



 MieresRail

[INNOVATIVE EXPERIENCE]



MieresRail



Electric arc furnace in use up to 2016

Mieres Rail occupies 56.000 m² in Mieres, only 40 km away from the sea ports of Gijón and Avilés, 50 km from the Airport of Asturias and perfectly communicated by road to the A6-66 highway, as well as with the railway line from ADIF with our own railway access to our assembling and production workshops.

We are highly specialized at the **design, manufacturing and supplying of turnout systems** as well as for **manganese steel casted crossings**, gathering all the experience, knowledge and know-how of the more than 45 years through different brand names and production facilities.



PLAY VIDEO



Reception



- 1 Dirección
Plataforma
Sala de Reuniones 1.1
Meeting Room 1.1
Comedor
Sales Desk
Nuevos Proyectos
New Products
Operaciones
Operational
Cálculo y Medio Ambiente
Quality & E.F. Control
Dirección Técnica
Engineering Direction
- 0 Recepción
Reception
Sala de Reuniones 0.1
Meeting Room 0.1
Compra
Purchasing Dept.
Administración
Administration
RRHH
Human Resources
Ingeniería
Engineering Dept.
Investigación de Riesgos Laborales
Work Risk Prevention
- 1 Sala de Conferencias
Conference Room

We have **two equipped laboratories** allowing us the validation of the different raw materials used at our processes, as well as the performing of the chemical analysis, mechanical tests and metallographic studies to the goods from our production.

We are capable of combining for all types of tracks, different rail profiles, inclinations, different track gauges, maximum speeds or axle loads, type of crossing, environmental requirements, ..., providing answers to our customer's need, all under the parameters of the different certifications that regulate our activities.

Being part of the group of companies from **Talleres Alegría**, we are able to integrate at our manufacturings the different synergies with our sister companies, as well as to achieve an independency for the supplies of some of the most critical components for the turnout systems.



Laboratory 1



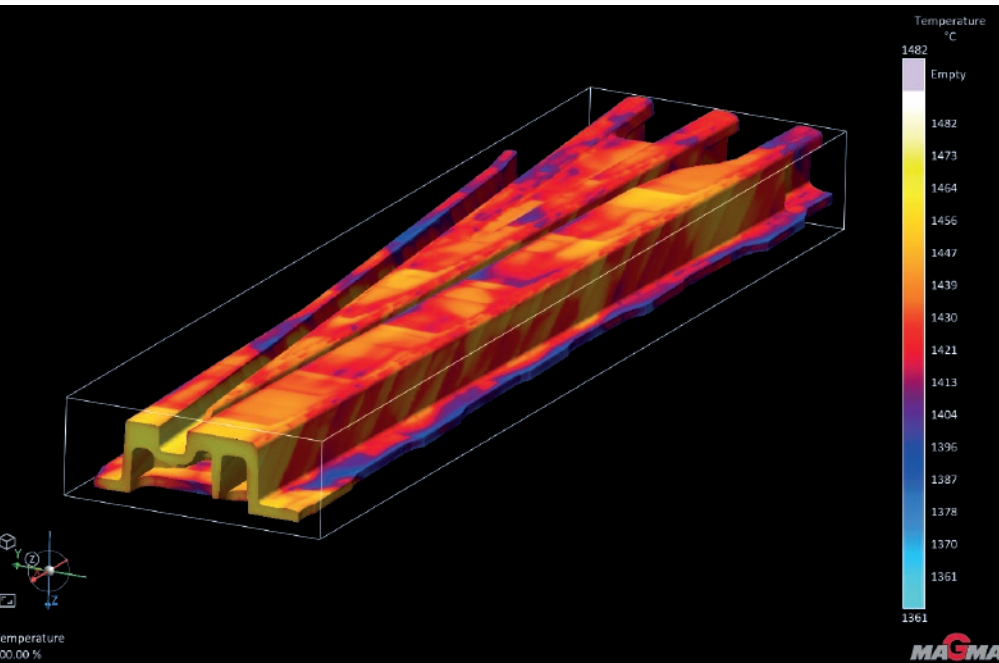
Technical Department



Pattern warehouse



Laboratory 2



Casting

All the know-how and experiences gathered since 1977 at the manganese steel casted crossings, were focused on the new facilities that started its production in September 2016. These facilities were designed to respectfully fulfill with all the environmental requirements, allowing the recycling of sand and paintures.

With two 8 Ton capacity furnaces, we can achieve castings, with the highest quality requirements, of crossings up to 12 m long and 4500 kg weights, as per different technical specifications.

We have a pattern warehouse with a capacity for housing more than 300 casting patterns.

Engineering

The capacities from our Technical Department allow us to develop and manufacture taylor made solutions for the turnout systems and manganese steel casted crossings as per our customer's needs, providing answers to their requests.

Besides this, and as a complement to these developments, we also perform security technical studies, rail – wheel interface studies, or predictive and corrective maintenance proposals, etc, ...

The generation of different invention patents, or our participation at some of the different working groups of the EN Committees are a proof of those capacities.





Machining

We perform the CNC drilling and machining of switchrails, stockrails and checkrails of our turnout systems, as well as for the manganese steel casted crossings at our own facilities. Our CNC machining equipment, with different capacities and characteristics, includes two rams milling machines up to 13 m (crossings) or 30 m (switchrails and stockrails).



Welding

Fixed installation for flash butt welding the crossings rail legs, as well as the transition rails. Our Metallurgy Department studies and designs the different welding parameters for different combinations of rails and steel grades.

The gathered knowledge allows the Responsible of the Metallurgy Department, as well as the Responsible of the Quality Department, to belong to the Normalization Working Group of the EN for the crossings flash butt welding.



Quality & environment & energy

With a quality, environment and energy integrated system, and being the continuous improvement and the client's satisfaction as essential concepts, all our designs and manufacturing's are performed under the regulations of the following Mieres Rail's certifications:

ISO 9001:2015, Quality Management System.

ISO 14001:2015, Environmental Management System.

ISO 45001:2018, Occupational Health and Safety Management System.

ISO 50001:2018, Energy Management System.

Assembling

Workshop assemblies for turnout systems up to 200 m long, on concrete or wooden sleepers, or on working benches. Simultaneous turnouts workshop assemblies with different geometries. Working benches for half set of switches, crossings or insulated glued joints.

Turnout Systems

- Metro.
- Conventional Railways
(Vmax 200 km/h).
- High Speed
(Up to 350 km/h).
- Combined lines
(Speeds up to 160 km/h
& 36 Ton axle loads)
- Industry, ports,
manufacturing facilities
- Heavy Haul (36 Ton), ...
- Depots and workshops
- Special layouts





Tecnical characteristics

Type of track

Ballast

- Wooden sleepers
- Concrete sleepers

Slab Track

- Direct fastenings
 - With anchors
 - With bonded baseplates
- For concreting up to the top of the rail
- Concrete sleepers with different characteristics

Rail profile and inclination

- 54E1, 60E1, 115RE,
... 1:00, 1:20, 1:40, ...

Gauge track

- 914, 1000, 1435, 1445,
1668, 1676 mm, ...
- Double gauge combination:
1435/1668
- Triple gauge combination :
1000/1435/1668



Crossings:

- Monobloc Manganese casted crossings
 - With flash butt welded rail legs
 - To be fishplated
 - Explosive hardened
- Swing nose crossings

Insulated glued joints:

- Four drills
- Six drills
- 90° Rail cut
- 30°, 45° Rail cut

Transition Rails:

- RN45/54E1,
- RN45/60E1,
- 54E1/60E1,
- 60E1/115RE,...

Switch wear measuring devices





COUNTRIES

- o Spain (ADIF, FGC, FGV, Metro de Madrid, Metro de Valencia ...)
- o Portugal (Autoridad Portuaria de Lisboa, Puerto de Aveiro)
- o France (RATP)
- o United Kingdom (Network Rail)
- o Belgium (Infrabel)
- o Switzerland (SBB)
- o Poland (PKP-PLK)
- o Croatia (HZ)
- o Albania (HS)
- o Greece (ERGOSE, Attiko Metro)
- o Turkey (TCDD)
- o Morocco (ONCF)
- o Algeria (Infrarail)
- o Tunisia (SNCFT)
- o Egypt (ECM)
- o Mauritania (SNIM)
- o Saudi Arabia (S.R.O.)
- o Australia
- o Mexico (L12 Metro CDMX, Tren Maya)
- o Dominican Republic (Metro Santo Domingo)
- o Cuba
- o Venezuela (Metro de Valencia)
- o Colombia (FENOCO)
- o Brazil (Metro Salvador Bahía)
- o Argentina (SBSE, ADIF)
- o Chili

HIGH SPEED (Vmax 350 km/h)

- o ADIF (Spain)
- o Al Haramain (Saudi Arabia)

METRO

- o Metro de Madrid
- o Metro de Barcelona
- o Metro de Valencia
- o Metro de Santo Domingo (Rep. Dominicana)
- o Metro de Atenas (Grecia)
- o Metro del Cairo (Egipto)
- o SBASE (Argentina)
- o RATP (Francia)
- o Metro de Valencia (Venezuela)
- o Metro CDMX (México)

CONVENTIONAL RAILWAYS (Vmax 200 km/h & 22,5 Axle load)

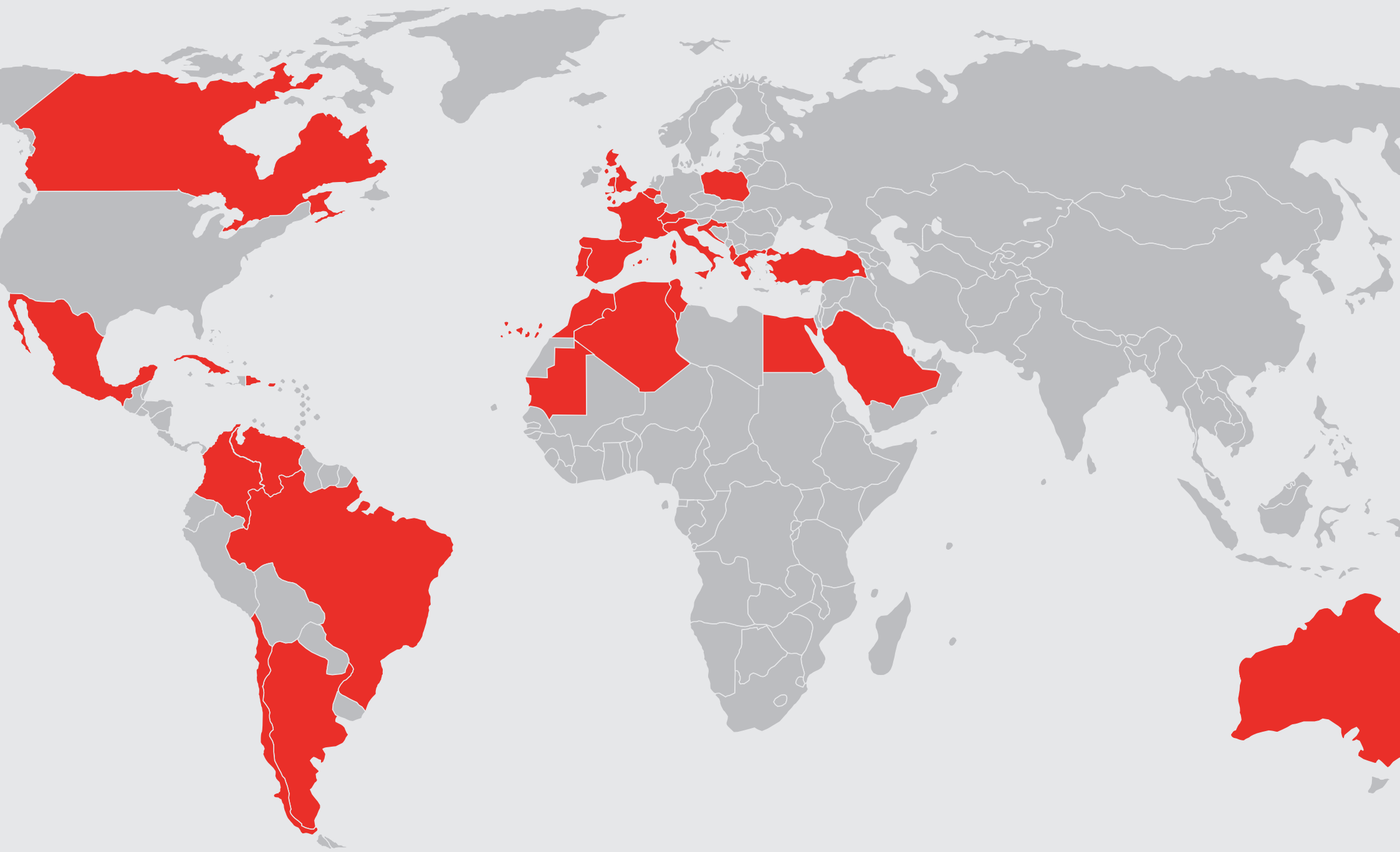
- o ADIF (Spain)
- o ERGOSE (Greece)
- o SBB (Switzerland)
- o HZ (Croatia)
- o Network Rail (United Kingdom)
- o Infrabel (Belgium)
- o PKP-PLK (Poland)
- o TCDD (Turkey)
- o SRO (Saudi Arabia 32,5 Ton/eje)

HEAVY HAUL (axle loads up to 37,5 Tons)

- o Arcelor Mittal (España)
- o SNIM (Mauritania)
- o TFM (México)
- o Tren Maya (México)
- o FENOCO (Colombia)
- o Cuba

PORTS

- o Port of El Musel (España)
- o Port of Valencia (España)
- o Port of El Ferrol (España)
- o Port of Barcelona (España)
- o Port of Lisboa (Portugal)
- o Port of Aveiro (Portugal)





Shall we connect?

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