

Spanish Railway in Innotrans 2012

APSA

Hall 23, 25, 26, 3.2 and 4.2



A. PAUKNER, S.A. (APSA) has been offering innovative solutions for the rail industry for over half a century with worldwide leading products and services:

RAILONE (Hall 26, Stand 216a) – manufacturer of track systems – will present its development of hinged turnout sleepers which allow to transport preassembled turnouts with sleepers up to 4.8 m on normal flat freight wagons (track field testing since July of 2011); GETZNER (Hall 25, Stand 216) – provider of elastic track systems – will present the LCC of its sleeper pads which lengthens the intervals between tamping work by a factor of 2 to 2.5; HANNING & KAHL (Hall 4.2, Stand 110) – provider of signalling systems – will showcase its absolutely innovative intelligent guiding system through strips with LEDs called GuideLight; VOSSLOH FASTENINGS (Hall 26, Stand 101) – provider of rail fastening systems – will present its fastening system for slab track DFF Metro which allows high elasticity of down to 8 kN/mm. WINDHOFF (Hall 23, Stand 122) – manufacturer of workshop equipment for railway depots – will present its new shunting vehicle ZRW 64 AEM, the beginning of a new generation of rail/road shunting vehicles; SOGEMA Engineering (Hall 3.2, Stand 210W) – Railway depot equipment manufacturer – will communicate on his Underfloor Wheel Lathe RNG15 for the future Metro of Panama.

www.railarea.com/site/index.php

Alstom

Hall 3.2
Stand 101



Alstom Transport participates in Innotrans 2012, International Trade Fair for Transport Technology. Alstom stand is located in hall 3.2, stand n° 101. In our 650 sqm plus 290 sqm mezzanine space we will show the latest developments and references of Alstom's fields of expertise in railway transport, such as the Citadis Compact, and the different partnerships we have made around the world with our Customers. In the tracks outside the exhibition area, we show our last generation tram-train, Citadis Dualis, running in Nantes, and the Euroduplex, running in the Rhin-Rhône high speed line.

www.alstom.com/transport

BCN RAIL 2013

Hall 7.1B / Stand 106

BcnRail, the International Railway Industry Show, organised by Fira de Barcelona since 2007, is the Spanish railway industry's leading event and aspires to be southern Europe's major railway industry event. In 2011, BcnRail featured 123 direct and indirect exhibitors, 44 of them foreign, and recorded an audience of 6,834 national and international trade visitors.

All areas related to the railway industry were widely represented at this biennial show. The leading manufacturers of rolling stock, such as Alstom, Bombardier, CAF, Patentes Talgo, Siemens and Vossloh presented their latest technological innovations.

BcnRail 2013 will be held from the 19th to 21st November, coinciding with the third edition of Smart City Expo, the forum created by Fira de Barcelona to show how technology applied to cities can improve their liveability and sustainability. Holding the two shows together gives great added value to BcnRail, in which leading railway companies showcase all aspects of the latest technological advances (high



speed, suburban lines, freight transport, trams and metros).

www.bcnrail.com

CAF

Hall 2.2. / Stand 107

Construcciones y Auxiliar de Ferrocarril (CAF) will show the company's latest innovations regarding public transport. Among the main novelties is CAF's high-speed platform, Oaris. A train developed with the company's own technology including the most modern advances in technology, design, safety and comfort. Oaris also contributes to meet the great challenge of rail interoperability.



The company will be presenting the Urbos family of trams and light rails (Urbos 100, Urbos 70, Urbos AXL and Urbos TT). Due to

its modular design, these trains can be adapted to the particular demands of each city.

Also, CAF will present the Arium monorail train. This is a solution for urban transport that stands out for its service capacity, energy efficiency and sustainability.

At CAF's stand more details about the Civity family of trains for suburban and intercity train service will be provided. Designed for a 1435-mm international track gauge, their main features are their flexibility and versatility, allowing them to be configured in many ways. Designed to meet all operators' traction demands, Civity can be adapted to four different feeding voltages: 1500 VDC, 3000 VDC, 15 kVAC (16,6 Hz), 25 kVAC (50 Hz).

www.caf.net

Danobat Group

Hall 22.a / Stand 130

DANOBATGROUP RAILWAYS has recently developed a new and innovative "Dynamic Bogie Test Rig for Bogies", model DTR-25, equipment that has been specially designed with the collaboration of

SKF, a global leading supplier of bearings, mechatronics and condition monitoring systems for railways.

The Dynamic Bogie Test Rig for Bogies for condition-based maintenance is critical for the tasks of verifying, repairing and delivering bogies in optimal conditions, and therefore ensuring their perfect functioning and quality. The equipment enables simulation of train movement on the rails at operation speeds of over 100km/h with the train in the workshop, avoiding the need for such tests while circulating. With this new concept of test rig, the savings in time are considerable and the user is able to diagnose the situation of components that could not be tested with previous technologies, optimizing the maintenance of the train.



In addition to this new equipment, DANOBATGROUP RAILWAYS will also exhibit the new model of Underfloor Wheel Lathe. This lathe performs specific operations for the corrective maintenance of railway rolling stock, without needing to remove it from the train.

www.danobatgroup.com/en

Felguera Melt

Hall 26 / Stand 104

Felguera Melt, S.A. keeps on increasing its engineering and manufacturing capacities for turnout Systems with different geometric and technical features. Some proofs of those capacities are some Diamond Crossings combining simultaneously up to three different gauges (1.668/1.435/1.000 mm), different Single and Double Slip Crossings for ADIF, the supply of all turnout systems to Line 2 Metro de Santo Domingo (Dominican Republic), or different R+D+I samples to be applied at the lockers for double gauge turnouts, or at the swing nose crossings for the Spanish High Speed Turnout family "AV4" from ADIF.



www.durofelguera.com

Indra

Hall 4.1 / Stand 126

Indra, the premier IT company in Spain and a leading IT multinational in Europe and Latin America, will exhibit at Innotrans the Da Vinci system-developed by the company and intellectual property of Adif-which is regarded as the world's most advanced railway traffic management platform. Da Vinci has proved its effectiveness and versatility in the management of networks with different characteristics: the Spanish high-speed

network, the Metro de Medellin. In addition to this, it was awarded the integral management of Morocco and Lithuania's railway networks as well as the management of the future La Meca-Medina high-speed line traffic.

The project in Saudi Arabia also includes Indra's latest ticketing and access control technology, also to be exhibit at the event. The contactless ticketing technology speeds up passenger flow as the cards in substitution of the tickets are validated via radio frequency by means of contactless access control systems. Indra is one of the leading companies in the ticketing sector in the world, with references such as the metro networks of Madrid, Barcelona, Valencia, Lisbon, Chile, Mumbai or Shanghai, Mexi DF's Suburban Railway of the Mexico City Metropolitan Area, the Metro of Austin (Texas) or St Louis light rail, in USA or Kuala Lumpur railway lines, Malaysia.

www.indracompany.com/en

Ingeteam

Hall 17 / Stand 222

INGETEAM will present its complete solutions of traction, control and auxiliary systems for rolling stock, based on in-house developments of power and control electronics, focusing specially on rolling stock modernizations solutions and energy recovery systems.

Our capacities allow us to offer advanced solutions, leading to minimised operational costs

and focusing on reliability, availability, comfort, maintenance and energy consumption. Cooperation with our customers begins at project definition, and goes through study, design and engineering phases up to turn-key supply of the complete solution either for new rolling stock or fleet modernization.

www.ingeteam.com



Invensys Rail Dimetronic

Hall 4 / Stand 205

Invensys Rail Dimetronic is the leading in railway signalling in the Iberian market. The activity of the company focuses on the design, manufacturing, supply, installation and commissioning of technology and solutions, both on the railway tracks and on board, to allow railway traffic management in a safe and efficient manner. Among the signalling and control solutions that the company will show outstands FUTUR, the Invensys Rail ERTMS (European Rail Traffic Management System) system. Visitors will be able to test the high technological level of this system that the company will implement in Makkah-Madinah HSL and in the Marmaray project and which is commissioned in several Spanish HSL and in a section of Madrid Commuter Network.

Assistants will discover the advanced features of SIRIUS CBTC (Communications Based Train Control) and Control Center Solutions as CTC Rail 9000, the latest generation electronic interlocking Westrace 2.0 and other technologies for modular signalling or the maintenance remote monitoring systems ROAME.





Jez

www.dimetronic.com

Hall 25 / Stand 416

JEZ SISTEMAS FERROVIARIOS, S.L. is committed to designing, manufacturing, supplying and maintenance of all types of manganese steel crossings and railway track layouts, in addition to moulded cast steel parts for the general industry. Our Technical Department (Department of R&I) ensures we have the capability of designing and producing points and crossings (turnouts, crossovers, scissor crossovers and diamond crossings) or components for them, such as hard manganese steel crossings or spare tongues.

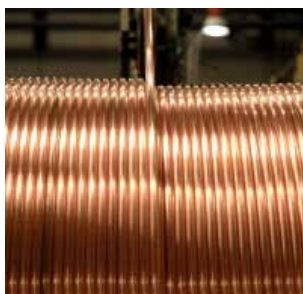
Among other products, JEZ will show the new solutions developed by JEZ in the field of fastening systems for high speed in the new turnouts of ADIF (Spain), new switch locking systems with low maintenance for high performance turnouts, low noise swing nose crossings for tramway systems and cast manganese crossings with welded legs.

en.jez.es

La Farga Lacambra

Hall 22 / Stand 202

La Farga Lacambra (LFL), a benchmark railway technology company in the Spanish market, will be presenting their new high tech and high performance copper and copper alloy products at the Innotrans trade fair in Berlin from September 18th to 21st. These include particularly EVELEC, a material based on micro-alloys that improves resistance to wear by 30 to 50% compared to products commonly used on conventional railway lines.



LFL's products are

currently present worldwide, particularly in projects for high speed lines in Europe, conventional lines in China, North Africa, Portugal and France; underground lines in Ecuador, the Dominican Republic, Mexico and Algeria, as well as tram lines in Ireland, Venezuela, Norway and Italy, among many others in progress. It will present the following products in the Innotrans fair:

RAILFIL: a splined wire for contact lines; CABLES: rigid and flexible cables for aerial suspension; SUSPENSION CABLES: equipotential droppers and dropper rods; ALLOYS: magnesium copper, tin copper, silver copper and EVELEC.

www.lfl.es/eng

Mafex

Hall 22 / Stand 131

MAFEX, the Spanish Railway Association, has been growing since its inception in 2004, in number of members, activities and participation, as well as in the number of employees working for the association.

Today, according to figures consulted with member companies, the total turnover of companies associated to MAFEX in 2011 was 11,298 million euros, out of which 4,469 million euros (40%) correspond to their activities in the rail sector. Regarding exports, there was 4,923 million euros worth of exports, out of which 2,116 million euros (43%) corresponded to railway activities. To be highlighted is our members' 47% of turnover in the rail industry in foreign markets. Concerning the number of employees, MAFEX companies employed in 2011 more than 72,000 people, 27% of which (almost 2,000) are entirely dedicated to railway activities.

The Association currently consists of 76 companies. All these companies are clearly export-oriented, and develop their activities in the manufacturing of products and rendering of



services involved in any rail project: rolling stock, infrastructure, telecommunications, signaling, engineering, consulting, construction, maintenance, interior design, etc.

www.mafex.es/en/home/home.asp



Mann-Filter

Hall 21 / Stand 133

The MANN+HUMMEL Group is an international company and employs over 14,400 people at 51 locations worldwide.

MANN+HUMMEL IBÉRICA, located in Zaragoza, produces and distributes innovative technical components and systems for the automotive industry and many other industrial fields.

The extensive products range of MANN+HUMMEL for railways, covers nearly the whole range of filter requirements for your rolling stock. Whether for the diesel engine, transmission, brake compressor or driver's cabin, MANN+HUMMEL can provide an optimal solution that fulfills the filtration requirements in such applications.

MANN+HUMMEL will attend the Innotrans Fair 2012, next September in Berlin, showing the wide range of products available to provide complete solutions to the needs of air, fuel or oil filtration.

www.mann-hummel.com/mhes/index.html?iKeys=13.1.150.0.0

Plasser Española

Hall 26 / Stand 221

The new Welding Robot APT 1500 R will be presented as the main development by Plasser & Theurer since the last InnoTrans. This fully auto-



mated welding robot with the new closure welding technology has already been approved by several European Rail Authorities. Plasser & Theurer will expose this innovation at Innotrans reminding that we are the leading company in construction, maintenance and renewal technology of railway superstructures.

We offer a Happy Hour at our stand n° 221 (hall 26) on Wednesday, September 19th at 5 p.m. More information about the new welding robot APT 1500 R will be given in a special presentation on Thursday, September 20th at 4 p.m. at the Hotel Esplanade, Berlin (please confirm your assistance).

www.plassertheurer.com/index_en.htm

Schwihag

Hall 26 / Stand 102.

For most railway companies, switch roller devices have been the standard switch equipment for many years.

The positioning of the switch rails on the distance blocks in the heel area is not always achieved optimally in switches that lie within the superelevation, due to the gradient situation. The predefined shape of the switch rail changes as a result of repeated passing over the switch rail with the full wheel load in the heel area. This change in shape can cause the switch rail to no longer sit against the distance blocks when closed.

Schwihag AG's newly developed spring roller



device (LSR), with its improved positioning of the switch rail on the distance blocks, counteracts narrowing of the gauge and enables a reduction of wear between the slide plate and the underside of the base of the rail.

The new LSR not only lifts the switch rail into the remote position, but in the closed switch position also enables the switch rail to be pressed against the distance blocks. The roller of the LSR presses the closed switch rail on the distance blocks with a preset, defined spring force in the direction of the stock rail.

www.schwihag.com

- Experienced manufacturing and testing
- Smooth installation and commission
- Transparent operation and monitoring
- Reliable maintenance and repair

www.railways.skf.com



SKF

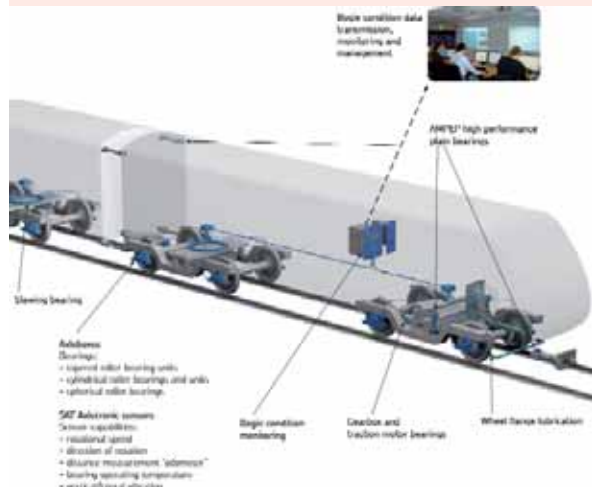
Hall 22 / Stand 123

SKF, as a leading global supplier, offers a broad range of customer solutions that includes bearings, mechatronics, lubrication and condition monitoring systems for the railway industry. This includes a wide assortment of rolling bearings and services to meet the demanding needs of railway applications.

Railway condition monitoring is a technology offering, new capabilities to increase safety and reliability as well as to extend maintenance intervals. Using condition detection systems and applying sophisticated algorithms for data processing, can detect incipient damage. This provides sufficient time for repairs before significant mechanical damage or failures occur.

Our customers appreciate having a reliable partner at their side. The successfully proven life cycle partnership helps you to overcome your economic and environmental challenges:

- Customized specifications
- Individual design and development



Siemens

Hall 4.2 / Stand 150

The company will be showing solutions and products from a single source: rolling stock specially designed for maximum energy efficiency; ultramodern rail automation that ensures optimum utilization of line and vehicle capacities; technology for optimizing complete operational processes and reducing down-times and operating costs; and, last but not least, Smart Grid solutions for intelligent traction power supply networks. Siemens provided information on this extensive portfolio at a pre-press conference in Vienna in the run-up to this year's InnoTrans trade fair for the railway industry.

Siemens is engaged in providing innovative mobility solutions: Rail Systems (rolling stock), Mobility and Logistics (traffic, transport and logistics management) and Smart Grid (intelligent power networks, including rail electrification). Together, they make sure people and goods reach their appointed destinations all over the world – be it within cities, regions and conurbations or over long distances.

www.siemens.com/entry/en

Talgo

Hall 4.2 / Stand 108

In INNOTRANS 2012, Talgo will launch its latest development in high speed, the AVRIL, to the rail



industry. To do so, Talgo will provide information to visitors at its stand (Hall 4.2 / Stand 108) scheduling guided visits to the train prototype in the track area of the fair (GI/I). This train prototype, consisting of a power head and two passenger coaches, is open to all visitors interested in knowing the advantages of the new train and onsite checking of its latest technology, high degree of design and maximum comfort.

Avril is the most modern train in its market segment. Designed as a platform which allows adapting to the needs of each customer, it is based on Talgo technology which ensures optimum accessibility, the minimum power consumption, reduced CO₂ emissions, noise and vibration, and minimum maintenance costs.

Presentation in the INNOTRANS Speaker's Corner: TALGO AVRIL: 19.09.2012, 11.00 – 12.00 h, hall 15.2

www.talgo.com/index.php/en/home.php

Thales España

Hall 4.2 / Stand 204

Thales introduce at Innotrans its portfolio for Railways Operators including its AlTrac solutions (ERTMS/ETCS) for train command and control, NetTrac for the railways network management, LockTrac for electronic interlockings, as well as FieldTrac field equipments (axle counters, point machines, level crossings...). For Metro Operators, SelTrac communications based train control (CBTC) solutions, NetTrac for network management and Locktrac for interlockings.

And, for transportation networks in general, Thales provides integration of critical systems of Supervision and Control, networks, video surveillance, access control, intrusion and fire detection, pas-



senger information systems, SCADA, revenue collection and ticketing.

www.thalesgroup.com/Countries/Spain/Homepage



Vossloh

Hall 4 / Stand 13 (outdoor area)

Vossloh Rail Vehicles: As manufacturer of high-performance diesel-electric locomotives, Vossloh Rail Vehicles is constantly engineering innovative types of locomotives for market-specific requirements.

The diesel-electric EUROLIGHT trains its sights on the UK and Asia: Vossloh Rail Vehicles has extended its diesel-electric locomotives into a family for operation on lines with limited axle loads. Specifically tailored to the needs of the British and Asian markets.

High-speed diesel locomotive: For tomorrow's passenger transport: A full-scale model of a diesel-electric high-speed locomotive. The machine is also acting as an innovation center where, with the aid of models and presentations, ideas for tomorrow's passenger haulage are on view.

Dual-mode locomotives for new operating strategies: Vossloh is working on dual-mode locomotives that are able to run both off a pantograph and with a diesel drive. We are also capable of integrating further energy-saving technologies in the diesel-electric traction train.

TramLink: Vossloh's first complete tramway: TramLink is a series of bidirectional, 100 % low-floor, articulated electric trams, with a "driving by sight" principle, suitable for urban use. Its basic vehicle, powered by a catenary system supplied with 750 Vdc, is an articulated 5-car unit, resting on three bogies, a maximum speed of 70 km/h and a tare weight of approximately 43.5 tons.

www.vossloh.com/en/home/home.jsp



Leading-edge control for traction systems?

Absolutely.



ABB supplies state-of-the-art traction solutions for all types of railway applications. In trustful long-term partnerships with vehicle builders, refurbishers, and rail operators, ABB delivers innovative and reliable solutions with exceptional power density, energy efficiency, and best-in-class control hardware and software. Interested in optimizing the performance of your fleet? Come and see us at InnoTrans 2012!

www.abb.com/railway

INNOTRANS Berlin, 16. - 21.09.2012
Hall 9, Stand 101 — Hall 25, Stand 306
Outdoor area FA/14



Power and productivity
for a better world™

