



Manufacturer of electric multiple units and locomotives





Softronic Group:

- Softronic: Producer of electric multiple units and locomotives.
- Softrans: Railway freight and passenger transport operator

Softronic deals with rail rolling stock construction, modernization, repairs and upgrades.

Established in Craiova Romania in 1999 with the main purpose of modernizing locomotives Softronic is today Southeastern's Europe single manufacturer of Electric Multiple Unit trains and locomotives.

Softronic proudly continues the city's tradition in the locomotive manufacture, our top engineers coming from the former Electroputere plant where over 3000 electric and diesel locomotives were built.

With more than 200 locomotives modernized, 18 new locomotives built and over 400 employees Softronic provides tailored and environmental friendly solutions to more and more clients.

Softronic values its employees (most of them young and top graduated from Universities) recognizing their importance helping them develop further, sustaining together the growth.

2007
Okuma turning machines



2008
Ermak Punch Press



2009
Plasma and Laser
Machine



Softronic has fully integrated production capabilities to manufacture locomotives and EMUs from the ground up and to provide complete overhaul upgrade, maintenance and testing services including all support systems in their entirety.

2013
Okuma Milling machine

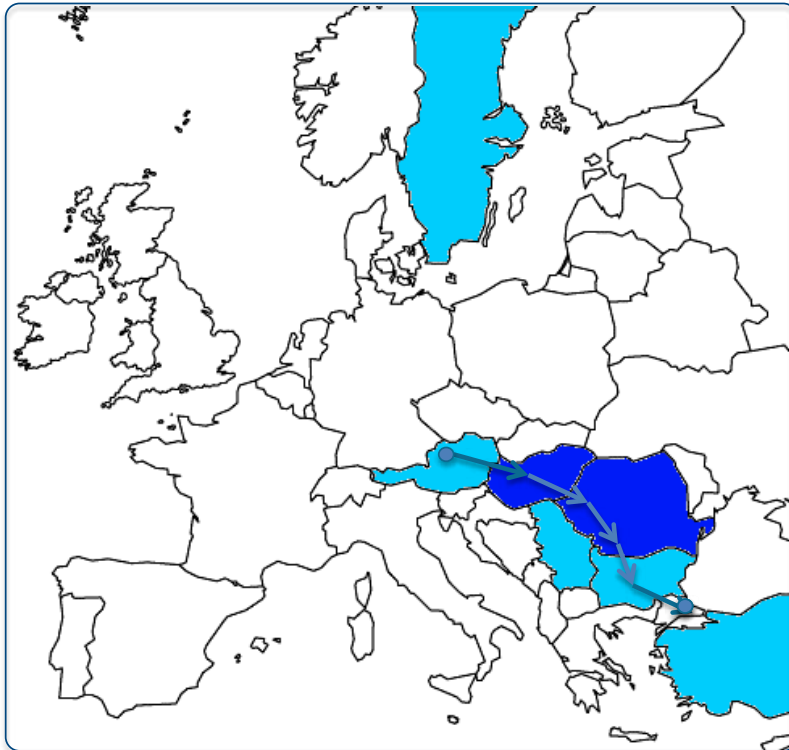


2011
Bystronic laser cutting & bending machines



2010
Testing facility for
engines





Dark Blue Main Markets
Light Blue Future Markets

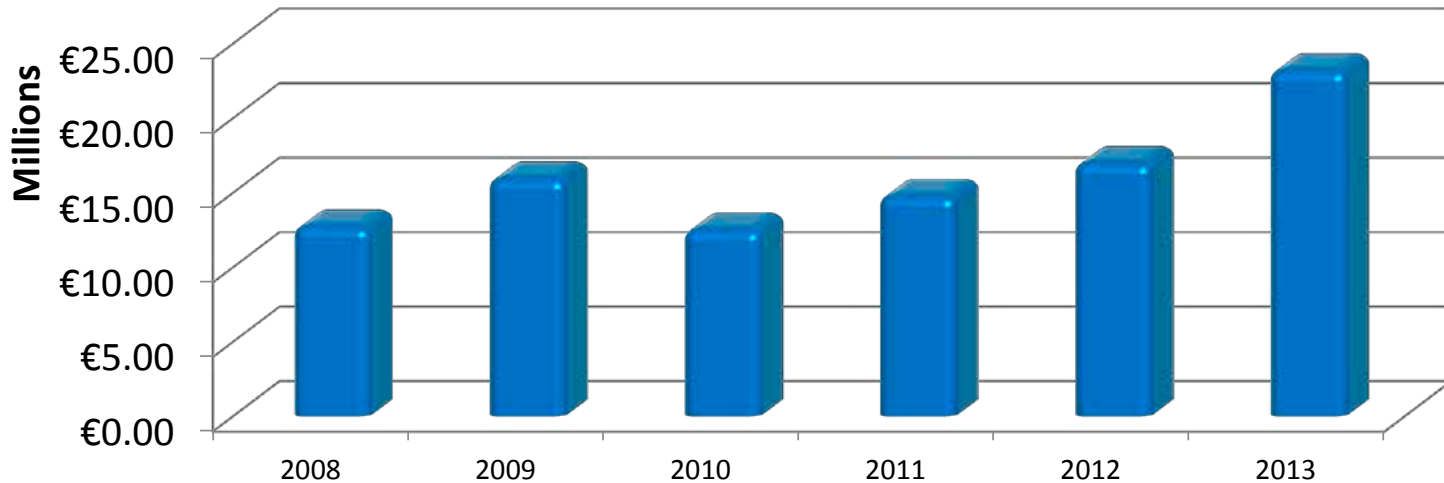
Partners

- DB Schenker (Romania)
- Garanti leasing
- Unicredit leasing
- JME Consulting (Sweden)
- BCR leasing (Erste Group)
- Raiffeisen leasing
- Intesa San Paolo

Main clients

- DB Schenker (Romania) 6 Softronic locos
- DB Schenker (Hungary) 7 Softronic locos
- MMV (Hungary) 5 Softronic locos
- Cargotrans Vagon (Romania) 1 Softronic loco
- Transferoviar Group (Romania) 1 Softronic loco
- CFR (Romania Rail States) 3 Softronic locos
- VestTrans Rail (Romania)

Softronic Turnover



For the last three years, Softronic has had a steady growth as we have increased significantly thank to the trust and confidence our clients have shown.

For 2014 we expect to grow by 30% showing the investment in our training programs under expert management and by the increasing number of locomotives and EMUs operating.



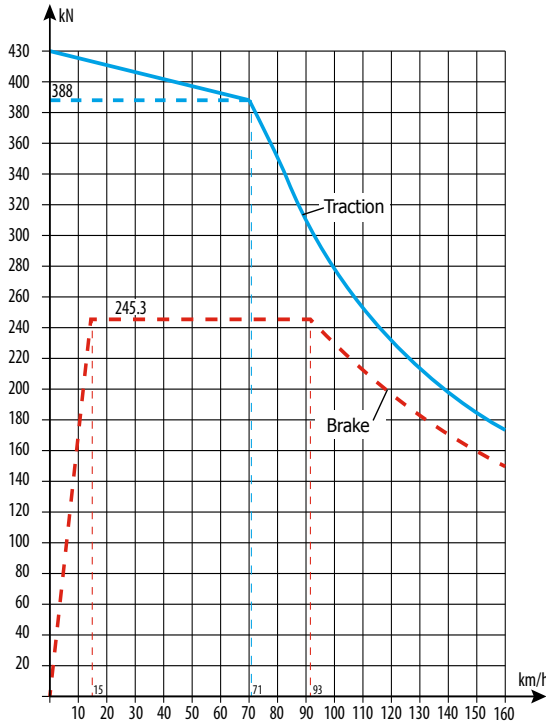
By combining experience with innovations systematically oriented to client benefit and cost effective in 2011 Softronic built the first asynchronous traction motor locomotive in Romania.

Understanding the needs of transport operators we are able to offer a modern and reliable locomotive Transmontana specifically adapted for country conditions like: Romania, Hungary, Slovakia, Austria and Turkey etc.

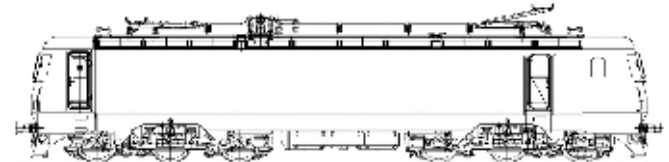
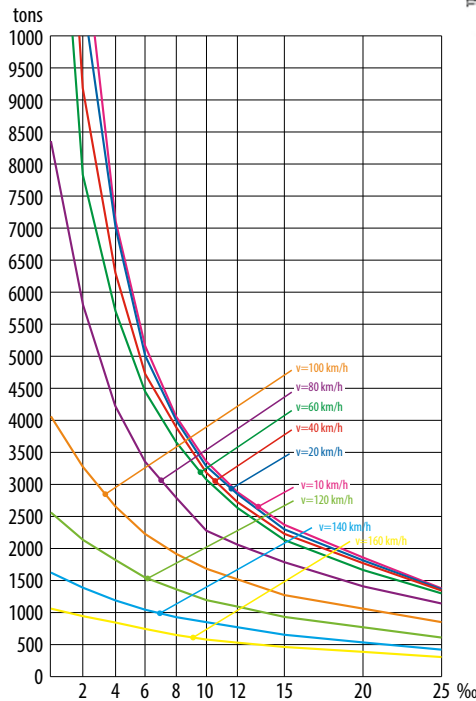
The locomotive, equipped with regenerative braking (21% economy), is powered with 15 kV AC an 25 kV AC, capable of reaching speeds of 120 Km/h when operating freight services and 200 km/h passenger traffic.

Transmontana is a 6600 kW electric six axle vehicle with a modern design meeting all technical parameters and the following standards: EN,ISO, UIC

Traction effort and dynamic brake characteristics



Train loads as a function of gradient and operating speed



Traction engine	6 x 1100 kW
Power	6600 kW
Design speed	120/200 km/h
Tractive force at Start-up	435 kN
Traction Voltage	25 kV AC/ 15 kV AC
Safety Systems	PZB Indusi, EVM120, LS90, AWS (Anti wheels slide and slip protection)
Control system	Micro-controllers and microprocessors based

Driver Desk UIC 651 approved
made by Softronic



Bi-system ABB Transformer
(Switzerland)



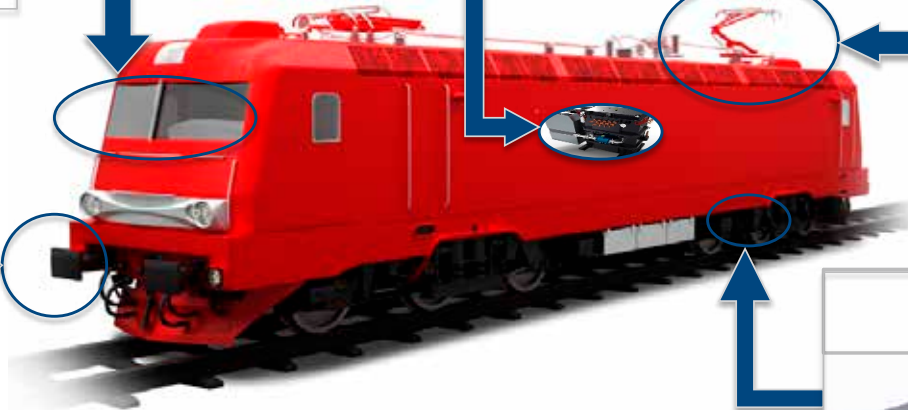
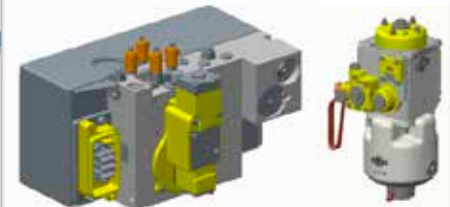
Stemmann Technik
Pantograph (Germany)



Crash puffer
Est Eisenbach
(Germany)



Knorr Bremse braking
System (Germany)



Adhesion, Main advantage of six axle locomotive Transmontana when operating heavy trains



Six axle locomotive Transmontana capable of towing trains up to 3000 tons

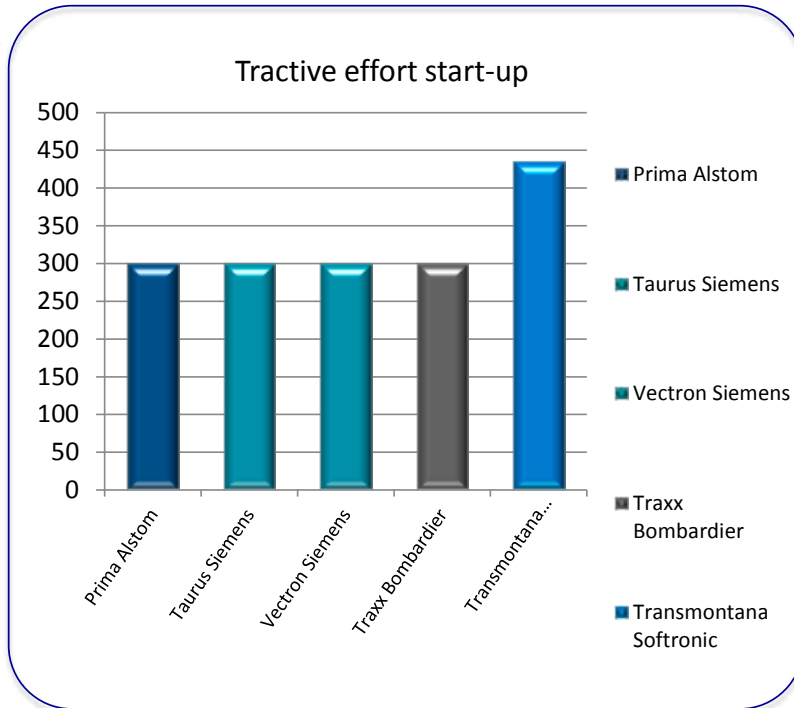


2800 tons trains needs two 4 axles locomotives increasing costs and reducing profit



4 axle locomotive capable of towing up to 1860 tons trains





Softronic Transmontana (6 axles)

6600 kW – 21,5 t/axle

Alstom Prima (4 axles)

6400 kW – 20,5 t/axle

Bombardier Traxx (4 axles)

5600 kW – 20,5 t/axle

Siemens Taurus (4 axles)

6400 kW – 20,5 t/axle

Siemens Vectron (4 axles)

6400 kW – 20,5 axle



Softronic's newest product, Hyperion, is an electric multiple unit train bi-system capable to operate both 25 kV AC and 3 kV DC.

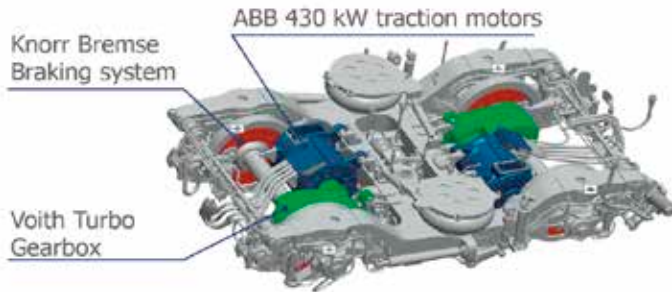
Hyperion is the first electric low floor train ever to be built in Romania, aiming to reduce costs and increase efficiency.

The train was built using cutting edge technologies after a 2012 project. In the same time it is based on our previous experience in railway vehicles manufacture and equipped with the best electrical and mechanical components.

Comfort and safety are key aspects of our train offering open-space compartments, free internet access, diffused lighting systems and comfortable seats. All of these making short and long journeys an enjoyable and recreational travelling experience.

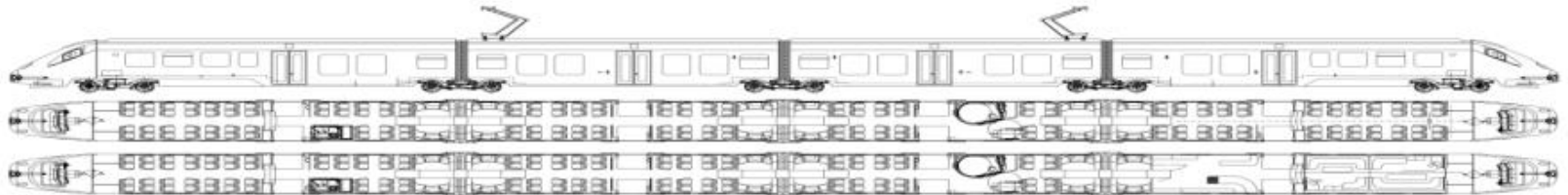
The train meets the specific requirements of all European Standards (EN and UIC) and the technical specifications for interoperability (TSIs).

Hyperion motor bogie



Catenary supply voltage	25 kV - 50 Hz AC / 3 kV DC
Axle arrangement	Bo'2'2'2'Bo'
Number of vehicles	4
Seating capacity	188
Standing capacity (4 ppl/m ²)	215/225
Floor height:	600 mm
Entrance doors	1300 mm
Number of entrances	1 entrance per car side (8 doors total)
Overall length	69 935 mm
Vehicle height	4230
Tare weight	134,6 t
Maximum acceleration	0.85 m/s ²

Primary Plan



Quick access to 5 depots in Romania and one in Hungary (Budapest end of 2014)

24/7 Supervision and tracking of locomotives

Mobile service specialists based in Romania



25/03/2014 18:30

- | | |
|---------------|---------------|
| 1. TM 001 CFR | 1. PH 001 DB |
| 2. TM 002 MMV | 2. PH 002 MMV |
| 3. TM 003 DB | 3. PH 003 DB |
| 4. TM 004 DB | 4. PH 004 CFR |
| 5. TM 005 DB | 5. PH 005 CFR |
| 6. TM 006 DB | 6. PH 006 DB |
| 7. TM 007 MMV | |
| 8. TM 008 DB | 1. EMU 001 ST |
| 9. TM 009 DB | |
| 10. TM 010 DB | |
| 11. TM 011 ST | |
| 12. TM 012 DB | |

TM- Transmontana
PH - Phoenix

24/7 Central support desk
Providing direct access to Locomotive experts

Preassembled spares and wear parts for periodic maintenance minimizing downtimes

Maintenance concepts and documentation

Short delivery for spare parts



- Delivering strong and reliable locomotives capable to operate between Austria, Hungary, Romania, Bulgaria and Turkey.
- Entering the Sweden market with new locomotives.
- Developing the freight traffic in the space of 15 kV 16 $\frac{2}{3}$ Hz. (Austria)
- Extending our product range with the DMU on the same basis as the EMU
- Opening a new depot in Budapest for locomotive maintenance and upgrades.
- Building a new plant in Turkey in collaboration with a turkish partner.

1



1. Welding certificate according to EN 15085-2
2. Mechanical processing certificate according to EN ISO 3834-2
3. Quality management systems certificate according to SR EN ISO 9001
4. Safety management systems certificate according to SR OHSAS 18 001
5. Environmental management system certificate according to SR EN 14001

2



3



4



5



Clients



TFG
Transferoviar Group

Suppliers



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