

Industria ferroviaria
española en
*Spanish railway
industry at*

Innotrans 2018



Entre el martes 18 y el viernes 21 de septiembre se desarrollará en Berlín la décimo segunda edición de Innotrans, el encuentro bienal que congrega en la capital alemana lo más granado del Sector del Ferrocarril de todo el mundo. Innotrans es, una vez más, el escaparate que administraciones, operadores, constructores, fabricantes y tecnólogos, utilizan para mostrar sus novedades y acreditar la pujanza del transporte ferroviario.

En 2016, 137.391 profesionales de 119 países asistieron a la feria, que contó con stands de 2.955 expositores provenientes de sesenta países, cifras que se superarán en esta edición que cuenta con más de un 60 por ciento de participación internacional. Un total de 224 empresas exponen por primera vez en Berlín.

Estructurada tradicionalmente en torno a cinco grandes áreas, Tecnología, Infraestructuras, Transporte Público, Interiorismo y Construcción de Túneles, la demanda de expositores y la afluencia de visitantes ha obligado a la construcción de un nuevo pabellón, el vigésimo séptimo, que con cerca de 10.000 metros cuadrados de superficie estará operativo en la edición de 2020.

La presencia de empresas españolas se ha incrementado edición tras edición en consonancia con la creciente presencia internacional del Sector Ferroviario español. Más de medio centenar de esas empresas avanzan las claves de su participación en Innotrans 2018 en estas páginas especiales.

The 12th edition of Innotrans, the biennial event held in the German capital that gathers the cream of the crop in the railway sector from all over the world, will take place in Berlin from Tuesday 18 to Friday 21 September 2018.

Once more, Innotrans is the showcase for administrations, operators, constructors, manufacturers and technologists to show their innovations and prove the strength of rail transport.

In 2016, 137,391 trade visitors coming from 119 countries attended the fair that included the stands of 2,955 exhibitors from 60 countries, figures to be exceeded in this edition, which expects over 60 percent of international participation. A total of 224 companies are exhibiting in Berlin for the first time.

The fair is traditionally organised around five major segments: Railway Technology, Railway Infrastructure, Public Transport, Interiors and Tunnel Construction. The demand for space by the exhibitors and the large number of visitors have required the construction of a new hall, the twenty-seventh, which with a surface of close to 10,000 square metres will be operative at the next edition in 2020.

The presence of Spanish companies has increased edition after edition in line with the growing international presence of the Spanish railway sector. More than 50 of those companies share the keys to their participation in Innotrans 2018 in these special pages.



ACOSTA INGENIEROS

Acosta Ingenieros, empresa con más de 20 años de experiencia en el mercado ferroviario. Representa y distribuye material para el sector ferroviario. Entre los productos distribuidos cuentan con:

- Sistemas de fijación de vía en placa anti vibratoria:
- Delkor EGG Low Profile.
- Delkor ALTI.
- Delkor EGG para desvíos.
- Traviesas sintéticas FFU y otros:
- Traviesas sintéticas FFU – SEKISUI.
- Absorbedores de ruido carril Calmoon Rail – SEKISUI.
- Mantas antivibratorias.
- Sistemas de mantas antivibratorias - ROCK DELTA.
- Desvíos:
- Sistema de rodillos para desvíos – AUSTROROLL.
- Sistemas de rodillos libres de lubricación para desvíos de punta móvil. – AUSTROROLL HSR.
- Electrificación:
- Catenaria convencional.
- Catenaria para Alta Velocidad.
- Tranviaria.
- Catenaria rígida.

Acosta Ingenieros, the company with more of 20 years experience on the railway market. Represents and distributes material for the railway sector. Among the products distributed we have:

- *Fastening systems for slab track:*
- *Delkor EGG Low Profile*
- *Delkor ALTI*
- *Delkor EGG for turnouts*
- *Synthetic Sleepers and others:*
- *Synthetic Sleepers FFU – SEKISUI*
- *Calmoon Rail web noise protection system – SEKISUI*
- *Anti-vibration mats.*
- *Anti-vibration mats – ROCK DELTA.*
- *Turnouts:*
- *Switch point rollers – AUSTROROLL*
- *Switch point rollers for lubrication free frogs with moveable point. – AUSTROROLL HSR*
- *Electrification:*
- *Conventional*
- *High speed*
- *Tramway*
- *Rigid catenary*

www.acosta-ing.com

ALSTOM



Alstom presenta sus tecnologías para una movilidad más sostenible, innovadora y eficiente. Como actor principal en la revolución del transporte, Alstom presenta su amplia oferta de soluciones y tecnologías sostenibles, tanto en el área de material rodante (tren de hidrógeno Coradia iLint, locomotora bifuel H4 o autobús eléctrico Aptis), como de infraestructura para la alimentación eléctrica (sistema de carga SRS para tranvías y autobuses, APS para carreteras), eficiencia energética y ecodiseño. En cuanto a la digitalización, Alstom expone sus últimos desarrollos e innovaciones diseñados para responder a las demandas de pasajeros y operadores (experiencia de viaje, seguridad o intermodalidad, entre otros).

Alstom showcases its innovative, environmentally-friendly and efficient mobility solutions. Alstom showcases at Innotrains its contribution to the transition towards more sustainable transportation by designing and delivering innovative, environmentally-friendly and efficient mobility solutions. As a major player of the environmental revolution, Alstom presents its enlarged range of sustainable solutions in rolling stock (the Coradia iLint hydrogen regional train, the Prima H4 bi-mode locomotive, and the Aptis e-bus), charging infrastructure technologies (SRS for trams and buses, APS for road), energy efficiency and eco-design. As a mobility maker in the era of digitalization, Alstom showcases its latest developments and innovations for passengers and operators (passenger experience, the Iconis security control center, Mastria and data analytics for multimodality).

Hall 3.2 – Booth 306

www.alstom.com



AMURRIO

Aparatos de vía

Amurrio diseña, produce, instala y hace mantenimiento de material ferroviario desde 1880.

Es uno de los líderes internacionales en conocimiento e innovación sobre aparatos de vía para todo tipo de trazados. Desde la alta velocidad hasta las aplicaciones especiales para minería o carga, pasando por el ferrocarril convencional, tranvía o metro.

El conocimiento que a lo largo de su trayectoria ha atesorado sobre la funcionalidad de cada uno de los componentes de un aparato de vía, las diferentes soluciones y las características y comportamientos de los materiales, permiten situar a Amurrio ante sus clientes como el mejor de los socios tecnológicos en sus proyectos ferroviarios. Las líneas de producto son aparatos de vía (diseño, fabricación, instalación y mantenimiento de desvíos completos, encarriladoras o juntas de dilatación), corazones (especialistas con fundición propia con dilatada experiencia en acero al manganeso) y servicios (asesoramiento previo sobre el proyecto, asistencia técnica "in situ" y montaje y mantenimiento).

Track equipment

Amurrio designs, produces, installs and maintains fixed railway equipment since 1880.

Today is one of the international leaders in knowledge and innovation on track equipment for all types of applications. From High Speed to special applications for mining or cargo, through conventional rail, tram and metro.

The vast knowledge regarding turnouts and crossings and all of its components and materials, makes it possible to assist our customers in finding the perfect solution for their projects.

Product lines are turnouts (Design, manufacture, installation and maintenance of complete turnouts, re-railers or expansion joints), crossings (They specialize in designing and manufacturing crossings with own foundry has extensive experience in manganese steel) and services (Engineering, on-site technical assistance and assembly and maintenance).

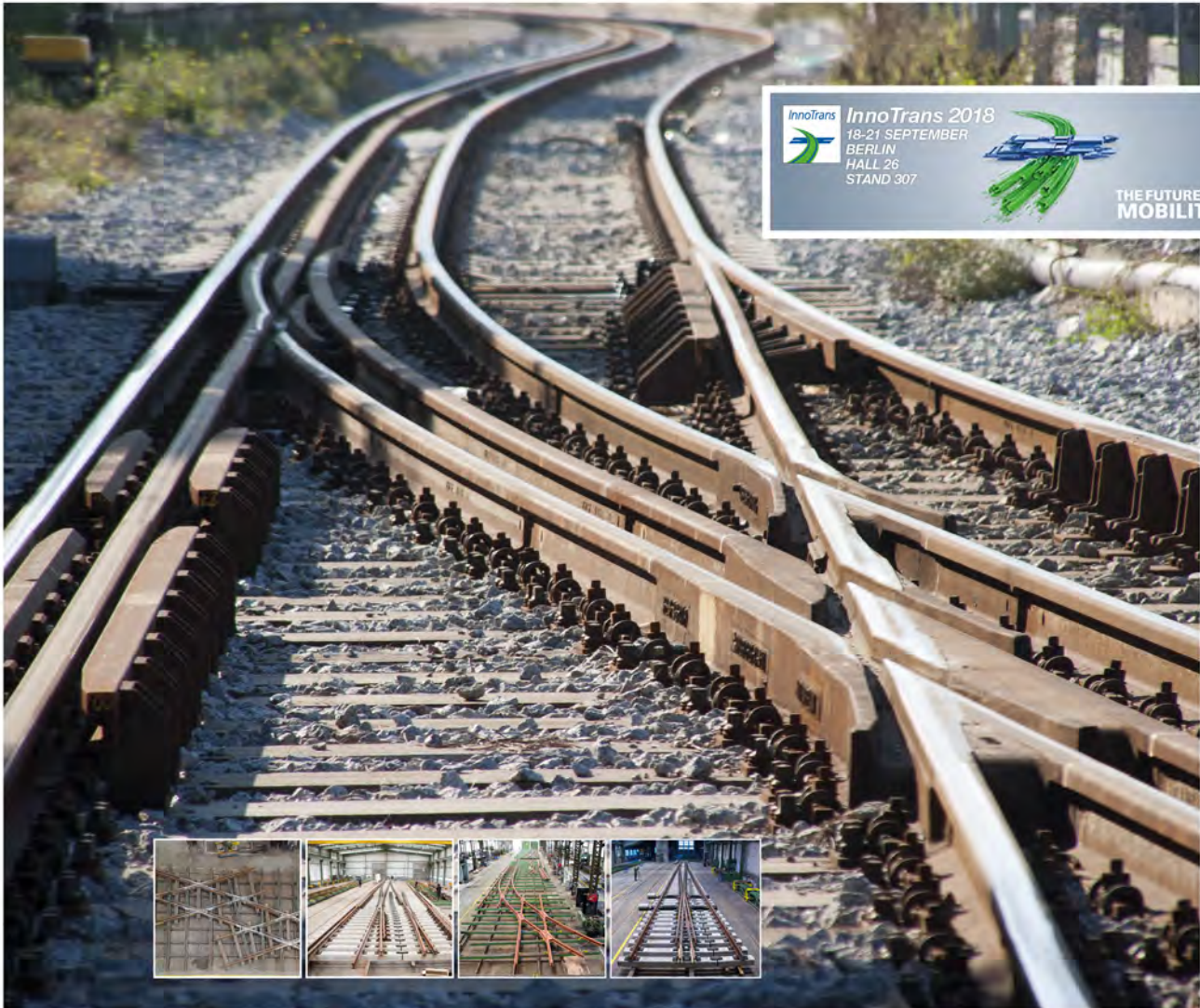
Hall 26 Stand 307

www.amufer.es



Flexibility

is the key



InnoTrans 2018
18-21 SEPTEMBER
BERLIN
HALL 26
STAND 307



THE FUTURE OF
MOBILITY

How to choose among many options the most appropriate way for your project?

In every railway project you have to be prepared to quickly provide an **innovative solution**, tailored to any unforeseen situation. Like this **four-line turnout**, designed to make possible the coexistence of different track widths in a single layout, and installed in the Autonomous Port of Barcelona. A good example of **flexibility and innovation**.

At Amurrio we design, produce and install railway equipment **since 1880**. Our turnouts are present in lines of **conventional rail, high speed, metro, tram and heavy-haul** all over the world. Our automated warehouse has **more than 1,000 models** ready to go into production in record time. And the technical office of Amurrio is prepared to create **solutions tailored** to any need.

If you do not know how to choose among so many options, talk to Amurrio first. We will show you the most appropriate way to **take your project to success**.



AQUAFRISCH

Equipos de lavado para trenes y Sistemas de Extracción de WCs

Desde la última edición de Innotrans en 2016 Aquafrisch ha fabricado equipos para más de 20 países, logrando convertirse en un referente de calidad y fiabilidad en el mercado internacional.

El tranvía de Aarhus, la línea de alta velocidad Medina-Meca, el Metro de Moscú, el tranvía de Río de Janeiro o el de Kaohsiung, son sólo algunos de los ejemplos de lugares que disponen ya de equipos Aquafrisch.

Mejoras continuas como la sustitución de la tracción neumática por motorización eléctrica en los cepillos de los equipos de lavado o el nuevo SW de mantenimiento integrado y por control remoto, permiten soluciones aún más ajustadas a las necesidades de cada taller.

Estaremos encantados de atenderle:
Pabellón 7.2C – Stand 201.

Train Wash Plants and CET systems

Since last Innotrans edition in 2016 Aquafrisch has manufactured equipment for more than 20 countries. The company became a solid reference in terms of quality and reliability for international markets. Aarhus tramway, high speed line Madinah-Makkah, Moscow Metro, Rio de Janeiro tramway or Kaohsiung's tramway are only some examples where Aquafrisch equipment is already running. Continues improving policy like evolution from pneumatic to electric system in brushing capacities or new maintenance SW for remote monitoring allows for even more precise solutions to every depot's needs.

We look forward to your visit at Hall 7.2C – Booth 201

www.aquafrisch.com



Aquafrisch, s.l. ®



APSA PAUKNER

Desde 1950 A. PAUKNER, S.A. (APSA) ofrece productos/ servicios innovadores de industrias líderes mundialmente. Fruto de este trabajo son las referencias adquiridas con involucración de APSA desde entonces. En la próxima Innotrans, APSA volverá a estar presente junto a sus representadas que expondrán diversas novedades:

RAILONE (vía en placa): Soluciones para tráfico urbano que ofrecen mayor confort de rodadura, protección contra vibraciones y reducido mantenimiento.
HANNING & KAHL (sistemas señalización): Sistema guiado inteligente GuideLight® mediante LEDs en pasamanos en túneles para situaciones de emergencia y señalización en pasos de peatones. Detector shuntado de ejes HAP II para contacto rueda-carri. ConnAct monitorización remota accionamientos y enclavamientos.

VOSSLOH FASTENING SYSTEMS (sistemas de vía): Nueva generación de sistemas que prolonga eficazmente el ciclo de vida de componentes de superestructura de vía; **WINDHOFF** (equipos para talleres y vehículos mantenimiento): locotractor accionado eléctricamente por batería, vagón taller de un tren para rescates/incendios, vehículo multifuncional para construcción y mantenimiento de catenaria e infraestructuras.

GUTEHOFFNUNGSHÜTTE RADSATZ (llantas y ruedas): la llanta elástica V60 leader en el mercado en versión con componentes de aluminio, las ruedas altamente elásticas Ultra-P y Ultra-S.

Since 1950 A. PAUKNER, S.A. (APSA) offers innovative solutions from worldwide leading industries. The results of this work are a wide range of references obtained with the involvement of APSA since then. APSA is again present at Innotrans together with its represented companies. Among the different innovations these companies will present, the following ones can be highlighted.

RAILONE (slab track): Solutions for urban traffic which offer driving comfort, protection against vibrations and reduce maintenance.

HANNING & KAHL (signalling systems): GuideLight® as emergency tunnel lighting in handrails and at crossings. Wheel-shunt detector: HAP II for testing the contact wheel-rail. VOSSLOH FASTENING SYSTEMS (track systems): It's new generation of systems which increases effectively the durability of the track superstructure components.

WINDHOFF: a battery-electrical driven Shunter, an equipment car of a Fire-fighting and Rescue Train, a Multi Purpose Vehicle for construction and maintenance of rail tracks and overhead catenary systems. GUTEHOFFNUNGSHÜTTE RADSATZ (rims and wheels) the market-leading resilient V60 wheel in a version with aluminium components.

www.pauknergroupp.com

BELGORAIL

Belgorail pertenece desde 2017 al Grupo de certificación Certifer, grupo con más de 20 años de experiencia en la prestación de servicios de certificación ferroviaria, tanto del ferrocarril convencional como del transporte guiado en general, metros, metros ligeros y tranvías.

Son líderes en certificación y en evaluaciones de seguridad de todos los subsistemas en Francia, Bélgica, Italia, España, Luxemburgo, Argelia, Australia y Brasil.

Están acreditados como certificadores de producto (ISO 17065) y como organismo de inspección independiente (ISO 17020), actuando tanto como NoBo, Debo, ISA y AsBo, además de entidad de certificación de las entidades encargadas de mantenimiento.

Además, son entidad reconocida en Dinamarca, Suiza, Arabia Saudita, Emiratos Árabes y Omán.

Certifer, como inspector independiente, realiza evaluaciones de seguridad de la inserción urbana de metros ligeros y tranvías, garantizando la integración segura con el entorno: peatones, bicicletas, coches, etc.

Belgorail belongs since 2017 to the Certification Group Certifer, a group with more than 20 years of experience in the provision of railway certification services, both conventional rail and guided transport in general, metros, light rail and trams.

We are leaders in certification and safety assessments of all subsystems in France, Belgium, Italy, Spain, Luxembourg, Algeria, Australia and Brazil. We are accredited as product certifiers (ISO 17065) and as an independent inspection body (ISO 17020), acting as NoBo, Debo, ISA and AsBo, as well as certification entity of the entities in charge of maintenance.

We are also a recognized entity in Denmark, Switzerland, Saudi Arabia, Arab Emirates and Oman.

Certifer, as an independent inspector, conducts safety assessments of the urban insertion of light rails and trams, guaranteeing safe integration with the environment: pedestrians, bicycles, cars, etc.

Hall A. City Cube 506

<http://www.belgorail.be/es/home.php>



VISÍTANOS EN
Hall 7.2C / stand 201

www.aquafrisch.com

SOLUCIONES EN EQUIPOS DE LAVADO Y TRATAMIENTO DE AGUA PARA TALLERES FERROVIARIOS

EXTRACCIÓN WCS

TRATAMIENTO Y RECICLADO AGUA

LAVADO BOGIES

LAVADO MATERIAL RODANTE



Aquafrisch

Aquafrisch C/ Ignacio Zuloaga 2
E-28522 Rivas - Vaciamadrid. Spain
Tel. +34.91.380.03.33

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BOMBARDIER



BOMBARDIER

This year, Bombardier will focus its activities at its prominent and highly interactive indoor booth which enables the company to use latest presentation technologies to engage directly with its clients. Bombardier will showcase how its broad portfolio of mobility solutions helps to solve the mobility needs of customers in ecosystems all over the world.

The stand will feature multi-touch screens allowing customers to virtually configurate mobility solutions adapted to the needs of different types of cities, from stable urban environments to megacities, fast-growing cities or even greenfield settings. A virtual reality exhibit takes visitors on an immersive 360° city experience, be it on the INNOVIA monorail, a FLEXITY tram or a MOVIA metro. An interactive presenter explores all elements of the value chain and helps customers consider the advantages of a complete mobility solution including options for signalling, operations & maintenance and components.

Bombardier's presence this year is centered on dialogue. The Bombardier team takes InnoTrans as an occasion to engage with their customers and to better exchange on the challenges they are facing in their ecosystems.

Hall 2.2 Stand 101

<https://www.bombardier.com/en/home.html>



CAF

Soluciones ferroviarias globales

CAF es uno de los líderes internacionales en el diseño e implantación de sistemas integrales de transporte ferroviario. CAF ofrece una gestión integral del proyecto y de la ingeniería en todas las fases del proyecto que incluyen diseño del sistema, obra civil, señalización, electrificación y otros sistemas electromecánicos, suministro del material rodante y operación y mantenimiento del sistema. En cuanto a material rodante, CAF fabrica y mantiene trenes de alta velocidad, trenes regionales y de cercanías, locomotoras, unidades de metro, unidades articuladas y tranvías.

En la actualidad, CAF está fabricando trenes de alta velocidad Oaris para Flytoget (Noruega) así como trenes regionales Civity para NS (Países Bajos) y distintas franquicias en Reino Unido como las de Northern o Transpennine. Sus contratos más recientes en el segmento urbano incluyen el suministro de unidades de metro Inneo para Nápoles y tranvías Urbos para diferentes ciudades como Friburgo, Lund, Luxemburgo, Oslo y Vitoria entre otras.

Comprehensive Rail Solutions

CAF is one of the world leaders in the design and implementation of comprehensive transit systems. CAF provides comprehensive project and engineering management throughout all stages of the project including system design, civil works, signalling, electrification and other electromechanical systems, rolling stock supply and system operation & maintenance. In terms of rolling stock, CAF supplies and maintains high speed trains, regional and commuter trains, locomotives, metro units, light rail vehicles and tramways.

At present, CAF is manufacturing Oaris high-speed trains for Flytoget in Norway and Civity regional trains for NS (Netherlands) and Northern and Transpennine franchises in the UK. Its most recent contracts in the urban segment include Inneo metro units for Napoli and Urbos trams for different cities such as Freiburg, Lund, Luxembourg, Oslo and Vitoria among others.

Visit CAF at Stand 104, in Hall 4.2.

www.caf.net



CETEST



CETEST – Laboratorio de ensayos

CETEST es un laboratorio acreditado ISO17025 con amplia experiencia en ensayos de componentes y vehículos ferroviarios. CETEST proporciona un servicio global para ensayos en vía, con clientes por todo el mundo, y dispone de varios bancos de ensayo, tanto portátiles como en sus instalaciones.

La cobertura de los servicios de CETEST cubre todo el ciclo de vida del producto ferroviario, yendo desde los ensayos de validación y verificación durante la fase de desarrollo, hasta la homologación de producto, pasando por investigación y detección de fallos durante el servicio.

Entre sus clientes se encuentran los principales fabricantes de coches de pasajeros, mercancías y material auxiliar, así como proveedores de componentes y diferentes autoridades e ingenierías. Algunas de sus áreas de conocimiento son: integridad estructural y ensayos de fatiga de bogies y traviesas; validación de ruedas, ejes y rodamientos; caracterización estática de vehículos completos (con plataformas portátiles); ensayos de dinámica en vía (incluyendo solución para ejes instrumentados); ruido, vibraciones, EMC, aerodinámica...

Your Test & Evaluation Department

Fully accredited ISO17025, CETEST is an experienced laboratory in railway vehicles and components testing. Its offering covers a wide variety of component test benches at their facilities as well as portable ones. CETEST provides a global on-track measurement deployment capacity.

From validation and verification test in the development phase to product homologation and failure detection / root cause analysis in the after-sales operation, CETEST can assist you during the full lifecycle of your product.

Their customers include passenger, freight and special track vehicle manufacturers as well as component suppliers. Additionally, they work closely with other railway organizations, namely Notified Bodies, engineering firms and authorities.

Some of their fields of expertise are: structural integrity and fatigue testing of car bodies and bogie bolsters/frames; validation of wheels, axles and bearings; static characterization of full vehicles (with portable platforms), on-track dynamic testing (including measuring wheelsets); noise, vibrations, EMC, aerodynamics...

Hall A, City Cube 401a

www.cetestgroup.com



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COMSA CORPORACIÓN

Servicios integrales de infraestructuras ferroviarias. Con más de 125 años de historia, COMSA Corporación desarrolla proyectos llave en mano de construcción y mantenimiento de infraestructura y superestructura ferroviaria, electrificación, control y sistemas de comunicaciones para alta velocidad, líneas convencionales, metros y tranvías. El grupo mantiene una posición de liderazgo dentro del mercado español, donde ha participado en todas las líneas de alta velocidad, y cuenta con presencia consolidada en Argentina, Brasil, Croacia, Dinamarca, México, Polonia, Portugal y Suecia. Dentro de su portfolio internacional, destaca la modernización de un tramo de la Rail Báltica en Lituania, la construcción de la línea entre Gradec y Sveti Ivan Zabno (Croacia), la segunda fase de la L4 del metro de Sao Paulo (Brasil) y el nuevo tranvía de Odense (Dinamarca), éstas tres últimas actualmente en ejecución.

Integrated railway infrastructure services
With over 125 years history, COMSA Corporation develops turnkey projects for the construction and maintenance of railway infrastructure and superstructure, electrification, control and communication systems for high speed, conventional lines, metros and tramways.
The group holds a leading position in the Spanish market, where it has been involved in all high-speed lines, and it has a strong presence in Argentina, Brazil, Croatia, Denmark, Mexico, Poland, Portugal and Sweden. Within its international portfolio, it highlights the modernization of a Baltic Rail section in Lithuania, the construction of the Gradec and Sveti Ivan Zabno line (Croatia), the second phase of the L4 of the Sao Paulo underground (Brazil) and the new tramway of Odense (Denmark), these three last ones are currently underway.
Hall 22 Stand 704

www.comsa.com



DANOBAT



DANOBAT es una empresa especializada en el diseño, desarrollo y fabricación de máquinas herramienta, sistemas de producción de alto valor añadido y soluciones completamente flexibles adaptadas a las necesidades del cliente. La división de Ferrocarril centra su actividad en el desarrollo de soluciones llave en mano para la fabricación y mantenimiento de material rodante, así como servicios avanzados de ingeniería, consultoría y gestión de proyectos complejos, integrando además de sus propios productos, otros desarrollados por empresas especializadas. En la feria, DANOBAT presenta su nueva línea de tornos de foso DHD. Una generación de máquinas robustas y fiables que proporcionan un proceso de mecanizado totalmente automático. Una solución completa desarrollada para reducir tiempos de ciclo, aumentar la fiabilidad y seguridad del proceso, para prolongar así, la vida útil de las ruedas dentro de una flota ferroviaria.

Specialised Machine Tools and production systems for railway industry offering technologically advanced solutions and services, including among others engineering, consultancy, which are fully adapted to clients' needs.
DANOBAT focuses its activity in the supply of turnkey solutions for the manufacturing and maintenance of railways rolling stock, incorporating own leading technology products, together with those manufactured by specialised companies.
DANOBAT will take the opportunity provided by the fair to present its new generation of DHD underfloor wheel lathes. A robust, reliable solution that provides a fully automatic machining process. This complete solution reduces cycle times, increases process reliability and safety, thus extending the useful lifetimes of the wheels of railway rolling stock.
Hall 22 Stand 603

<https://www.danobatgroup.com/es>



DURO FELGUERA

Compañía especializada en el diseño, fabricación y suministro de aparatos de vía y sus componentes, cubriendo un amplio rango de aplicaciones: desde tranvía hasta alta velocidad, pasando por metro o líneas convencionales (escapes, travесías...), montadas sobre travесías de madera, hormigón o sobre losa, con cruzamientos fundidos de acero al manganeso o de punta móvil. Juntas aislantes encoladas. Fundición diseñando, fabricando y suministrando cruzamientos de acero al manganeso de hasta 11 metros de longitud. Mecanizado CNC, soldadura a tope por chisporroteo, endurecimiento por explosión, ensayos estáticos y dinámicos... Diseño y fabricación de carriles de transición. Referencias en más de 20 países.

Specialized Company for the design, manufacturing and supply of turnout systems and their components, covering a wide range of applications: from tramway to high speed turnouts, passing by metro or conventional turnouts (crossovers, double slip crossings ...) assembled on wooden and concrete sleepers or on slab track, with Manganese steel crossings or swing nose crossings. Insulated glued joints. Foundry designing, manufacturing and supplying Manganese steel casted crossings up to 11 meters long. CNC machining, flash butt welding, explosive hardening, static and dynamic bending tests... Design and manufacturing of transition rails. References in more than 20 countries.
Hall 26 Stand 307

<https://www.durofelguera.com>



REDALSA

TRACK TESTING

ULTRASONIC INSPECTION
OF RAILS



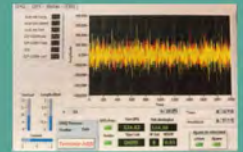
INSPECTION OF
ALUMINOTHERMIC
WELDING



GEOMETRICAL INSPECTION
OF TRACK



DYNAMIQUE INSPECTION
OF TRACK



INSPECTION
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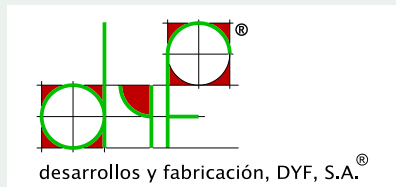
hispacold is committed with global warming reduction policies.



Come and visit us at InnoTrans 2018
to discover our sustainable comfort

Hall 3.1 / Booth 224
Berlin, September 18th-21st

DYFSA



desarrollos y fabricación, DYF, S.A.®

Desarrollos y fabricación, DYF®

Componentes plásticos para infraestructura DYF está especializada en el diseño y fabricación de piezas de ingeniería en plásticos técnicos mediante el proceso de moldeo por inyección, aplicado a infraestructuras ferroviarias.

Posee 9.000 m² de instalaciones en su planta de Madrid. Sus señas de identidad en el sector son su capacidad para desarrollar soluciones, flexibilidad y velocidad de respuesta, acompañadas de un precio muy competitivo.

En sus veinticinco años de historia, ha conseguido convertirse en uno de los principales suministradores de componentes plásticos para infraestructura ferroviaria en España.

Exporta más del 40 por ciento de su producción a países como Alemania, Francia, Portugal, Israel y Turquía.

Sus piezas pasan por exhaustivos controles de calidad, mediante un sistema ISO:9001.

DYF posee Autorizaciones de Suministro y Uso de ADIF (ASU) y certificados de producto de CETREN y DEUTSCHE BAHN (HPQ) de diferentes elementos plásticos para la vía.

Plastic components for infrastructure

DYF is specialized in the design and subsequent manufacturing of engineering technical plastics pieces by injection molding process, applied to railway infrastructure. It has 9,000 m² facility at its plant in Madrid, Spain. Its identity in the sector are its ability to develop solutions, flexibility and speed of response, accompanied by a very competitive price.

In its 25 years history, has managed to become one of the leading suppliers of plastic components for railway infrastructure in Spain. Exports more than 40 % of its production to countries like Germany, France, Portugal, Israel and Turkey. Its pieces go through strict quality controls through a system ISO: 9001. DYF Has Supply and Use released ADIF (ASU), and product certificates for CETREN and DEUTSCHE BAHN (HPQ) in different plastic elements to the track.

www.dyfsa.com



EJE OGI

Ejes OGI de ancho variable para mercancías

Para solucionar el problema de los cambios de ancho de vía de los trenes de mercancías en las distintas redes ferroviarias, el consorcio compuesto por Azvi, Tria y Ogi, junto con Adif, ha desarrollado un sistema automático de cambio de ancho, compuesto por ejes de ancho variable y un cambiador.

El proceso de homologación para ejes de ancho variable que establece la norma ETH española está siendo verificado y certificado por Bureau Veritas, organismo que emitirá el informe de evaluación.

Actualmente, los ejes OGI han superado con éxito los ensayos en banco y en circulación, así como los 100.000 kilómetros de las Fases I y II de los ensayos en servicio que establece la norma, y obtendrán la Autorización de Puesta en Servicio y la Autorización de Circulación para circular en servicio comercial.

Variable gauge OGI Axles for freight

In order to solve the problem of breaks of gauge between the different railway networks in rail freight, the consortium composed by Azvi, Tria and Ogi, as well as Adif, has developed an automatic variable gauge system made up of variable gauge axles and a gauge changeover facility.

The Variable-gauge Axle homologation process set out by the Spanish ETH standard is being verified and certified by Bureau Veritas, the entity responsible for publishing the evaluation report.

Currently, the OGI axles have successfully completed Laboratory Tests and On-Track Tests, as well as the 100,000 km in Phase I and II of the In-Service Tests set out in the standard, and they will obtain the provisional Technical Approval for commercial operation.

Hall 22 Stand 704

<http://ogiaxle.com>



FAINSA



En esta nueva edición de Innotrans, FAINSA, fabricante de asientos para transporte de pasajeros con más de 80 años de experiencia en el sector y desde enero 2015 unida al Grupo COMPIN, exhibirá la mayor parte de la gama de productos ferroviarios del Grupo, que cubren cualquier necesidad de transporte, desde asientos para metro hasta butacas para trenes de Alta Velocidad, pasando por múltiples soluciones de interiorismo.

En Innotrans presentarán múltiples versiones de la butaca SOPHIA, diseñada para servicios de trenes regionales y ahora también en versión Primera Clase, así como también nuevos tejidos antivandálicos y la incorporación en sus butacas de las últimas prestaciones tecnológicas. Exhibirán también el asiento NEW METRO, de reducido peso y con múltiples combinaciones de color y de acabados.

Fainsa, a passenger seats manufacturer with more than 80 years of experience and linked to Compin Group from January 2015, is presenting at Innotrans most of the railway seating systems manufactured by the Group. Our range of products could meet any passenger transport need, from underground to high speed services as well as railway interior solutions.

On this occasion, we will introduce different versions of the SOPHIA seat, designed for Regional traffic purposes and now available for First Class purposes, as well as new vandal-resistant textiles complying with the highest standards and the addition of the latest technological outputs in our seats. We will also show our seat model NEW METRO, offering light weight and many different colour and finishing possibilities.

Hall 1.1 Stand 322

www.compim.com





1968- 2018

**THE JOURNEY HAS
ONLY JUST BEGUN**

We are turning 50. Half a century of great projects and important challenges successfully overcome. We look to the future with the same hopes and motivation as the very first day. Because this journey has just begun.



INNOTRANS 2018
HALL 5.2 STAND 114



GEMINYS

Manuales Industriales y de Ingeniería

Especialistas en gestión y elaboración de Documentación Técnica para el sector ferroviario y afines: máquina herramienta, máquina especial, bienes de equipo, automoción, software... Expertos en Documentación Técnica en cualquier soporte, adaptándonos a la Industria 4.0 gracias a las nuevas tecnologías.

Diseño, creación, composición y redacción de manuales de conducción, operación, descriptivos, de mantenimiento e investigación de averías, catálogos de piezas, planes de mantenimiento, desarrollo de versiones interactivas de manuales (IETM) a medida de cada cliente y consultables desde cualquier dispositivo móvil. Desarrollo de catálogos electrónicos interactivos que ayudan a gestionar los repuestos.

Desarrollo de plataformas y contenidos e-learning destinados al sector industrial. Desarrollo de aplicaciones informáticas para apoyar la gestión de planes de mantenimiento y su integración con sistemas ERP.

Industrial and Engineering Manuals

Specialists in management and drafting of Technical Documents for the railway industry and associated industries: machine tools, special machinery, capital goods, automotive, software, etc. Experts in Technical Documents on any media, adopted to Industry 4.0 thanks to the implementation of state-of-the-art technology.

Design, creation, composition and drafting of driving, operation, descriptive, maintenance and trouble-shooting manuals, parts catalogues, maintenance plans, development of client-tailored interactive manual versions (IETM) that can be accessed from any mobile device. Preparation of interactive electronic catalogues that can help to streamline spare parts logistics.

Development of e-learning platforms and content for the industrial sector. Development of computer applications to assist in the management of maintenance plans and their integration with ERP systems.

www.geminys.com

GLOBALVIA



Globalvia, constituida en 2007, es uno de los líderes mundiales en la gestión de concesiones de infraestructuras. En la actualidad, la Compañía gestiona un total de 26 proyectos incluyendo 19 autopistas y 7 ferrocarriles en 8 países: España, EE UU, Irlanda, Portugal, Andorra, México, Costa Rica y Chile. A través de estos activos, la Compañía gestiona más de 1.600 km de autopistas y más de 70 km de vías ferroviarias siguiendo un modelo de negocio eficiente y sostenible.

El objetivo de Globalvia es la generación de valor a sus accionistas, tres fondos de pensiones internacionales, OP Trust (Canadá), PGGM (Holanda) y USS (Reino Unido), gracias a seguir una estrategia de selección de inversiones en activos de infraestructuras de transporte ubicados en países de la OCDE.

Globalvia, established in 2007, is a worldwide leader in the transport infrastructure concession management. Currently, the company manages 26 projects including 19 highways and 7 railways in eight different countries: Spain, USA, Ireland, Portugal, Andorra, Mexico, Costa Rica and Chile. Through them, more than 1,600 km of highways and more than 70 km of railways are managed following a business model based in efficiency and sustainability.

Globalvia's goal is focused on generating value for its shareholders, three international pension funds, OP Trust (Canada), PGGM (Netherlands) and USS (UK), by managing strategic investments in transport infrastructure assets located in OECD countries.

<https://www.globalvia.com>



GMV

GMV es la empresa española líder en ITS con presencia destacada en el sector ferroviario. Su actividad se centra en el diseño, desarrollo, implantación y mantenimiento de sistemas inteligentes para el transporte. Como principales productos y servicios ofrece: Equipamiento embarcado de localización y comunicaciones, Sistemas de Ayuda a la Explotación, ticketing, Sistemas de información al viajero, videovigilancia, PA & Intercom, Sistemas de refuerzo a la Seguridad y Software de Planificación Óptima de servicios, concebidos para todos los modos ferroviarios. Dispone de referencias destacadas en todo el mundo con clientes como RENFE, ONCF, ALSTOM, CAF, TALGO, Metro de Santiago de Chile, Metro de Barcelona, FGV, EUSKOTREN, etc.

GMV is the Spanish Company leader in ITS, with outstanding presence in the rail sector. The activity of GMV is focused in design, development, commissioning and maintenance of Intelligent Transport Systems. As main products and services GMV offers: On board units for location and communications, Fleet Management Systems, Ticketing, Passenger information systems, CCTV, PA & Intercom, Systems for security reinforcement, Software for planning and scheduling of services, applicable to all railway modes. GMV has important references all around the world with clients like RENFE, ONCF, ALSTOM, CAF, TALGO, Metro of Santiago de Chile, Metro of Barcelona, FGV, EUSKOTREN, etc

Hall 2.1 Stand 412

<https://www.gmv.com/es/>





Visit us, we are
at InnoTrans!
You can find us in
Hall 18 / Stand 303

A way to the future

The major equipment and vehicle manufacturers for the railway sector rely on MANN+HUMMEL for the quality of its products and its design of bespoke solutions, which contribute to optimal maintenance costs and greater efficiency.

Whether it's for diesel engines, the transmission, the brake compressor, the driver's cab or passenger cars, it is vital that the components come from the same manufacturer. MANN+HUMMEL's wide variety of products covers virtually all the filtration requirements for the railway sector.

The experience and innovation capacity of MANN+HUMMEL makes it a key element in keeping rail transport rolling.

MANN+HUMMEL, 70 years of experience in the world of filtration.

www.mann-hummel.com

Leadership in Filtration

MANN+
HUMMEL

HISPACOLD



Confort sostenible

Hispacold es una empresa líder a nivel mundial en sistemas de climatización, con más de 40 años de experiencia, especializada en el confort del pasajero. Hispacold, con una larga y dilatada experiencia en soluciones HVAC, diseña sistemas para todas las condiciones climáticas y cualquier tipo de necesidad de carga térmica.

Desde sus inicios, Hispacold siempre ha estado comprometida con las políticas de reducción del calentamiento global.

Hispacold es una empresa de Irizar Group, que emplea a más de 3.000 personas en los cinco continentes y que factura más de 550 ME. De esta forma, dispone de los recursos y beneficios de una multinacional, manteniendo su propio espíritu y filosofía de empresa.

La presencia de Hispacold en los cinco continentes garantiza la mejor asistencia técnica en cualquier parte del mundo.

Sustainable comfort

Hispacold is a World leader company for climate systems with more than 40 years of experience specialized in passengers' comfort.

Hispacold, with a long and deep experience in HVAC solutions, designs systems for all climatic conditions and any type of thermal load necessities.

Hispacold has been always engaged with global warming reduction policies.

Hispacold is a company of Irizar Group SC, which employees more than 3,000 people in the five continents and has a global turnover of more than 550 Million €. This gives Hispacold the benefits from a multinational organization while maintaining an individual company spirit.

Hispacold's presence in the five continents guarantees the best technical assistance at any place of the world.

Hall 3.1 Stand 224

www.hispacold.es



INDRA

Indra transforma la movilidad del futuro con soluciones end-to-end

Indra, una de las principales compañías globales de tecnología y consultoría, cuenta con soluciones integrales líderes en el ámbito ferroviario para gestión de la infraestructura y la operación del transporte, destacando los últimos avances digitales e innovaciones de la compañía en TMS, recaudo y seguridad.

Indra continúa la evolución de su tecnología ERTMS hacia sistemas más abiertos e interoperables y se posiciona, además, como compañía líder en tecnologías IoT, muy poco explotadas hasta ahora en el sector, por la alta exigencia de seguridad, y con un alto potencial de crecimiento.

Indra transforms the mobility of the future with solutions for the entire lifecycle

Indra, one of the world's top technology and consulting companies, offers a comprehensive range of leading solutions in the railway sector, for infrastructure management and transport operation, highlighting the latest digital advances and the company innovations in TMS, fare collection and safety solutions. Indra continues the development of its ERTMS technology towards more open and interoperable, and it is also positioned as a leader in the highly growing IoT technologies, which have been barely exploited until now in this sector, due to the high demand for safety.

Hall 4.1 Stand 403

<https://www.indracompany.com>

INECO



Ineco es una compañía con cincuenta años de vida que cuenta con 3.000 profesionales con una alta especialización técnica en ingeniería y consultoría de redes ferroviarias convencionales y de alta velocidad, aeropuertos, navegación aérea, logística, transporte urbano, puertos y carreteras. Está presente en 50 países con soluciones integrales, innovadoras y de alto valor tecnológico, con el objetivo de mejorar la movilidad de las personas gracias al desarrollo de infraestructuras del transporte sostenibles y seguras. Entre otros proyectos, destaca su participación en el desarrollo de las líneas de alta velocidad en Arabia Saudí, en Reino Unido o en Turquía.



Ineco is a company with 50 years of experience and 3,000 professionals, with a high degree of technical specialization in engineering and consulting for conventional and high-speed rail networks, airports, air navigation, logistics, urban transport, ports and roads. It operates in 50 countries with comprehensive, innovative and technologically-valuable solutions, aiming to improve the mobility of people thanks to the development of sustainable and safe transport infrastructure. Among other projects, it is worth mentioning its participation in the development of high-speed lines in Saudi Arabia, United Kingdom and Turkey.

Hall 5.2 Stand 114

<https://www.ineco.com/webineco/>



Hall 4.1,
booth 317

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Reliable Networks ▲ Sincere Service

Ingeteam

INGETEAM

INGETEAM amplía su presencia en Innotrans. Presentará nuevos módulos de potencia para Convertidores de Tracción INGETRAC en el Hall 17. INGETEAM presentará en Innotrans los módulos de potencia, que suponen el elemento principal de los convertidores INGETRAC en cada uno de los rangos de potencia.

Los nuevos módulos incorporan las topologías más avanzadas, y ya han sido implantados en algunos de los proyectos ferroviarios más punteros. Se mostrarán, además, los últimos proyectos realizados en el área de sistemas de recuperación de energía.

En el Hall.6.2 se ubicará un stand de INGETEAM para presentar la solución INGESYS de control y monitorización que da respuesta tanto a las necesidades de automatización existentes en el tren (VCU, RIO, MU, TWC, etc.), como en sus sistemas auxiliares (HVAC, WC, puertas, etc.), mediante una arquitectura modular configurable a las necesidades de cada aplicación.

INGETEAM: Bigger presence at Innotrans. The company will show new power basic electronic modules for INGETRAC converters and INGESYS solution.

INGETEAM will present the High/Medium / Low power electronic modules for INGETRAC converters for all kind of rail vehicles.

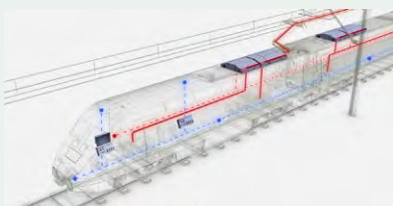
The new modules are designed with most advanced topologies and are being implemented on the latest rail projects.

We will also present latest energy recovery projects.

On hall 6.2 INGETEAM will present INGESYS control and monitoring solution responds both to the automation needs of the train (VCU, RIO, MU, TWC, etc.) and its auxiliary systems (HVAC, WC, doors, etc.), through a modular architecture that can be configured to the needs of each application.

- Hall 17 Stand 201
- Hall 6.2 Stand 604

<https://www.ingetteam.com>



ISTOBAL



ISTOBAL es un grupo multinacional líder en soluciones de lavado y cuidado para todo tipo de vehículos de transporte, presente en más de 75 países en todos los continentes. A través de su división ferroviaria ISTOBAL FDI+ desarrolla sistemas de lavado a medida para trenes, tranvías y metros, que se adaptan a las especificaciones de cada instalación y garantizan un lavado eficiente y de la máxima calidad con el mínimo mantenimiento e impacto en el medio ambiente. La compañía suministra equipos de lavado a los principales fabricantes de material rodante y servicios de taller y mantenimiento en países como España, Francia, Irlanda, Dinamarca, Túnez, Panamá, Dubai, Rusia, Arabia Saudí, Australia o Malasia.

ISTOBAL is a multinational group leader in wash and care solutions for all transport vehicles, present in more than 75 countries in all five continents. Through ISTOBAL FDI+ railway division, the company develops customised wash systems for trains, trams and metros, ensuring an efficient and top-quality wash with minimum maintenance and impact on the environment. The firm supplies wash equipment to the leading rolling stock manufacturers and depot constructors in countries such as Spain, France, Ireland, Denmark, Tunisia, Panama, Dubai, Russia, Saudi Arabia, Australia or Malaysia. Discover ISTOBAL FDI+ at Innotrans 2018, Hall 7.2c Stand 104.

www.istobal.com



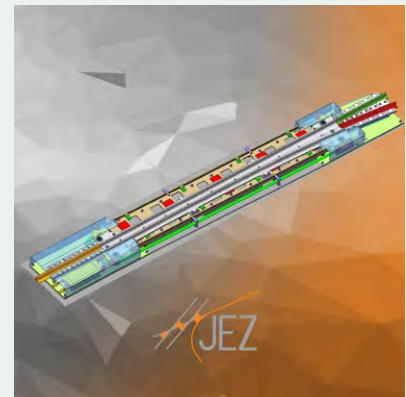
JEZ

JEZ Sistemas Ferroviarios, líder en el diseño, producción y venta de material fijo de vía, ha desarrollado desvíos y travesías para vehículos de transporte urbano con características híbridas entre un tranvía y un autobús que funcionan con ruedas neumáticas guiadas a través de un carril central y un sistema de ruedas metálicas que lo abrazan. La solución desarrollada por JEZ consiste en un panel giratorio con carril principal y secundario, preferiblemente de acero al Mn, mecanismos de leva en la entrada y salida de los cambios de aguja, con sistema de bloqueo integrado de las posiciones finales e integración de la unidad de maniobra, bloqueo y detección del motor electrohidráulico UNISTAR HR dentro del desvío o la travesía.

JEZ forma parte del grupo Voestalpine.

JEZ Sistemas Ferroviarios, leader in the designing, manufacturing and supplying of points and crossings, has developed turnouts and diamond crossings for urban transport vehicles with hybrid characteristics between a tram and a bus which consists in vehicles with pneumatic wheels guided through a central rail and a metallic wheel system that clamp it. The solution developed by JEZ consists of rotary panel with main and branch rail, preferably made of Mn steel. Cam mechanisms at the entrance and exit of switches, with integrated locking system of the end positions and integration of the switching unit, locking and detection of the electrohydraulic engine UNISTAR HR inside the turnout or the diamond crossing. JEZ is part of Voestalpine.

<http://www.jez.es>





VARIABLE GAUGE AXLES FOR FREIGHT

The solution
for breaks of gauge



OGI AXLE

www.ogiaxle.com



Visit us at **InnoTrans**
Hall 22
Stand 704



KNORR-BREMSE ESPAÑA, S.A.



Leading company in braking and HVAC systems and automatic access doors systems for all type of railway vehicles.

Knorr-Bremse España, S.A. belongs to the Rail Vehicle Division of the German group Knorr-Bremse, global leading manufacturer of braking and on-board systems for rail and commercial vehicles. Based in Getafe, Madrid, Knorr-Bremse España, through its FRENOS division, is leader in the Spanish market for the design, manufacturing and supply of brake systems and derailment detection systems for railway vehicles, as well as automatic access door systems IFE.

MERAK division specializes in the development, manufacturing, sales and service of heating, ventilation and air-conditioning (HVAC) systems for all type of railway vehicles. As of today Merak has some 100.000 systems in daily operation all over the world and under all kinds of environmental conditions, with innovative solutions including ultra-compact units, sand filtering or braking energy reuse, among others. It stands out for its project-orientation, systems integration capacity and customer service throughout the entire value chain, including localization.

Hall 1.2 Stand 203

www.knorr-bremse.es
www.merak-hvac.com



MAFEX

La Asociación Ferroviaria Española (Mafex) tiene como objetivo servir al sector ferroviario español, mediante la ayuda a sus empresas en sus procesos de internacionalización y la defensa de los intereses generales de sus empresas asociadas para conseguir, en cooperación, el más alto nivel de competitividad posible de las mismas. Entre sus actividades se incluye la coordinación de una intensa agenda de delegaciones empresariales; la difusión de información de interés a los socios, así como la comunicación institucional con diferentes administraciones nacionales e internacionales. Con el fin de dar respuesta a los nuevos retos del sector y apoyar el liderazgo tecnológico de la industria, Mafex cuenta con un comité de competitividad que refuerza su organización interna. Mafex, reconocida como entidad oficial colaboradora de la Secretaría de Estado de Comercio del Ministerio de Economía y Competitividad, cuenta con el apoyo del GRUPO AGEX al cual pertenece y diversos organismos e instituciones nacionales e internacionales como UNIFE y ALAMYS.



The Spanish Railway Association (Mafex) aims to serve the Spanish rail sector, by helping its companies in their internationalization processes and defending the general interests of their associated companies to achieve, in cooperation, the highest level of competitiveness possible of them. It's activities include the coordination of an intense agenda of business delegations and missions; the dissemination of information of interest to his partners, as well as the institutional communication with different national and international administrations. In order to respond to the new challenges of the sector and to support the technological leadership of the industry, Mafex has created a competitiveness committee that reinforces it's internal organization.

Mafex, recognized as an official collaborating entity of the Secretary of State for Trade of the Ministry of Economy and Competitiveness, has the support of the AGEX GROUP to which belongs and various national and international organizations and institutions such as UNIFE and ALAMYS.

Hall 22 Stand 704

www.mafex.es

MAN HUMMEL

MANN + HUMMEL

Globalization and fewer opportunities in some local markets have made that the vehicle and equipment manufacturers in railway sector have decided to enter in new countries and new markets. That means that traditional solutions are no longer valid to comply with the regulations and the extreme conditions required in some projects. From MANN + HUMMEL we give solution to these new demands developing a new generation of panels with cyclonic cells that fulfil current standards about fire and smoke (EN 45545) and provide the highest filtration efficiency without penalizing commitment about pressure-drop. This product allows to provide large air flow volumes highly pre-filtered to be used in subsequent applications.

In the same way, in MANN + HUMMEL is more aware and sensitive to the need of providing maximum air quality, not only to engine rooms or engines themselves, but overall to the end users of the railway vehicles. The MANN + HUMMEL HVAC (Heat Ventilation and Air Conditioning) filters provides better efficiencies than the standard solutions used in this type of application, with M5 grade filtration (according EN 779) as a standard for this program. In this way, is guaranteed high quality level of the air that we breathe inside the carriages and driver's cab, and a higher degree of hygiene in the ducts of ventilation, extending the maintenance periods of this equipment. They are certified in the category HL3 according to European regulations of fire and smoke EN 45545-2 (filter media and frame), which makes this air filter a superior product compared with the conventional filter mat solutions.

The filter concept allows to achieve high filtration surface, extending maintenance periods over traditional solutions and getting lower TCO (Total Cost Ownership).

For more information you could visit our Stand Hall 18 / Stand 303.

<http://www.mann-hummel-industria.com/>





PlasserSmartMaintenance

MACHINE • FLEET • INFRASTRUCTURE

Our digital generation: PlasserSmartMaintenance

In the near future a new digital development will assist and ensure not just HIGH CAPACITY, PRECISION and RELIABILITY of P&T machines, but will put the SMART MACHINE in the center of a predictive maintenance concept of rail infrastructure.

Nuestra generación digital: PlasserSmartMaintenance

Próximamente ese nuevo desarrollo digital no solo apoyará y asegurará RENDIMIENTO, PRECISIÓN y FIABILIDAD de las máquinas de P&T, sino coloca la SMART MACHINE en el centro del mantenimiento predictivo de la infraestructura ferroviaria.





MASATS

Masats specializes in public transport accessibility for the road and railway sectors. Its range of products include passenger access doors, ramps and steps. The company is also active in infrastructures with PSD doors (platform screen doors) and Gap-Fillers.

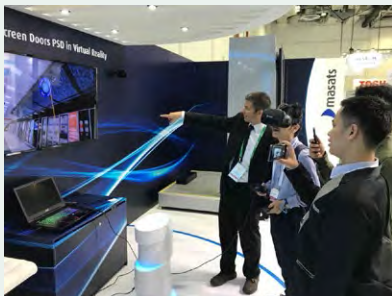
Standing out in the passenger train door sector are its passenger electric sliding-plug doors which offer quick closure, an attractive design and the ideal weight as well as high system availability. Besides its high-performance modern designed Platform Screen Doors (PSD), Masats will be presenting two other worldwide innovations for platforms at Innotrans:

-The all-new Gap-Filler model, an automatically extending running board that is installed in a station's fixed infrastructure for safe and comfortable passenger access, especially people with reduced mobility. The main characteristics of this equipment are speed, lightness and extensive coverage. It is a new family of running boards that Masats has designed for its platform accessibility systems which can be integrated and interact with Masats platform door systems.

- A communication system between passenger train door systems and platform door closing systems called ThyraLink. This patent-pending communication system allows the implementation of an on-request immediate, delay-free open functionality for train access doors using open buttons. Plus, with ThyraLink, it's possible to determine the operational status of doors before a train arrives at a station to give passengers on the train and on the platform advance notice of any access doors that are out of service.

Hall 3.1 Stand 225

<http://www.masats.es/es/>



METRICA

Carenados | Fairings



Mechanical Engineering | metrica

Diseño integral de material rodante

Metrica es una empresa de ingeniería mecánica especializada en el desarrollo de material rodante. Participa activamente con sus clientes en el diseño de sus vehículos ferroviarios, desde las instalaciones, interiorismo o estructura de caja, hasta los medios necesarios para su industrialización. Los proyectos realizados incluyen tranvías, metros, cercanías, sub-urbanos, alta velocidad y funiculares. Su actividad se centra en ofrecer un servicio integral que engloba: diseño de superficies exteriores, células y carenados; diseño de instalaciones neumáticas, eléctricas e hidráulicas; diseño integral de interiorismo, tanto de sala como de cabina; diseño y cálculo de la estructura de caja, así como los medios productivos para su fabricación.

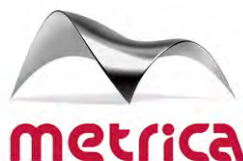
Están certificados acorde a las normas ISO 9001, ISO 14001 y la EN 15084-CL4 para soldadura de vehículos y componentes ferroviarios.

Rolling stock integral design

Metrica is a mechanical engineering company specializing in the development of rolling stock. We work actively alongside our clients in the design of any part of the vehicle and its built-in systems, including the body structure, interior fittings and industrial manufacture. We have carried out all kinds of railway projects, from trams, metropolitan underground, suburban, regional and high speed trains and cable cars.

Our activity is focused on providing a comprehensive service that encompasses: the design of exterior surfaces, cells and fairings, design and calculations of the body structure, design of pneumatic, electric and hydraulic systems. Integrated design of interior design, for both cabin and passenger cars, as well as the jigs and production tools for manufacturing. We hold ISO 9001 and ISO 14001 certifications. Metrica is also certified in EN15085-CL4 for designing welding railway vehicles and components.

Tel.: +34 976 106 695
 info@ingemetrica.com
 www.ingemetrica.com



METROTENERIFE

Asesoramiento en proyectos de movilidad sostenible

Metrotenerife trabaja, desde 2001, en el desarrollo de proyectos de transporte sostenible. Experiencia en diseño, construcción y operación de líneas ferroviarias propias; opera de manera eficiente y sostenible (99,7% de disponibilidad de servicio - ratio de cobertura de costes superior al 100%). Además, participa en el desarrollo de proyectos ferroviarios en varios continentes.

Metrotenerife ofrece una línea de asistencia técnica a operadores y autoridades de transporte para las distintas fases de un plan de movilidad integral:

1. Planificación
2. Proyecto
3. Construcción
4. Pruebas y ensayos
5. Preoperación
6. Simulación de servicio
7. Operación y mantenimiento

Assessment on sustainable mobility projects

Metrotenerife works in the development of sustainable transport projects since 2001. The firm has experience in the design, construction and operation of its railway lines, and has achieved successful results with and efficient and sustainable operation (99,7% availability of service - a cost coverage ratio of over 100%). Also, Metrotenerife participates in the development of others railway projects in several continents.

Metrotenerife offers a technical assistance at any stage of an integral mobility plan:

1. Planning
2. Project
3. Construction
4. Tests and trials
5. Preparation
6. Service simulation
7. Operation and maintenance

Project management
 contact@metrotenerife.com

<http://metrotenerife.com/services-and-consultancy/>



MRX Ni-Cd battery

Delivering high energy in a compact package



MRX Ni-Cd batteries deliver the high energy performance essential to meet the continuous, every day onboard backup needs of all types of modern electric trains such as urban transport, regional transport and intercity transport.

Main benefits of MRX

Maximum performance – Minimum maintenance – Reduced volume, footprint and weight
Integrated water filling system – Low life cycle cost

www.saftbatteries.es

saft
100
1918 • 2018



Natural Ingenium

mgn
FLEXIBLE ENGINEERING

MGN



MGN fue fundada en 1957 y desde entonces viene desarrollando su actividad en el diseño y fabricación de elementos de caucho-metal para el sector ferroviario.

MGN apuesta por la Investigación e Innovación como base fundamental para el desarrollo de elementos integrados en los nuevos conceptos de tren de pasajeros y mercancías, adoptando los más modernos avances tecnológicos en el mundo del caucho, control de vibraciones y sistemas de amortiguación para satisfacer las necesidades de sus clientes.

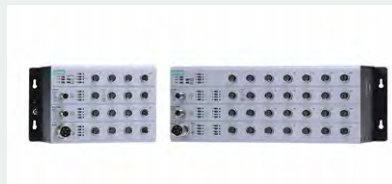
Su diversidad en maquinaria, la polivalencia y experiencia de sus empleados y adaptabilidad de sus instalaciones para diferentes procesos les permite flexibilidad para producir desde grandes series hasta pequeños lotes ajustándonos a los plazos del cliente.

MGN was established in 1957 and since then it has been developing its activity both designing and manufacturing of rubber-metal components for the railway industry.

MGN invests in research and innovation as a basis for the development of elements to be adapted in the new understanding of passenger and freight trains, taking the most advanced technologies of the rubber world, vibration control and damping systems to satisfy the needs of our customers.

Our diversity in machinery, the versatility and experience of our employees and the adaptability of our facilities for different processes gives us the flexibility to produce both large as well as small batches, adjusting to the client's delivery schedule. Hall 9 Stand 602

<http://www.mgncaucho.com>



MOXA

Moxa es un fabricante líder de soluciones para redes industriales y aplicaciones informáticas y de automatización. Fundada en 1987, Moxa ha conectado en red desde entonces más de 30 millones de dispositivos en todo el mundo y ha creado una red comercial y de servicios que llega a clientes en más de 70 países a nivel mundial. La colaboración durante 10 años de Moxa con sus clientes y socios ha permitido reunir un abundante conocimiento interdisciplinario que, combinado con una cultura diferente de servicio y da lugar a soluciones a medida y adaptadas que funcionan de forma fiable incluso en las condiciones más extremas, según el lema de Moxa, redes fiables, servicio honesto. Así es como Moxa garantiza que sus clientes se beneficien de valores sostenibles de empresa basándose en estructuras de redes fiables y sistemas de automatización. En Europa, este experto industrial está presente principalmente en los sectores de transporte, automatización de fábricas, energético, eléctrico, marítimo y de gas y petróleo.

Moxa is a leading provider of edge connectivity, industrial computing, and network infrastructure solutions for enabling connectivity for the Industrial Internet of Things. With over 30 years of industry experience, Moxa has connected more than 50 million devices worldwide and has a distribution and service network that reaches customers in more than 70 countries. Moxa delivers lasting business value by empowering industry with reliable networks and sincere service for industrial communications infrastructures. Information about Moxa's solutions is available at

www.moxa.com



1913 **PASCH** 2013

PASCH Y CIA

Pasch y Cia, con más de cien años de historia, juega un importante papel en el suministro y mantenimiento de bienes de equipo en España. Su participación en un gran número de proyectos industriales le ha proporcionado su dilatada experiencia.

Abarca múltiples campos de actuación en el Sector Ferroviario, tanto en equipamientos para infraestructura ferroviaria como para material rodante.

En el suministro de equipos para la infraestructura ferroviaria Pasch colabora con las empresas:

- Voestalpine BWG (Desvíos de alta velocidad).
- Voestalpine SIGNALING Siershahn (Detectores de cajas calientes e impacto en vía).
- Voestalpine VAE (Desvíos).
- Voestalpine SCHIENEN (Carril).
- BACKER WOLFF (Calefactores de agujas).
- FRAUSCHER (Contadores de ejes, sensores de rueda).
- RAWIE (Toperas).
- LASA (Amolado de carril, soldaduras).

Con respecto al equipamiento para el material rodante las empresas con las que colabora son:

- AKW-PROTEC (Biorreactores).
- BODE (Puertas).
- GMEINDER (Reductores de ejes).
- HÜBNER (Pasillos).
- MAN (Motores diésel).
- STEMMANN-TECHNIK (Pantógrafos y contactores de tierra).
- RAWAG (Puertas, equipamiento interior de aluminio).
- HEMSCHIEDT (Sistemas de articulación, suspensiones).

Pasch y Cia, with more than 100 years of history, has an important role in the supply and maintenance of equipments in Spain. It's participation in a big number of industrial projects has given the company it's large experience in the railway sector, as well in equipment for rail infrastructure as in equipment for rolling stock. In the supply of equipment for rail infrastructure Pasch collaborates with the following companies:

- voestalpine BWG (High Speed turnouts).
- voestalpine SIGNALING Siershahn (Hot box detectors, wheel defect detectors).
- voestalpine SCHIENEN (Rails).
- voestalpine VAE (Turnouts).
- BACKER WOLFF (Turnout heating systems).
- FRAUSCHER (Wheel sensors and axle counters).
- RAWIE (Buffers/Railway bumpers).
- LASA (Welding and grinding Specialist).

And about the supply of equipment for rolling stock Pasch collaborates with the companies:

- AKW-PROTEC (Bioreactors).
- BODE (Doors).
- GMEINDER (Axle gears).
- HÜBNER (Interconnection gangways, bellows).
- MAN (Diesel motors).
- STEMMANN-TECHNIK (Pantographs, ground contacts and third rail shoe gear).
- RAWAG (Doors, aluminium-interiors).
- HEMSCHIEDT (Articulation systems, Air suspension).

<http://pasch.es>



Mobility for Tomorrow

Industry 4.0 is also revolutionizing railway technology. Schaeffler is a strong development partner at your side who is intentionally following this track. Our comprehensive understanding of systems means we can offer the ideal solution for any challenge in the railway sector: From conventional bearings and complete drive systems through to condition-based monitoring with intelligent software and cloud connection. You can find out more at InnoTrans. Till then!



PASSGO TECHNOLOGY S.L.



**PASSGO
TECHNOLOGY**

Travel wisely- E Mobil-ity

E-Mobil-ity is a mobile application that allows to select the best route in public transport and make the payment. The integration of this application with all local, regional and national transport operators will allow to choose the best route, pay all the tickets at once with the same mobile, and use it as a valid ticket for travel.

In addition to traveling, users will be informed during the trip about its duration, price, events or hotels. The proposed solution with E-Mobil-ity is cheaper for the operator and more comfortable for the user, since all the information is received through the mobile in a single application, including voice guidance in different languages, which is helpful for blind people, with functional diversity and tourists. The traveler only has to accept the best alternative, without machines, without cash, through a click and with a secure payment gateway guarantee.

Currently, vending machines with a high acquisition cost (40-60k €) are required. With the solution proposed in E-Mobil-ity, only an investment of around €3k would be needed for an equivalent environment. E-Mobil-ity is compatible with current systems, and is a solution that encompasses both local and international transport, including major reference operators such as RENFE.

This project of integration between cities, communities and European countries is the future of transport, with a technology that we already have in our hands.

The Universitat Politècnica de València (UPV) technically supports this project. A proof of concept is been developed for a next implementation in Ferrocarriles de la Generalitat Valenciana.

www.passgotechology.com



PLASSER IBÉRICA



La revolución digital es entendida por Plasser & Theurer como una oportunidad de ofrecer mayor valor añadido a sus clientes. Este valor añadido se resume bajo el término Plasser Smart Maintenance. Con los desarrollos ligados a esta plataforma integrada en las futuras máquinas, Plasser & Theurer quiere continuar siendo un actor clave para garantizar a las administraciones ferroviarias la máxima disponibilidad de sus vías.

La tecnología digital de Plasser & Theurer impregna la propia máquina, la gestión de flotas y la manera en que se optimiza la calidad y disponibilidad de la infraestructura ferroviaria. Plasser Smart Maintenance se traduce en sistemas digitales de trabajo embarcados en máquina, en fórmulas de tratamiento masivo de datos y en herramientas y sistemas de registro, evaluación y representación de la infraestructura ferroviaria, con el objetivo de proponer de forma proactiva y continua las mejores prácticas en la ejecución de los trabajos garantizando el estado óptimo de la máquina.

The digital revolution is understood by Plasser & Theurer as an opportunity to offer a greater added value to our customers. This added value can be summarized under the terminus Plasser Smart Maintenance: the various developments which get integrated in the machine, Plasser & Theurer aims to continue playing its role of being a key actor for the ensuring of maximum track availability.

Plasser & Theurer's digital technology will impregnate the machine, the fleet management and the way of optimizing the quality and availability of the railroad. Plasser Smart Maintenance stands for digital onboard working systems, big data analytics and for tools and systems for the registering, evaluation and representation of the railway infrastructure, aiming to offer proactively and continuously best working practices and while ensuring optimum machine condition.

Hall 26 Stand 222

<http://www.plasser.es/es/inicio/index.html>

Plasser Ibérica

railgrup

RAILGRUP

Acción. Dinamismo. Iniciativa. Movilidad.

Iniciado en 2002, Railgrup se ha constituido como un clúster de referencia en el sector ferroviario, potenciando la competitividad global de sus socios, y su influencia a través de la excelencia tecnológica, el conocimiento sectorial y el desarrollo de proyectos. Innovación, Tecnología y Formación es la respuesta del clúster para los retos del inmediato futuro.

Railgrup cuenta con más de 90 empresas asociadas, y su principal objetivo es mejorar la competitividad global de sus miembros, promoviendo, representando y defendiendo sus intereses colectivos.

Railgrup genera un amplio porfolio de experiencia y excelencia distribuidas a lo largo de una cadena de valor y desarrolla nuevas oportunidades en torno a cooperación tecnológica, inteligencia de mercado y plataforma de proyectos para aplicar en diferentes áreas: I+D+i, Formación, Movilidad Inteligente y Transporte de Mercancías.

Action, dynamism, initiative, mobility. Since 2002, Railgrup has become a benchmark cluster in the railway sector by promoting its members global competitiveness and its influence through technological excellence, sectoral knowledge and project development. Innovation, Technology, Training, these are the cluster's responses to the challenges of the immediate future.

Railway cluster with more than 90 companies associated, its primary goal is to enhance the global competitiveness of its members by promoting, representing and defending their collective interests.

Railgrup generates a wide portfolio of expertise and excellence distributed along a very useful value chain and develops new opportunities around technological cooperation, market intelligence and platform of projects to be applied to different areas: R+D+I, Training, Smart Mobility and Freight Transport.

Hall 11.2 Stand 208

<https://www.railgrup.net>





SIEMENS

Ingenuity for life



Visit us in
hall 4.2 &
outdoors

Shaping connected mobility.

Digitalization is fundamentally changing mobility. It's improving the availability of vehicles and infrastructures, optimizing operations and saving resources, time and money. Providing passengers with highly attractive and seamless mobility.

At InnoTrans 2018, you can experience first-hand how we make trains and infrastructure intelligent, enhance the passenger experience and increase value sustainably over the entire lifecycle. See how new, intelligent solutions are making rail transport more efficient, safer and more reliable.

[siemens.com/innotrans](https://www.siemens.com/innotrans)

REDALSA



Redalsa pertenece al grupo ADIF. Se fundó en 1974 y se dedica desde entonces a la fabricación y mantenimiento de equipos para el sector ferroviario. Sus principales actividades son:

- Soldadura eléctrica de carril de hasta 288 metros para líneas de Alta Velocidad y Red Convencional.
- Soldadura eléctrica en vía con robot de soldadura.
- Regeneración del carril usado para formar barra larga soldada.
- Suministro de sistemas completos de fijación. Láminas J2, L1 o P50 para J2 y clips elásticos SKL1, SKL14, SKL12, SKL12RE, SKL14RE y la nueva variante del Fast-Clip.
- Inspección ultrasónica de carril, con equipos manuales y con equipo móvil autopropulsado hasta 90 km/h.
- Inspección ultrasónica de soldaduras aluminotérmicas.
- Inspección geométrica de vía.
- Inspección dinámica de vía.
- Inspección de aparatos de vía.
- Montaje de desvíos con carros y pórticos autopropulsados.

Redalsa is a company of ADIF group. Began service in 1974 and since then is engaged in the manufacture and maintenance of equipment for the railway industry. Our main activities are:

- *Electric welding of rails up to 288 meters high speed lines and Conventional Network.*
- *Electric welding of rails on site.*
- *Regeneration rail used to form long welded rail.*
- *Providing complete fastening systems. Plates J2, L1 or P50 for J2 and elastic clips SKL1, SKL14, SKL12, SKL12RE, SKL14RE and new variant of Fast-Clip.*
- *Ultrasonic inspection rails, with manual equipment and self-propelled mobile equipment up to 90 km / h.*
- *Ultrasonic inspection of aluminothermic welding.*
- *Geometrical inspection of track.*
- *Dynamique inspection of track.*
- *Inspection of turnouts*
- *Laying of switches with trolleys and self-propelled gantries.*

<http://redalsa.com>



RENFE



Renfe Operadora, empresa pública adscrita al Ministerio de Fomento (Gobierno de España), es uno de los operadores ferroviarios más relevantes del mundo gracias a su experiencia en la gestión de servicios de alta velocidad, regionales y de cercanías metropolitanas. Renfe pone en circulación más de 5.000 trenes diarios y es un actor central en el sistema de transporte de España, con más de 487 millones de viajeros transportados y 19,6 millones de toneladas movidas en 2017.

Con más de 25 años operando servicios de alta velocidad, la empresa ofrece conocimiento y consultoría en los mercados internacionales. Renfe tiene una larga experiencia en materia de cooperación, servicios internacionales con Francia y Portugal y está involucrada en el proyecto Haramain de alta velocidad en Arabia Saudí, donde aporta gestión para las próximas operaciones comerciales entre Meca y Medina, diseño industrial de instalaciones de mantenimiento y formación en distintos niveles.

Renfe Operadora, a spanish public company (Ministry of Transport and Infrastructure, Government of Spain), is one of the most significant railways operators in the world because of its experience in high speed, regional and commuter services. Renfe runs more than 5,000 trains daily and it is a central actor in the transport system of the country, with more than 487 million passengers and 19,6 million tons of freight moved in Spain 2017. With more than 25 years running high speed services, the company offers consultancy and knowledge in the international markets. Renfe has a long experience regarding cooperation, international trains with France and Portugal, and projects as Haramain, where Renfe has provided training on different levels, maintenance depot designs and will be operating High-Speed trains in Saudi Arabia connecting Makkah and Madinah.

www.renfe.com

SAFT



The Haramain High Speed Line (HHR) project includes the execution of a 450-kilometer long railway and a supply with 36 Talgo trains that can reach 56.

Each train has batteries of nickel-cadmium technology developed by SAFT and belong to the range called MRX. This range combines the proven reliability of the electrochemical Ni-Cd with the efficiency of the sintered positive electrode and the negative PBe (Plastic Bonded electrode) in a compact and ultralight format of up to 30% lower than any other battery based on the same technology electrochemistry. The main benefits of MRX: Maximum performance, minimum maintenance, reduced volume, footprint and weight Integrated water filling system and low life cycle cost.

This battery is the largest developed to date for an emergency profile in 110 V. It is composed of 2 sets of batteries connected in parallel of 82 elements in block MRX of 520 Ah each, divided into 6 cabinets and 22 trays for a total weight, only in the battery elements, of 3.138 kg and 102.336 Wh of energy.

The achievement of this design falls on the demanding requirements of the end customer in which extreme temperatures are considered and a discharge of up to 3 hours of duration keeping available to travellers all the possible comforts in case of an incident.

Hall 15,1 Stand 205

www.saftbatteries.es



13 - 15 NOVEMBER 2018
BARCELONA

THE NEXT MOVE



Fira Barcelona

www.smartmobilitycongress.com

#smartmobilitycongress  

SCHAEFFLER

SCHAEFFLER

Mobility for tomorrow by Schaeffler

Schaeffler es un proveedor global de soluciones de rodamientos y sistemas para la industria del ferrocarril que cuenta con soluciones específicas para cualquier aplicación de rodamientos en vehículos sobre railes cuyo objetivo es garantizar la máxima disponibilidad y el óptimo rendimiento, tanto para el transporte de alta velocidad, como de mercancías y para el transporte urbano en las grandes megaciudades. Con nuestras soluciones optimizadas, perseguimos un objetivo común con fabricantes y operadores: reducir los costes totales de propiedad (TCO), mediante el incremento de la fiabilidad y un menor mantenimiento de los componentes. Gracias a nuestra amplia gama de productos que incluye desde rodamientos para las cajas de grasa, motores de tracción y para la transmisión, hasta soluciones mecatrónicas y dispositivos de Condition Monitoring estamos preparados para afrontar la movilidad del mañana.

Schaeffler is a global supplier of bearing solutions and systems for the railway industry, that offers specific solutions for each application in rail vehicles, including high-speed transportation, freight transportation, and local transport in the world's growing megacities. Our goal is to ensure the maximum availability and optimum performance. With our optimized solutions, we focus on the same goal as rail vehicles manufacturers and operators; reduce the total costs of ownership (TCO), through the increase in availability and reducing the maintenance of components. With our product range, that includes axlebox bearings, traction motors and gearbox bearings, mechatronic systems and Condition Monitoring devices, Schaeffler makes a decisive contribution towards "Mobility for Tomorrow".

Hall 21 Stand 404

<https://www.schaeffler.com/fork/>

SCHWIHAG

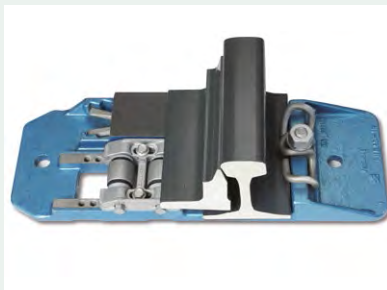


Schwihag AG es un fabricante líder a nivel mundial en productos innovadores en tecnología para vías y desvíos. Desde hace más de cuarenta años, los productos Schwihag optimizan la funcionalidad de vías y desvíos, reducen los costes de mantenimiento y ayudan a proteger el medio ambiente. Pueden ser empleados tanto en líneas de alta velocidad como en transporte de mercancías pesadas o sistemas de metro.

Schwihag AG is a leading supplier of innovative products for track and switch technology, Schwihag products optimise the functionality of switches and track systems, reduce maintenance costs and help protect the environment. They can be used in high-speed lines, heavy freight transport, underground railways or metro systems.

Hall 26 Stand 301

<https://www.schwihag.com>



**SEGULA
TECHNOLOGIES**

Engineering and consultancy in rolling stock

Segula Technologies Spain is part of the Segula Technologies group, one of the largest engineering groups in the world, with more than 11,000 employees in 28 countries (Australia, Austria, Algeria, Argentina, Belgium, Brazil, Canada, Congo, China, England, France, Gabon, Germany, Holland, India, Israel, Italy, Morocco, Mexico, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Tunisia, Turkey, USA).

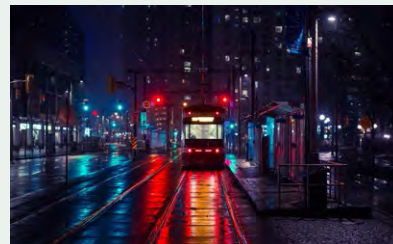
Segula Technologies Spain, through its office located in Zaragoza, is a Center of Excellence in the development of rolling stock at an international level, in addition to being the largest engineering in the rail sector in Spain in the development of this kind of products. (Locomotives, EMUs, DMUs, High Speed, Subways, LRVs)

With more than 25 years of experience in the sector, SEGULA has a team of more than 100 engineers specialized in the realization of rolling stock projects (Sketches-Style, Structures & FEM, Interior Design, Electrical Installations and Mechanical Installations, RAMS) and about 50 consultants in the Signaling area (Software, ERTMS, RAMS) and Infrastructure.

The annual capacity for the development of rolling stock project in the offices of SEGULA (work packages) is 190,000 hours of projects, making us the ideal partner of companies such as ALSTOM, CAF, STADLER, TALGO among others.

Hall A, City Cube 403

www.segulatechnologies.com





Tecnología ferroviaria



Railway technology



Technologie ferroviaire



InnoTrans 2018

Visítenos en / Visit us: Hall 26 / STAND 307



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F. +34 985 26 60 11

www.talegria.com

SERBD



The current sector of guided transport systems requires advanced infrastructure solutions; for it, serdB subsidiary of the group Gamba associated with Acouphen, combine their skills and tools as international experts in noise, and vibration consultancy to offer complete and innovative services to meet these needs and challenges.

SerdB works widely with engineerings, operators, communities, and companies, depending on the stage progress of the projects. serdB provides the consultancy to establish the baseline of the sites, size and to optimize the types of railway superstructure. Afterwards, it verifies its performance in situ, and finally, it diagnoses and proposes solutions in case of noise and / or vibration problems after the commissioning.

Latest List of Major Projects 2015-2018

Tram Mauritius, Caen, Ouargla (Algeria), Luxembourg, Nantes, Saint-Etienne, Liège (Belgium), Toulouse, Avignon, Algiers (Algeria), Sidi Bel Abbès (Algeria) Aubagne, Paris, etc.

- Metro Grand Paris: Extensions to existing lines 14,11 and construction lines 15,16,17,18.

- Metro de Lima L1 and L2.

Software tools used:

- dBTrack © (Analytical model developed by serdB).

- SiProVib (3D Analytical model developed by Acouphen).

- Mefissto (FEM, BEM 2,5D developed by CSTB).

<https://www.serdb.com>



SIEMENS

Ingenio para la vida



SIEMENS

Dando forma a la movilidad conectada

Dando forma a la movilidad conectada ha sido el lema elegido por Siemens Mobility para la próxima edición de InnoTrans 2018. Los puntos clave durante la feria serán la estación digital, el enclavamiento en la nube y el nuevo tren de alta velocidad Velaro Novo, cuyo consumo de energía es un 30% menor que el de sus predecesores. Las soluciones digitales actuales hacen que las nuevas infraestructuras ya sean inteligentes, mejoren la experiencia de los viajeros y aumenten la sostenibilidad a lo largo de todo el ciclo de vida del producto.

Shaping connected mobility

Under the motto "Shaping connected mobility" at the InnoTrans, Siemens is presenting digital innovations in an increasingly networked "total mobility system". The Highlights will focus on: Digital Station, Interlocking in the Cloud and new Velaro Novo, high-speed train with 30 percent lower energy consumption. Digital solutions make infrastructures intelligent, improve passenger experience, guarantee availability and increase sustainability over the entire lifecycle.

Hall 4.2 Booths 201 and 202 and outdoor booth

www.siemens.com/mobility

<https://www.siemens.com/global/en/home/company/fairs-events/innotrans>

SKF



Gestión del material rodante

Con el concepto de colaboración durante el ciclo de vida, SKF brinda toda su experiencia y tecnología a los clientes del sector ferroviario con el fin de ayudarles a afrontar sus retos económicos y medioambientales: innovaciones para crecimiento rentable y sostenible, desarrollo e implementación de soluciones, gestión de activos y reacondicionamiento, y presencia local.

De la mano de los principales tecnólogos y operadores, SKF aborda los principales retos a los que se enfrenta la industria ferroviaria centrandose su estrategia en la digitalización. En su clara apuesta innovadora, seguirá presentando sus nuevos desarrollos en cartuchos mejorados y sus diferentes soluciones de monitorización basada en la condición tales como el ya consolidado sensor inalámbrico Insight y sus nuevos desarrollos IMx-8 específicos para ferrocarriles. El objetivo final es conseguir la máxima disponibilidad de los vehículos ferroviarios, anticipando y programando el mantenimiento de los componentes de una manera segura, sirviéndose de las herramientas de la industria 4.0, de la que SKF no quiere ser parte, sino comandarla de forma activa.

Innovations and solutions for rail

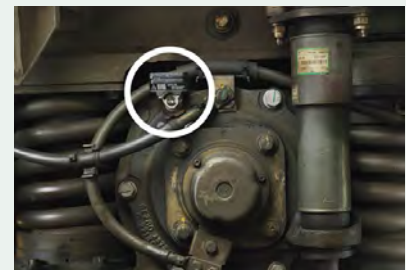
With the life cycle partnership concept, SKF brings all its expertise and technologies to help the railway customers overcome their economical and environmental challenges, innovations for profitable and sustainable growth, development and implementation solutions, asset management and remanufacturing, and local presence.

Together with leading technologists and operators, SKF addresses the main challenges facing the railway industry by focusing its strategy on digitalization. In its clearly innovative commitment, SKF continues to present its new developments in improved cartridges and its different condition-based monitoring solutions such as the now consolidated Insight wireless sensor and its new IMx-8 developments specifically for railways. The ultimate goal is to achieve maximum availability of rail vehicles by anticipating and scheduling component maintenance in a safe manner, using the tools of industry 4.0, of which SKF does not want to be a part, but actively command it.

- Hall 22 Stand 611

- Hall 22 Stand 612

<http://www.skf.com/es/index.html>



HIGH SPEED RAIL NETWORK IN SPAIN

Preliminary and detailed design and construction supervision of more than 2,700 km of line.



Stockholm Metro
11 km of line in a rock tunnel
under the Saltsjön Sea



HS2 High Speed Railway, UK
London - Birmingham (Phase 1): 24.5 km.
Eastern leg to Leeds (Phase 2B): 100km



Saudi Arabian railway network
415 km of new lines for the
Saudi railway expansion

every great project leads to a major engineering firm

- Knowledge, experience, technical skill and corporate independence.
- More than 50 years' experience designing conventional and high speed railways, metros and tramways, enables us to develop ambitious plans all over the world.
- Designing and helping to build more than 100 km of tunnel a year.
- In-house applied technology and new advanced systems. More than 30 R&D projects currently underway.
- Exporting Spanish engineering to all continents, contributing to sustainable development and improving quality of life.

TYPSA
CONSULTING
ENGINEERS
& ARCHITECTS

www.typsa.com

SMARTMOBILITY
CONGRESS

SMART MOBILITY CONGRESS

Smart Mobility Congress (Barcelona, 13-15 November 2018) takes place as a co-located event with the 8th edition of Smart City Expo World Congress, the worldwide leading event for cities. It will welcome more than 700 exhibiting companies and 20,000 international attendees addressing the challenge of mobility for citizens. This event will help accelerate the development of mobility products, services and projects, and tackle the urban mobility challenges faced by modern cities and economies. The 3-day congress & expo will bring together global thought leaders and innovators and create plenty of networking opportunities and immersive experiences with cutting-edge mobility solutions.

El Smart Mobility Congress (Barcelona, 13-15 noviembre 2018) se celebrará junto con la 8ª edición del Smart City Expo World Congress, el evento mundial de referencia para ciudades. Entre ambos atraerán a más de 700 expositores y 20.000 visitantes internacionales con el objetivo de abordar los nuevos retos de movilidad urbana en las ciudades del siglo XXI. El evento ayudará a acelerar el desarrollo de productos y servicios de movilidad, y debatirá en profundidad sobre los principales problemas y oportunidades en materia de transporte urbano que afrontan las ciudades y economías modernas. Durante los tres días de congreso y exposición, Smart Mobility Congress reunirá reconocidos expertos de empresas, gobiernos y centros de investigación de todo el mundo, y ofrecerá múltiples actividades de *networking* y experiencias inmersivas con las soluciones más innovadoras del mercado.

<http://www.smartmobilitycongress.com/en/home>

STADLER



Existen siete buenas razones para visitar Berlín este año. Descubra los siete novedosos vehículos de Stadler expuestos en 500 metros de vía: dos nuevas variantes del FLIRT, nuestro vehículo más vendido, un tren de doble piso KISS, dos trenes Tailor-Made, un metro automático sin conductor y la locomotora bimodal EURODUAL. Visitenos en el Stand 103 del Hall 2.2 y descubra hoy lo atractivo y rentable que puede ser la movilidad de mañana. En nuestro stand de servicios, en la zona exterior O/615, le mostraremos nuestro compromiso diario con la disponibilidad de su flota.

There are seven good reasons to come to Berlin this year – the seven different Stadler vehicles displayed on 500 metres of track at InnoTrans. Explore two new types of the best-selling FLIRT passenger train, one cutting-edge KISS double-decker EMU, two tailor-made trains, one driverless metro and the bi-mode EURODUAL locomotive. Visit us at stand 103 in Hall 2.2 to learn today how attractive and cost-effective the mobility of the future can be. Also learn on our service stand, outdoor area O/615, how we are committed to the availability of your fleet day-in and day-out. Stadler provides a comprehensive range of products in the heavy and urban transport segments: High-speed trains, intercity trains, regional and commuter trains, metros, tram-trains and trams. Furthermore, Stadler also manufactures main-line and shunting locomotives, passenger coaches and it is the world's leading manufacturer in the rack-and-pinion rail vehicle industry.

www.stadlerail.com

Hall 2.2 Stand 103



Talgo

TALGO

Talgo es una empresa española con más de 75 años de historia especializada en el diseño y fabricación de trenes de muy alta velocidad, alta velocidad, larga distancia, regionales, coches de pasajeros y locomotoras; fabricación de equipos de mantenimiento; y prestación de servicios de mantenimiento a operadores ferroviarios de todo el mundo.

Talgo presentará en InnoTrans 2018 su gama de producto usando tanto realidad virtual como demostradores corpóreos de las siguientes categorías:

- Trenes de Muy Alta Velocidad
- Trenes de Alta velocidad
- Composiciones Intercity remolcadas
- Transporte Regional y Suburbano

Los visitantes también podrán conocer los detalles del tren AVRIL adquirido por la operadora española Renfe, y recorrer dos zonas enfocadas a las otras áreas de negocio de la compañía: fabricación de equipos de mantenimiento y prestación de servicios de mantenimiento.

Talgo is a Spanish company with a 75-year long experience in the design and manufacture of high-speed, long-distance and regional trains, as well as passenger cars and traction units. The company is also specializing in the design and manufacture of the rolling stock maintenance equipment and provision of maintenance services to railway operators all over the world.

Talgo will participate in the InnoTrans Trade Fair 2018, where it will present a wide range of its products using Virtual Reality technology and demonstration models of the following:

- Very high-speed trains
- High-speed trains
- Loco-hauled intercity trainsets
- Regional and commuter trains

Visitors will have an opportunity to learn more about AVRIL, recently acquired by the Spanish train operator Renfe, and visit two additional areas, dedicated to auxiliary maintenance equipment and maintenance services.

Hall 4.2 Stand 305

<https://www.talgo.com>

GLOBAL ITS SOLUTIONS BEYOND THE LIMITS

For the last 25 years, we have been working closely with our customer to deliver transit solutions that excel their needs. Over 100 public transport authorities and operators across all six continents currently rely on GMV's edge technology. We continue to devote our talent and experience to them to create the transit of tomorrow, today.

GMV is a seasoned Public Transport system integrator with deep knowledge of key ITS technologies, such as Planning & Scheduling, Dispatching, multimodal Fleet Management, readily available PIS, Ticketing and Fare Collection, TVM HW & SW development, mobile web and app development, statistical analysis, smart mobility and carsharing & carpooling.



VISIT US AT
HALL 2.1.
STAND 412



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INNOVATING SOLUTIONS



TALLERES ALEGRÍA

Desvíos y material fijo de vía Material rodante

Empresa con actividad exclusiva en el sector ferroviario que desarrolla en dos líneas de negocio altamente especializadas:

- Fabricación de todo tipo de desvíos y material fijo de vía para ferrocarriles de alta velocidad, convencionales, mercancías, metros, tranvías, etc.

- Fabricación y mantenimiento de material rodante. Es Entidad Encargada de Mantenimiento Certificada y fabricante de todo tipo de material remolcado y vehículos autopulsados para mantenimiento de vía y catenaria.

Con más de 100 años de experiencia empresarial, Talleres Alegría cuenta con una tecnología puntera, los más modernos equipos y máquinas y un equipo humano de profesionales y técnicos altamente cualificados. Consciente de la importancia que tiene la fiabilidad de sus productos, constantemente renueva su compromiso de avance y desarrollo en las últimas y más actuales técnicas de producción, diseño, calidad e investigación con el objetivo de alcanzar la plena satisfacción de sus clientes.

Turnout Systems

Rolling Stock

A Company dedicated exclusively to the Railway Industry and developed into two highly specialized business lines.

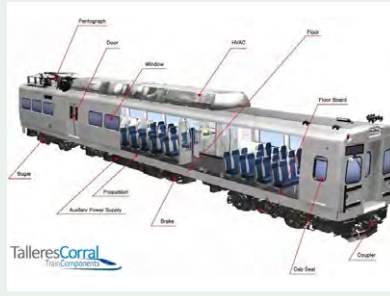
First, the design and manufacturing of all types of turnout systems and other fixed track material for high speed, conventional, heavy haul, metro or tram railway lines.

Second, the construction and maintenance of rolling stock; it is a Certified Maintenance Entity and manufacturer of freight wagons and self-propelled vehicles for track and catenary works.

With more than 100 years of business experience, Talleres Alegría relies on a state-of-the-art technology, the most modern equipment, and a highly qualified human team of engineers and technicians. Aware of the importance of the reliability of its products, TA is continuously renewing its compromise for advance and development into the latest design, production, quality and research techniques. All with the objective of acquiring the full satisfaction of its clients.

Hall 26 Stand 307

www.talegria.com



TALLERES CORRAL



Es una mediana empresa, fundada en 1958, y centrada en la producción de componentes de alta calidad y seguridad para la industria ferroviaria. Actualmente su plantilla la forman más de 50 personas, destacando el alto nivel de formación y porcentaje de personal técnico e ingenieros.

Empresa certificada en normas más relevantes: ISO9000 (AENOR) para gestión de calidad, EN15085 CLI e ISO3834 (SLV Duisburg) para piezas soldadas, DIN 6701 A2 (TC-Kleben) para los componentes adhesivados y DIN2303 Q3 (SLV Duisburg) para piezas soldadas en vehículos de defensa.

Para la producción de recipientes a presión para sistemas de frenado y aire acondicionado, están certificados en el módulo H de la PED 97/23/CE por Bureau Veritas, cuyo diseño y fabricación se realiza según los códigos AD2000, EN13445 y EN286.

Sus principales mercados son los proyectos nuevos y componentes para aftermarket. Siendo analizados mediante cálculos FEM e ingeniería inversa componentes descatalogados.

Is a medium size company, founded in 1958, focusing in production of high quality and security requirements components for railway industry. Currently our staff is formed by over 50 people, highlighting the high level of training and percentage of technical staff and engineers.

For this, our company is certified according the most important international standards like ISO9000 (AENOR) for our managing quality system, EN15085 CLI and ISO3834 (SLV Duisburg) for welded parts for railway, DIN 6701 A2 (TC-Kleben) for bonding components for railway and DIN2303 Q3 (SLV Duisburg) for welded parts for defense vehicles.

For production of pressure vessels for brake and air conditioned systems, Talleres Corral is certified module H of PED 97/23/EC by Bureau Veritas, manufacturing tanks according to AD2000, EN13445 and EN286 codes.

Our main markets are new projects and after-market parts. For these, we can analyzed by FEM calcules and inverse engineering all king of discontinued components.

Hall 22 Stand 805

www.tallerescorral.com

THALES

THALES

Thales participará en Innotrans 2018 con una amplia gama de productos y soluciones para líneas convencionales y de alta velocidad, así como para transporte urbano.

- SelTrac Generation 7: La nueva era del CBTC, que permitirá habilitar la plataforma para la autonomía.

- Ciberseguridad: Todo el porfolio de soluciones y servicios ciber para transporte.

- Aramis: Nueva generación del centro de regulación y control basado en la nube.

- FICOS: Los contadores de eje de fibra óptica, un gran avance en los elementos de campo ferroviario.

- Plataformas de Servicios Digitales: NAIA, TIRIS, VCA como plataforma de servicios.

En el stand de Thales todos los visitantes tendrán la oportunidad de vivir una experiencia única en su Visión Lab. Donde abordan los siguientes temas:

- Autonomía, Infraestructura Inteligente y IoT.
- Operaciones impulsadas por datos.
- Pantalla interactiva con todas sus soluciones de innovación para transporte.

Thales will be present at Innotrans 2018 with a wide range of products and Solutions for main and High Speed lines as well as urban transport.

SelTrac Generation 7: The new age of CBTC, the enabling platform for autonomy.

Cybersecurity: The entire portfolio of solutions and services for cyber transport.

Aramis: New Generation cloud based ready for digital Traffic Management System (TMS) for integrated Network and Centralised Traffic Control (CTC) centres.

FICOS: the Fiber Optics Axle Counter, a breakthrough in rail field elements.

Digital services platform: NAIA, TIRIS, VCA as services on the platform.

You can have the opportunity to immerse yourself in our journeys through our interactive digital walls and discover our Vision Lab where we will have different topics:

- Autonomy
- Smart infrastructure and IoT
- Data-driven operations
- Interactive screen to showcase Thales innovation solutions for transport

Hall 4.2 Stand 103

www.thalesgroup.com/es





YOUR MISSION IS CRITICAL. THAT'S ALL WE THINK ABOUT.

Today's rail industry demands that you provide the most advanced technologies for your customers. Servicing some of the largest rail operators across the globe with extensive experience in infrastructure support, we future-proof the services you offer to your passengers. Find out how we help move billions of travelers on a mission at VertivCo.com/railEMEA





TMB

A benchmark for innovation

The automation and digitalisation of Barcelona's metro network fosters a more efficient and competitive service.

Barcelona has confirmed itself as an international benchmark in matters of innovation applied to urban transport. The use of technology and smart systems allows for higher levels of efficiency, better services and maximum social and environmental benefits. In the case of the metro, this manifests itself in the commitment to automation and the implementation of systems to recover water and energy.

Mobility today, from the perspective of service availability and experience, faces a challenge of mitigating impacts such as energy consumption, climate change, pollution and the exclusion of people who are unable to travel by car, and more efficient technologies are needed to deal with them, gain competitiveness and benefit citizens.

Transports Metropolitans de Barcelona (TMB) is at the forefront of using technology and innovation in the public transport sector and specifically in the metro with concepts such as automation, electrification and digitalisation.

Currently, 25% of TMB's metro network is driverless, a percentage that will increase in the medium term with the introduction into service of new sections on Line 9/10 and with the possible need to reconvert some existing conventional lines so that services can be substantially increased. And with automation comes digitalisation. With sensors, it is much easier to discover the levels of demand on a transport network in real time so that the service supply can be better adjusted. Trains and infrastructure can be monitored to optimise maintenance, and the relationship with users can be more direct and personalised through interactive digital channels.

www.tmb.cat/es



TYPESA



TYPESA, more than 50 years designing railways, metros and tramways

TYPESA is recognized as a rail engineering authority and the partner of choice for a large number of multinational companies to work in complex projects around the world.

Wide experience in high speed rail and conventional railways

TYPESA took part in the first HS Line in Spain from Madrid - Seville, and then helped build most of the country's national network lines. TYPESA has also worked on major international projects, such as Madrid - Lisbon HSL, Los Angeles - Las Vegas or Sao Paulo - Rio de Janeiro. Currently, TYPESA is involved in the design of high-speed networks in Sweden and the United Kingdom.

Metropolitan transport: TYPESA has considerable experience in this field, not only in metros but also in light metro, tramways and commuter rail lines, and is a leader in design and works supervision. Participation in major international projects:

- Riyadh Metro, the biggest metro network under construction today, where TYPESA is the designer in the consortium in charge of implementing package 3, lines 4, 5 & 6.
- Quito Metro.
- Sao Paulo Metro Lines 5 and 6.
- Stockholm Metro extension from Kungsträdgården to Nacka and Gullmarsplan.
- Doha Metro Red and Green Lines.
- Lima Metro Line 2 and Line 4 branch to the airport.
- Abu Dhabi Light Rail Transit Network.
- Sidney Metro
- Singapore Metro

TYPESA has an excellent team of highly specialised professionals, working in every discipline of a railway engineering project, and is constantly evolving to implement the latest technical innovations and acquire new skills.

www.typsa.com



VERTIV



Liebert® 80-eXL TR, Alimentación Segura y Energía de Calidad para Aplicaciones Ferroviarias

En Vertiv mantienen las infraestructuras en funcionamiento con soluciones de:

- Alimentación ininterrumpida en AC y DC.
- Climatización de precisión para sistemas críticos.
- Gestión de la energía.

Liebert 80-eXL TR es el SAI innovador para aplicaciones ferroviarias diseñado específicamente para ofrecer alimentación continua, segura y de alta calidad a las cargas críticas de la red ferroviaria bajo las condiciones más severas.

El rectificador dual del SAI Liebert 80-eXL/TR es compatible con la alimentación simultánea desde red y catenaria, incluyendo un rectificador de entrada monofásico en combinación con una entrada de bypass trifásica, que optimiza los costes

Liebert® 80-eXL TR, Secure Power and Energy Quality for Railway Applications

In Vertiv we keep your infrastructure up and running with solutions of:

- AC and DC power protection.
- Thermal management for critical systems.
- Energy management.

Liebert 80-eXL TR is the innovative UPS for railway applications specifically designed to deliver continuous, safe and high quality power to the rail network's critical loads under the most severe conditions.

The dual rectifier of the Liebert 80-eXL TR UPS is compatible with simultaneous input from traditional and catenary sources, featuring a 1-phase input rectifier in combination with 3-phase bypass input, which optimizes operation costs and ensures maximum availability.

www.vertivco.com/en-us/

Weidmüller

WEIDMÜLLER

Amplio rango de productos de alta calidad para el mercado ferroviario

La creación de un sistema de transporte moderno, de alto rendimiento y ágil mantenimiento, es un gran desafío logístico que requiere de vehículos rápidos, flexibles y seguros, resistentes a factores ambientales extremos.

Como reconocidos expertos, Weidmüller da apoyo a clientes y partners con productos, soluciones y servicios en el entorno ferroviario de energía, señales y datos. Son parte de sus industrias y mercados, de modo que continuamente desarrollan soluciones innovadoras, sostenibles y útiles.

Bornes, conectores, módulos electrónicos, cajas, herramientas o sistemas de marcaje de alta calidad han sido diseñados para cumplir con estos requisitos y normativas. Resistentes a vibraciones, golpes y el clima, sus productos convencerán día a día en todo el mundo.

Wide range of high quality products for the railway industry

The creation of a modern transport system, high performance and fast maintenance is a major logistical challenge that requires a fast, flexible and reliable transport: subjected to the extreme environmental factors.

As experienced experts we support our customers and partners with products, solutions and services in the industrial environment of power, signal and data. We are at home in their industries and markets and we are therefore continuously developing innovative, sustainable and useful solutions.

Terminals, connectors, electronic modules, enclosures, tools or marking systems have been designed to meet our customer requirements and their regulations. Our products convince thanks to their vibration, shock and climate resistance worldwide.

Let's connect.

Hall 12 Stand 301

www.weidmueller.com



We continue to create, update and dream thanks to you. JEZ, commitment.

You **MOTIVATE US, our RAILWAYS BRING US TOGETHER**

Visit us at InnoTrans 2018, hall 21, stand 209.