman Pullman car; with kitchen the type was WPc, without kitchen it was WP
- F Fourgon Luggage car



In the tinplate range only one of each type was made, but in the scale series various different versions of different types were made. The range Elettren made was larger than the already large range shown in the Fulgurex leaflet above. I do not think that as many different CIWL cars as Elettren made, were made by any other maker in any scale. Elettren made models of metal cars which were made and/or used by the CIWL from around 1925. Before that time the CIWL used wooden (teak) cars, which were not modelled by Elettren (Fulgurex did commission after an announcement in 1982 teak CIWL cars from the Italian model builder Dottori). Based on the CIWL cars Elettren also made a couple of Mitropa cars.

5.1.1 WL – Sleeping cars

The first sleeping car to mention is the remarkable white sleeping car based on an original that was made in 1928 in England for use by the CIWL in Egypt. I had ordered one of these in 2008 direct from Elettren which I agreed to collect at the Elettren premises near Milan. During a holiday that year we went via Switzerland, to visit Baumgartner Gallery in Mendrisio to see the extensive modeltrain collection. In that collection there was also a model of the Elettren Egyptian sleeping car and when I saw it, I was not very impressed. As I mentioned, later models are "nicer" and this was obvious when I saw the car I had ordered, it looked magnificent. The picture right shows this car and Maurizio Ravasini and me talking trains. This car has Arabic lettering. Maurizio told me that the design of the livery of these cars, including the Arabic lettering, was given by Elettren to RivaRossi to use it on their H0 model.



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To some all classic CIWL blue sleeping cars may look the same, but not to Elettren. They made and catalogued models of the types LX, S, Z and Y; all these are 54.5 cm long. They even made a small series of type F (Night Ferry) sleeping cars; these were smaller and shorter cars and the models are 44 cm long.

The type LX sleeping car is popular since it not only was used in famous trains like the Train Bleu and the Orient Express, but a number of these cars were preserved and were and are used in the more recent various luxury Orient Express type tourist trains. Elettren made this type with different numbers such that you could make a realistic train with more than one LX sleeping car. The numbers made are: LX 3472, 3480, 3497, 3532, 3540 3542 and 3551. The pictures show 3551.





The LX sleeping car is easily recognised by the oval windows in the doors. It was the most luxurious sleeping car with only 10 one person compartments, each with a sofa that could be made into a bed and a "cabine de toilette". Later most were rebuilt with extra beds, but the interior of the Elettren LX sleeper shows the original layout.

The S type sleeping cars were depending on their interior subdivided in subtypes S1, S2, ST and SG. The S was used for these types since these were the first types made of steel. Elettren made a model of car number 2644, a car manufactured in England by Metropolitan Amalgamated Railway Carriage and Wagon Company Ltd., which they describe as ST. According to other sources this car was type S1 or S2. More interesting however is that original photographs of the car with this number exist and they show that this car had an abundance of yellow lines. Apparently, the extended paint job was done for the purpose of making the factory photos of just this car since no pictures exist of sleeping cars with this livery while they were on regular CIWL trains. But of course, a model with this livery looks very good.



Elettren also made a model of a car from the same series with number 2647 and this car has a less lavish livery and a grey instead





A different type sleeping car from Elettren is the type S with number 3406. The original was made in 1929 by the Belgian company Les Ateliers Métallurgiques de Nivelles. My version has destination board for the Arlberg Orient Express which was added by a previous owner. Looking further at the lettering I noticed that the revision date shown on the frame is 21-8-26. This cannot be correct since the original car was made in 1929. Looking further I noted that many Elettren CIWL cars do have this revision date on the frame. Apparently, the same transfer is used on different cars, however I noticed this just now, so it cannot be called a serious problem.



In the range made for Fulgurex and shown in the leaflet above a type LX and S sleeping car were presented. Later Elettren added amongst others this type Y sleeping car. The original car with number 3909 was made in 1949, also by the Belgian company Les Ateliers Métallurgiques de Nivelles. The Elettren model was introduced in 1994. The original sleeping car became part of the consist of the "Intraflug Nostalgie Orient Express" and the model was marketed like that by Lemaco.







In 1927 the CIWL introduced the type Z sleeping car; the Z name coming from the Z-shaped partitions separating the compartments. Elettren made a model with CIWL number 3323, see above. The Z-shape can be recognised in the partitions at the right.





After WW2 the American army based in Europe had some trains specially assigned to them. A number of CIWL sleeping cars, including the S type car with number 3411, were part of this. Elettren announced in 1988 a model of this car with the livery applied for the US Army Transportation Corps.

At an auction in 2004 in Paris I noticed (but did not bid on) a type F (Night Ferry) sleeping car describes as follows: One sleeping-car of the Compagnie Internationale des Wagons-Lits (CIWL) F bleue (sic), with the trade mark Fulgurex, reference: 2624 (1990). Manufactured by: Elettren. Gauge «O». Approximate length: 440 mm. See picture right. This car is not mentioned in any Fulgurex or Elettren documentation as far as I could find. I asked Mr. Ingold of Fulgurex about this car and received the answer:



Of this car, made by ELLETREN in Italie, we imported only a small series of about 5 or 6 coaches, because in the same time we had our own production of real fines scales CIWL-cars. I assume these cars were made by Elettren in the first part of the nineties.

5.1.2 WR – Restaurant cars



Elettren made two types of CIWL restaurant cars (WR); a version with 7 bays and a version with 8 bays. The type with 7 bays was

originally made and shown in the Fulgurex leaflet with CIWL number 3348, however my version of 3348 has a white roof while the version shown in the Fulgurex leaflet has a grey roof. Later a similar WR with CIWL number 3638 was made and also a model of the restaurant car of the French Presidential train; this has CIWL number 3354 and has a different interior including curtains at the windows. As mentioned, during the years that Elettren made CIWL cars they changed the detailing a bit, so newer cars are "nicer" than older cars. Some of this can be seen when comparing the two pictures at the right with regard to grab irons and kitchen windows.

The WR which has 8 bays with CIWL number 4218 has of course a different window layout as can be seen below showing WR 4218 and WR 3354:





5.1.3 WP – Pullman cars

The Elettren range of Pullman cars, WP without or WPc with kitchen, is complete or even more than complete. With the latter I mean that even some Pullman cars with non-existing liveries were produced. Pullman cars, with exception of the Sud Express type, were recognised by their oval windows at the car ends end in the car doors. There were 4 types of WP(c), in order of introduction with their assigned number series:

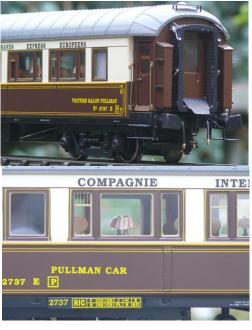
- Sud Express: WP 2737-2742; WPc 2743-2748, 2839-2841
- Flèche d'Or (8 bays/windows): WPc 4001-4015, 4031-4040, 4051-4065, 4081-4085; WP 4016-4030, 4041-4050, 4066-4080, 4086-4090
- Etoile du Nord (9 bays/windows): WPc 4091-4110; WP4111-4130
- Côte d'Azur (7 bays/windows): WPc 4131-4147; WP 4148-4164

Elettren made two Sud Express Pullman cars, WP 2737 and WPc 2743. Both of these were made in the original brown/crème livery, as shown below, and the later blue/crème livery. All came with grey roofs while I think that the brown/crème versions should have had white roofs. These Elettren Sud Express Pullman cars were introduced much later than the other types and have very nice detail.



Kitchen at the left.

The interior accessories like table lamps and chairs differ from these used in the earlier Fulgurex cars and look better. Elettren cars do have interior lighting but none of the CIWL Pullman (or restaurant) cars ever had lighted table lamps.



Elettren makes a number of Fleche d'Or Pullman cars in both the brown/crème and blue/crème livery. Cars with number 4003, 4080, 4089 are made in blue/crème. Note that the Elettren version of 4080 has arrows; CIWL specialists agree that blue/crème cars never had arrows so this livery is incorrect. Cars with CIWL numbers 4005, 4018, 4023 (see below), 4025 and 4030 are or were made with brown/crème livery.







The picture left of WPc (Pullman with kitchen) 4005 shows strange looking wooden inserts at the kitchen windows. These inserts are used also in other Pullman cars by Elettren. I prefer the semi-transparent kitchen windows as shown with the Sud Express cars above.

Fleche d'Or Pullman car 4013 was



later rebuilt as a service car for train cruises and held amongst others douche cabins for use by the travellers. Elettren made this car in two liveries, blue/grey and blue/crème.

Elettren also made Etoile du Nord type (9 windows) Pullman cars with and without kitchen with the CIWL numbers 4095, 4098 4111, 4115 and 4127. Some of these second-class Pullman cars were given a brown/crème livery by Elettren which the real Etoile du Nord type never wore so I show only the blue/crème versions here, 4127 without and 4095 with kitchen.





The most luxurious Pullman cars were the Cote d'Azur type cars. Elettren Cote d'Azur cars with CIWL number 4141, 4153 and 4158 wear the normal Pullman blue/crème livery. Car number 4148 is also blue/crème but has some windows blinded; it was transformed into a bar car for the Pullman Orient Express and wears this name on a plate covering the blinded windows. The Cote d'Azur cars with number 4160, 4162 and 4146 had their interior changed after WW2 to be used as Salon Bar car for the Train Bleu. These wore a blue livery; Elettren made models of this Salon Bar with numbers 4162 and 4164.





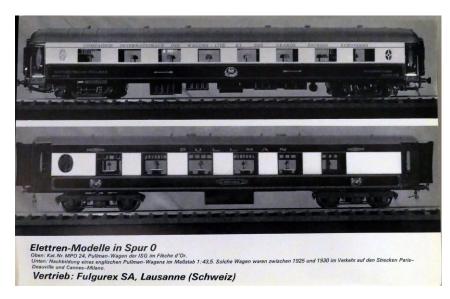


Above shows C^te d'Azur Pullman car without kitchen 4153 its lighted interior. Shown below are Pullman car 4141 and 4148. I wonder why at the car with number 4141, a Pullman with kitchen, the CIWL emblem is not placed below the fourth window as on the real car.





The black and white Fulgurex advertisement shown right is from 1970 and is a mystery. The Pullman car at the top is an Elettren made Fleche d'Or WP. The car at the bottom is a model of one of the British Pullman cars that were used for a short period in Europe since the CIWL Pullman cars were not yet available. I have seen one of these models and it has a Fulgurex marking. However, it does not at all look like an Elettren product. It resembles more a product of Exley (English 0-gauge passenger car maker) but the advert explicitly mentions Elettren Models.



5.1.4 F – Luggage cars

Elettren is unique in making available not only the 6-door and 8-door metal luggage cars but also the Fleche d'Or luggage car with containers. All these luggage cars were presented in the Fulgurex/Elettren leaflet shown above. These cars were made in 3 liveries: brown/crème, blue/crème and blue. It is questionable whether the original 8-door luggage car ever wore another than a blue livery.

Shown here is a 6-door car with CIWL number 1265. Brown/crème luggage cars were used for the Sud Express when the Sud Express Pullman cars also wore the brown/crème livery. These cars have at both sides a red tail light; when running only the light at the back is lighted. The six sliding doors as well as the side doors at the vestibules, can be opened. These cars have correctly a shorter length than the other CIWL cars and measure 48 cm.







This blue 8-door luggage car has CIWL number 1252. Also, here all doors can be opened; the sliding doors of this car slide correctly internally, while with the 6-door cars the doors slide externally.







Only three container luggage cars were made by the CIWL with numbers 1260, 1261 and 1262. Shown here is the Elettren model of a blue version with CIWL number 1260. Elettren also made models with numbers 1261 and 1262, so a complete set can be collected. The containers are fixed, i.e. not removable from the car. The doors on the central housing can be opened. The car is rather short at 40 cm. Contrary to the other Elettren CIWL cars the roofs of these cars were not made of plastic, but were metal.





5.1.5 Mitropa cars

Some CIWL cars were left in the Eastern part of Germany at the end of WW2 and were confiscated and used by the East German company Mitropa. Elettren announced in 1980 a Mitropa car, however they used some of their CIWL models to represent a sleeping car as well as a restaurant car of the Mitropa. The sleeping car has Mitropa number 055-015 and the restaurant car 054-013. These numbers seem to be a mixed up since Mitropa uses 055 for restaurant cars and 054 for sleeping cars.





5.2 PLM cars

Between 1900 and 1910 a large number of metalized wooden 4-axle passenger cars were made for the PLM (Compagnie des chemins de fer de Paris à Lyon et à la Méditerranée) railway in a number of different configurations and different classes. In the seventies these cars became popular to model by the Swiss companies Fulgurex and Metropolitan. Fulgurex commissioned models in gauge 1 from Wilag and in gauge 0 from Elettren while Metropolitan had a set of these cars made in H0 gauge by Pocher. Elettren made 7 different PLM cars: 5 passenger cars, a luggage car and a postal car. While the Wilag gauge 1 PLM cars were in a tinplate style, the Elettren cars were scale representations of the real cars. These cars had metal roofs with a prototypical correct exceptionally large amount of roof vents on the passenger cars. Although all seven cars were announced in the Fulgurex leaflet shown at the beginning of this chapter it seems that the luggage car and postal car were added to the range much later. The picture shows the complete range with a matching RivaRossi 0 gauge PLM Pacific locomotive.





The roof of the passenger cars, but not of the luggage and postal car, can easily be removed; some of the ventilators have threads and can be unscrewed thus loosening the roof. The interior of these cars can then be fully appreciated. The picture left shows the interior of the third-class car; Note the toilet bowl and sink and luggage racks. The wiring and interior lights armatures are also visible.





The prettiest and most interesting car is the Lits-Salon. This first-class car has 4 first class compartments and a large and a small salon, both with an adjoining toilet area. The picture above shows the compartment side, the salons can be recognised since they have curved window tops. The interior of the salons includes sofas, comfy chairs, tables and also curtains at the corridor side as can be seen in the picture left of the large salon. The PLM cars have different lengths, the Lits-Salon is 51 cm long.

The PLM cars had a livery based on the class. The first-class cars, including the Lits-Salon cars, were red/maroon at the bottom with black around the windows; the second-class cars were yellow with black while the third-class cars were all green. Shown right and below is the first-class car; this has 7 compartments and two toilets and is 47 cm long.







The first/second class car is peculiar with its two-colour livery. The picture shows it from the corridor side. It is an A3 B4 type car which means it has three first class and four second class compartments. The model is 44 cm long.

Note that on all door windows the text "escalier du sortie" can be read (in mirror image), a warning that there are steps when you get off the train. Looking through the window at the compartment side one can see mirrors and pictures above the seats.

The second-class car shown below has 8 compartments and is 47 cm long.







The all-green third-class car has what is called a Z-layout; The corridor switches positions with the compartments in the middle of the car. Each half has 5 compartments so a total of ten third class compartments is present. This car is the longest, the Elettren model is 52 cm long. As can be seen there are also doors in the centre of the car with folding steps below.

The PLM luggage car is an eight-door version based on a type that was made for the PLM in 1928. It has an asymmetric look-out in the middle of the car. The luggage car has at both sides a red tail light; when running only the light at the back is lighted.



The luggage doors can be opened as can the small door in the middle of the car. The model is 47 cm long.

The model of the PLM postal van was introduced by Elettren in 1993 and although mentioned on the Fulgurex leaflet not made for Fulgurex. When it was introduced Lemaco was an Elettren distributor, at least for Germany and Switzerland. I assume it is made of brass and not of tinplate, being the first brass Elettren model. The car is 50 cm long.





6 Finescale products

Although re-issues of older models are made and a range of tinplate cars is still advertised on the website, from about the midnineties the main focus of Elettren is on fine-scale 0-gauge models. Elettren makes locomotives and passenger cars, however, the range does not seem to be targeted at making complete trains of locomotives with matching cars.

6.1 Locomotives

The three locomotive models made until now are models of steam locomotives. Elettren announced around 2000 a model of a German electric Baureihe 101 locomotive, but as far as I know only a pre-production model (shown right) was ever made.



616

REPLANTATION RAPOSTS

REPLANTATION RAPO

The first finescale locomotive was announced in 1996. It is a unique looking FS Group 60 locomotive with postal compartment. This locomotive, or self-propelled railcar, consisted of a vertical boiler, postal and luggage compartments placed on a 0-4-2 chassis with two outside cylinders and Walschaerts valve gear. 85 of these were made by Maffei in 1907 and used for light trains in rural areas in Italy. Elettren made models with number 616 for 2-rail operation on 0-gauge track. This is a highly detailed brass fine-scale model made in limited numbers. The model is 22 cm long.

616



At the right is a version with a grey roof and partly green body which was shown at the Rail Expo 2013 in Pontoise next to a model of a so called "100 Porte" car (see 6.2)



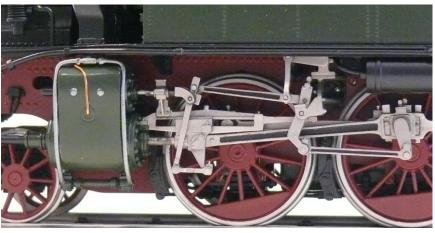
BORSIC BERLIN 1907 The next model announced by Elettren in 2002 was a FS Group 880 2-6-0 tank locomotive. This was made in three liveries, the grey and black shown right and the green version below. It is a highly detailed model with a detailed cab interior. It is 21 cm long. It was described by Elettren as: Faithful scale reproduction of the



steam locomotive belonging to the Group 880. The model is entirely built in brass - it is a perfect synthesis of various techniques such as lost wax casting in brass - chemical photo etching, turning and laser cutting. Features are: Sprung buffers and axles – Opening smokebox door, water tank roof hatches - Wooden footboard and ceiling in the cabin - Stainless steel wheel rims - 12 V Faulhaber motor with constant light circuit – Direction controlled headlight illumination - Laser cut frame - Pad-printed lettering - Radius 1.60m.







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The next finescale locomotive is an old acquaintance. Elettren makes a finescale model of the FS 691 of which they had made a large quantity previously in tinplate style. It was shown, as far as I know for the first time, at the Rail Expo 2013 in Pontoise, France. The picture is taken by Dick while the model was exhibited in a glass case. I remember having spent quite some time looking at this eye candy.



This model is made in a small series. A customer may choose some details like locomotive number and livery and then will be patiently waiting till his order is fulfilled.





6.2 Passenger cars

The finescale cars are made of brass. These cars are finescale, but still are made to run. They do not have the opening doors which all previous Elettren cars had. First in the finescale type were a range of Swiss SBB wagons. Later Elettren made French cars (Le Capitole) and Italian cars (Vettura 100 Porte), the latest offerings are SNCF 3-axle cars (3 Pattes).

The Swiss passenger cars range included a restaurant car, a first/second, second/third- and third-class car. When this range was introduced in 1995 Elettren collaborated with the Swiss company Allmo; Allmo took care of sales in Switzerland. An Allmo leaflet mentions that these cars were the first Elettren cars made from brass. Note however that the floor of these cars was made of wood and looked very realistic.



These 4 modelled cars are based on preserved cars owned by the Swiss (SBB) Historical Heritage Foundation. The restaurant car was made by Elettren in brown and in green. The preserved car wears a brown livery as shown below.





The interior of these cars is nicely detailed including white table linen and plates as can be seen right. The first/second class car below shows red seats in the first and green seats in the second class; the third class has brown seats.





The cars of type Y of the SNCF, named UIC for the International Union of Railways (Union Internationale des Chemins de Fer), were delivered in 1327 copies from 1963 to 1976. When delivered they wore a green livery which was later changed to a green with grey livery. The cars for the named train "Le Capitole", a train famous for its high speed before the TGV era, wore a red livery. Elettren made models of type Y UIC cars in the different liveries.



The specification of these models

mentions: Handcrafted from brass in small series. Metal body mounted on sprung bogies fitted with insulated axles according to NMRA standards - sprung buffers - model screw couplings - brake hoses, accumulator box, dynamo, intercom bellows and other accessories mounted on metal frame - correct inscriptions on the body and chassis - very complete interior fittings - interior



lighting. All the components, the number of windows and the accessories corresponding to the prototype and in accordance with the different types of cars.

Left: First class "Le Capitole" car

Right "Le Capitole" restaurant car and below first and second class cars in green and green/grey livery.













Left a model of an UIC couchette (sleeping) car; note the curtains at the occupied compartments.

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In 2003 Elettren announced the introduction of fine scale Italian passenger cars. These were the so called 100 doors ("100 porte") cars which were introduced by the FS in 1910. The cars were made in first, second and third class and as a combined first/second class car. Elettren has modelled these 4 types in three different liveries as used on these cars through the years: green, chestnut/isabella (brown/pale yellow) and all brown. These Elettren cars are made entirely of brass, the technical solutions adopted are brass photo etching and lost wax casting. The interior décor is faithfully reproduced and interior lighting is added. The steps on the carriage are made of real laser cut wood. The cars are 43 cm long and need a radius of 2 meter.









The chestnut/isabella (brown/pale yellow) and all brown livery

The, until now, latest fine scale brass passenger cars made by Elettren were announced in 2011. These are based on the SNCF "Trois Pattes (three legs)"; six-wheel cars that were modernised ex-PLM old carriages. They were used for local trains around France. There are first- and second-class versions and combinations thereof including a combination with a luggage compartment. I assume that Elettren has made all these different versions, but these cars are seldom seen.



The first- and second-class car shown above had been fitted with passengers by a previous owner.



Shown left a pre-production model shown at the Nürnberg Toy Fair which did not receive any lettering yet.



7 Marketing and Sales

In many companies the Marketing & Sales department is considered, especially by this department themselves, the most important. Not so with Elettren. They do not have departments and are mainly a small manufacturing workshop. But of course, some marketing and sales aspects, like advertising and resellers, are of interest.

7.1 Catalogues

As far as I know Elettren issued only two catalogues through the years. The first one, which is undated but I assume is from around 1960, was loosely bound and had no page numbers. I have seen a version with less pages than the one I have, and there might be versions with more pages. Except for the cover, see below, it is a black and white catalogue.

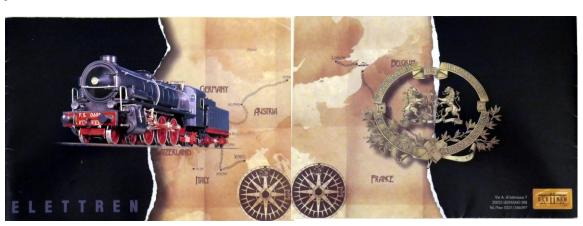


Front cover Back cover



My catalogue has a stamp of Onorato Isacco, a modeltrain shop from Torino that is still in business and apparently sold Elettren trains. The catalogue pictures and describes the two Elettren locomotives (FS691 and E428), Italian, Swiss and CIWL tinplate cars, the freight car range and the transformer.

In 1996 Elettren issued their 50-year anniversary catalogue, with the FS691 on the front and a CIWL emblem at the back.



This catalogue was very nicely laid out; a studio and art director were involved. The text was in Italian, French, German and English to show that Elettren has an international customer base. It contained a short history of the company and full colour pictures of the whole range available in 1996.



Above the catalogue pages with the history of Elettren; the text was the starting point for chapter 3. Below one of the pages with the CIWL range.



A special leaflet was also made for the Elettren 50th anniversary. The bottom of this leaflet was a form that could be filled in and sent to Elettren to order a catalogue, see right.

The pictures used in the catalogue were later also used on the Elettren website (http://www.elettren.it/). The website originally also had a good design. Later amendments however made it a bit messy and it seems not to be updated regularly.



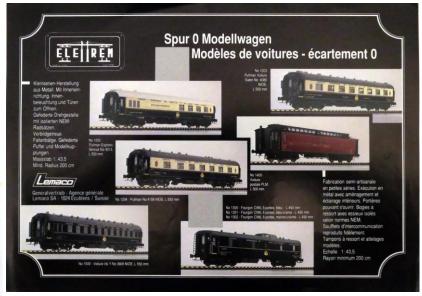
Although Elettren was sold via Fulgurex their products were generally not shown in Fulgurex catalogues but in separate leaflets. Two Fulgurex catalogues of the late eighties show some Elettren (picture left).



7.2 Leaflets & pricelists

Apart from the leaflet shown above there were a couple of others made. Most of these seem to be from the nineties. The one shown right mentions Lemaco as reseller. This leaflet might even be made by or for Lemaco. The two leaflets below are both specific for Elettren and mention the Elettren address.









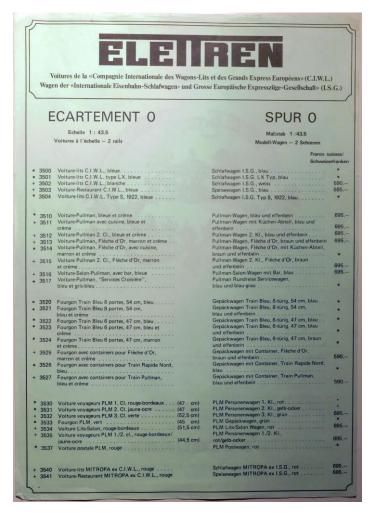
The Lemaco period for Elettren only lasted a few years. Thereafter Allmo became reseller, at least for Switzerland as can be seen in the Allmo News left. The leaflet right shows the Elettren address and the Allmo address copied in.

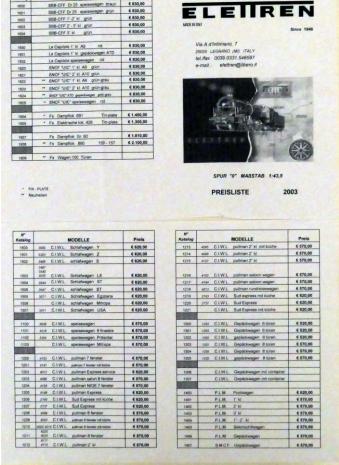


The French market is also interesting for Elettren as the leaflets with French text below show:



Although Fulgurex did not show Elettren products in their catalogue, their pricelists showed Elettren prices. The green one below left is a Fulgurex pricelist from 1983. The Elettren pricelist shown below right is from 2003 and shows the prices for direct sales from Elettren to their private customers.



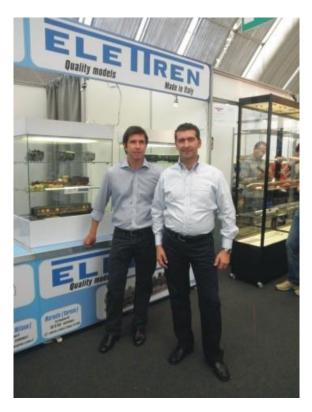


7.3 Fairs

Fulgurex was present at the yearly Toy Fair in Nürnberg and the reports of this fair in the model railway press often mentioned the Elettren products shown by Fulgurex. In 1991 the Elettren products were not shown at the Fulgurex stand anymore but at the Lemaco stand. From 1996 Elettren had its own representation at the Nürnberg fair. From 2015 Elettren seems, like other smaller model railway manufacturers, not to be present at this fair anymore.

Lately Elettren is present at fairs were direct contact with clients is possible like "Model Expo" in Italy, and specialistic fairs like the "Plattform der Kleinserie" in Bauma, Switzerland.





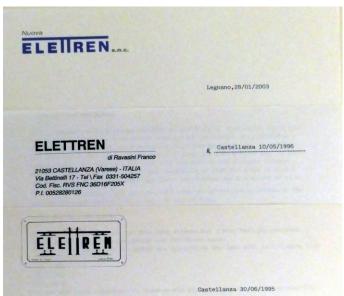
At "Rail Expo" in Pontoise, France, Elettren shared a booth with the other small Italian model train builder Lombardi.





7.4 Advertising, Box art, Letterheads, Season's Greetings

As far as I know there are no specific Elettren advertisements. Fulgurex advertised with all of their product lines and the advertisement shown right is from 1972.







Various styles of the look of the Elettren name have been

used through the years on letterheads (left) and boxes (right). I have seen some models in wooden boxes but most models seem to be delivered in blue carton boxes with the Elettren name printed in gold lettering. The content was in general mentioned on a white sticker-label. The name Elettren used as a symbol of an electrical railway overhead wire system, as on the bottom letterhead and the box on the right side, is quite striking.

As a sign of the customer relation management by Elettren some Christmas cards are shown below. The first two came by mail (the left one in 2005), while the next two came by e-mail in 2008 and 2012.









7.5 Buying Elettren products

In the early days Elettren products, which I assume were made in low quantities, were sold in local shops in Milan and might also have been available directly from Armando Ravasini.

It was a model of the Italian class E428 that caught the eye of Count Antonio Giansanti Coluzzi, when it was on display at a model and toy shop in Milan, Italy. Count Coluzzi arranged to meet Armando Ravasini and agreed to have 50 models of the E428 constructed to be sold by him. The Fulgurex company was initiated then. Fulgurex was the main reseller of Elettren product from then on until 1990. As mentioned before, see 5, Fulgurex commissioned the CIWL and PLM range of cars. The CIWL cars from the tinplate range, see 4.2, were also instigated by Fulgurex. In that period Elettren products were sometimes just classified as Fulgurex items, but the boxes, and in general the underside of cars, did show the Elettren name. I assume that not many Elettren products however were sold directly.

After 1990 the cooperation between Fulgurex and Elettren stopped. For a short period Lemaco, the predecessor of Lematec, was reseller, at least for Switzerland. The pricing of Elettren models sold by Lemaco was different; models became much more expensive which I assume will not have helped to achieve large sales volumes. After a few years, in 1995, the Swiss company Allmo became reseller for Switzerland. An Allmo newsletter mentions even cooperation between Allmo and Elettren. Whether the series of Swiss finescale passenger cars (see 6.2) was initiated by this cooperation I do not know.

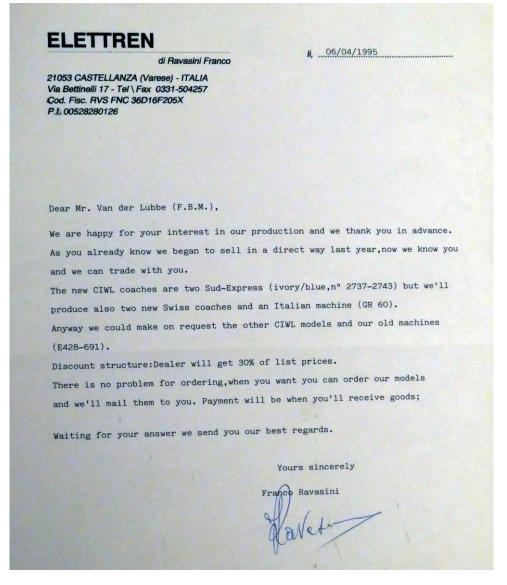
Elettren has some famous customers. "We recently discovered - explains Fabio Ravasini proudly - that among our admirers there was Frank Sinatra. We received a letter from Frank Cattaneo, who wrote some songs for Sinatra, with attached photographs of "the Voice" next to our models, with the brand clearly in evidence"

When in 1995 I wanted to buy some Elettren cars I asked Elettren, via a letter, how to arrange for this. The answer by Franco Ravasini is shown right showing that direct sales were, and are still, possible. So, I ordered a couple of items through the years, also a combined order with Tamme. In 2008 I even went to Elettren in Italy to collect a few cars. Recent contact information for Elettren can be found on their website:

http://www.elettren.it/

I have some Elettren items, a lot of pictures shown in this book are from items in my collection. Some of these however I did not buy from Elettren but I acquired on the second-hand market in shops, at auction houses and via internet. When searching for Elettren, items can be found and often at an "acceptable" price. When on the internet one should also search for Elletren. Eletren or Ellettren or even Electrotren, since many sellers seem to have problems with spelling of the name. Some sellers are even offended when I point out this mistake, which I thus don't do anymore.

To conclude: to see some Elettren items moving around some videos are available on the internet. When



searching I found out that most of these are made by me, so I made an internet page where you can find some of these videos made by me with Elettren trains running in the garden: http://sncf231e.nl/elettren-trains/

8 Production index

The tables below list the items produced by Elettren through the years. I have compiled these tables based on information from catalogues and pricelists. I do not know whether everything produced is in these tables. Further Elettren made on request special versions or liveries of some of their items. Many items are illustrated in the previous chapters. During the production years, changes (improvements) were made mainly to the tinplate, but also the CIWL items. These are not further mentioned here but are in general discussed in the previous chapters.

Tinplate style

Item description	Catalogue reference	Additional remarks
FS 691 4-6-2 Pacific locomotive	0691	Original 3-rail AC; later also available in 2-rail and DC
FS E428 2BB2 Electric locomotive	0428	Available in FS brown and blue and in SBB green
FS 746 2-8-2 Mikado locomotive	0746	Made in low numbers and with higher price
Italian FS passenger car – 1st class	P027	Before 1960 1st/2nd class - Two-tone brown
Italian FS passenger car – 2 nd class	P028	Before 1960 3 rd class - Two-tone brown or grey
Italian FS Luggage car	B026	Brown or two-tone brown
Italian FS passenger car – 1st class	BZ460/M or G	Newer version with inset window frames in brown or grey
Italian FS passenger car – 2 nd class	BZ459/M or G	Newer version with inset window frames in brown or grey
Swiss SBB passenger car – 1st class	V027	Before 1960 1st/2nd class - Green
Swiss SBB passenger car – 2 nd class	V028	Before 1960 3 rd class - Green
Swiss SBB Luggage car	B026	Green
CIWL Pullman car	P024	Blue/crème – An early green/crème version is known to exist - Final version has plastic roof
CIWL Pullman car - Fleche d'Or	FP024	Brown/crème - Final version with plastic roof
CIWL Restaurant car	R025	Blue- Final version has plastic roof
CIWL Sleeping car	L023	Blue- Final version has plastic roof
CIWL Luggage car	B027	Blue
German DSG Restaurant car	DR025	Red – Minden-Deutz bogies
German DSG Sleeping car	DL023	Red – Minden-Deutz bogies
German DSG/Mitropa Restaurant car	1900	Red - "Schürzenwagen" - Görlitz bogies
German DSG/Mitropa Sleeping car	1901	Red - "Schürzenwagen" - Görlitz bogies
German DB/DR passenger car – 1 st /2 nd /3 rd class	1902	Blue or Green
German DB/DR passenger car –1st class	1903	Blue or Green
German DB/DR passenger car – 2 nd class	1906	Blue or Green
German DB/DR Postal car	1910	Blue or Green
German DB/DR Luggage car	1911	Blue or Green
Italian FS transformer car	STA101	Different colours - 5- or 6-axles
Italian FS flat car with stakes	L107	6-axles
Italian FS flat car with stakes	PT105	4-axles
Italian FS flat car with 3 cable rolls	BC108	4-axles
Italian FS open wagon	SB106	4-axles
Italian FS tank car Esso	E102	4-axles – Silver tank

Italian FS tank car Shell	SH103	4-axles – Yellow tank
Italian FS tank car Standard	ST104	4-axles – Dark red tank
Italian FS tank car BP	BP109	4-axles – Green tank

The CIWL and PLM range

Item description	Catalogue reference ¹	Additional remarks
CIWL Sleeping car Type LX	3501 1503	Blue – Various CIWL numbers available
CIWL Sleeping car Type S	3500 1502	Blue
CIWL Sleeping car Type ST	3504 1504	Blue - Car 2644 with extra lining
CIWL Sleeping car Type ST	1508	Blue
CIWL Sleeping car Type S	1507	Blue - USA Transportation Corps lettering
CIWL Sleeping car Type Y	3500Y 1500	Blue
CIWL Sleeping car Type Z	3500Z 1501	Blue
CIWL Sleeping car for Egypt	3502 1505	White
CIWL Restaurant car	3503 1100	7 bays
CIWL Restaurant car	1101	8 bays
CIWL Restaurant car	3503P 1102	Presidential car no 3354 – 7 bays
CIWL Pullman - Fleche d'Or	3510 1208	Blue/crème
CIWL Pullman - Fleche d'Or	1203	Blue/crème with arrows – Minden-Deutz bogies - NIOE
CIWL Pullman - Fleche d'Or kitchen	3511 1209	Blue/crème
CIWL Pullman - Fleche d'Or	3513 1211	Brown/crème with arrows
CIWL Pullman - Fleche d'Or kitchen	3514 1210	Brown/crème with arrows
CIWL Pullman – Etoile du Nord	3512 1215	Blue/crème
CIWL Pullman – Etoile du Nord kitchen	3512C 1213	Blue/crème
CIWL Pullman – Etoile du Nord	3515 1212	Unrealistic Brown/crème with arrows
CIWL Pullman – Etoile du Nord kitchen	3515C	Unrealistic Brown/crème with arrows
CIWL Pullman – Cote d'Azur	1200	Blue/crème
CIWL Pullman – Cote d'Azur kitchen	1201	Blue/crème
CIWL Pullman – Sud Express	1207	Brown/crème
CIWL Pullman – Sud Express kitchen	1206	Brown/crème
CIWL Pullman – Sud Express	1220	Blue/crème
CIWL Pullman – Sud Express kitchen	1221	Blue/crème
CIWL Bar car	3516 1216	Blue
CIWL Bar car	1217	Blue NIOE
CIWL Service car	3517 1218	Blue/grey
CIWL Service car	1202	Blue/crème - Lettering "Pullman Express"
CIWL Luggage car 6-door	3522 1300	Blue
CIWL Luggage car 6-door	3523 1301	Blue/crème
CIWL Luggage car 6-door	3524 1302	Brown/crème

 1 When two numbers are given, the first is the Fulgurex catalogue number and the second the Elettren catalogue number 1 PAGE 51

CIWL Luggage car 8-door	3520 1251	Blue
CIWL Luggage car 8-door	3521 1256	Blue/crème
CIWL Luggage car 8-door	1252	Brown/crème
CIWL Luggage container car	3526 1307	Blue
CIWL Luggage container car	3527	Blue/crème
CIWL Luggage container car	3525 1306	Brown/crème
Mitropa Sleeping car	3540 1506	Also available with Minden-Deutz bogies
Mitropa Restaurant car	3541 1103	Also available with Minden-Deutz bogies
PLM passenger car 1st class	3530 1401	Red/black
PLM passenger car 2 nd class	3531 1402	Yellow/black
PLM passenger car 1 st /2 nd class	3535 1404	Red/yellow/black
PLM passenger car 3 rd class	3532 1403	Green
PLM Lits Salon car	3534 1405	Red/black
PLM Luggage car	3533 1406	Green
PLM Postal car	3537 1400	Red

Finescale products

Item description	Catalogue reference	Additional remarks
FS Gr.60 Postal/Luggage 0-4-2 locomotive	1907	Available in various liveries
FS 880 2-6-0 locomotive	1908	Available in various liveries
FS 691 4-6-2 Pacific locomotive	691.022	Black - Also available in photo grey livery
SBB Restaurant car	1600	Brown
SBB Restaurant car	1601	Green
SBB passenger car 1 st /2 nd class	1602	Green
SBB passenger car 2 nd /3 rd class	1603	Green
SBB passenger car 3 rd class	1604	Green
SNCF Le Capitole passenger car 1st class	1800	Red - Available with various car numbers
SNCF Le Capitole passenger car 1 st class with luggage compartment	1801	Red
SNCF Le Capitole Restaurant car	1802	Red
SNCF UIC passenger car 1st class	1820	Green
SNCF UIC passenger car 2 nd class	1821	Green - Available with various car numbers
SNCF UIC passenger car 1st class	1822	Green/grey
SNCF UIC passenger car 2 nd class	1823	Green/grey - Available with various car numbers
SNCF UIC couchette car 2 nd class	1832	Green - Available with various car numbers
SNCF UIC passenger car 1 st class with luggage compartment	1824	Green/grey
SNCF UIC Restaurant car	1825	Red
FS 100 Porte passenger car 1 st /2 nd class	1909	Green or two-tone brown or brown
FS 100 Porte passenger car 1 st class		Green or two-tone brown or brown
FS 100 Porte passenger car 2 nd class		Green or two-tone brown or brown

FS 100 Porte passenger car 3 rd class	Green or two-tone brown or brown
SNCF "trois pattes" passenger car 1st class	Green - Available with various car numbers
SNCF "trois pattes" passenger car 1 st /2 nd class	Green - Available with various car numbers
SNCF "trois pattes" passenger car 2 nd class	Green - Available with various car numbers
SNCF "trois pattes" passenger car 2 nd class with luggage compartment	Green - Available with various car numbers

