

# Railway Interiorsexpo

15, 16, 17  
November 2011

Koelnmesse, Cologne, Germany

**FREE-TO-ATTEND**  
DESIGN & TECHNOLOGY FORUM

# SHOW PREVIEW



## 5 REASONS WHY YOU MUST ATTEND!

- 1 Source solutions from an unrivalled range of rail-specific exhibitors:** This year's event promises to be the biggest Railway Interiors Expo ever, with more than 100 exhibitors showcasing interior concepts, seating, fabrics, floor coverings, laminates, safety equipment, lighting, galley equipment, luggage racks, WiFi and communication systems, refrigeration, electronic displays, food service equipment and more. As well as an impressive European contingent, exhibitors include companies from the USA, China, India and Taiwan.
- 2 Keep up to date with the latest industry developments:** A special feature of Railway Interiors Expo is the three-day, free-to-attend Design & Technology Forum. Top-level speakers will cover everything from the latest developments in high-speed rail travel to revenue generation, security and surveillance, and fire safety and crashworthiness regulations and standards. Speakers include Dr Joachim Winter, research director of the Next Generation Train project at the German Aerospace Center; Peter Snape, senior engineer at MIRA; and Dr Cedric Gallais, project leader in comfort at SNCF.
- 3 Network with peers from more than 55 countries:** Each year the free-to-attend expo attracts thousands of senior industry figures from all over the globe. It is a must-attend event for buyers of light rail, urban, suburban, regional and high-speed passenger railcar equipment, and specifiers of services for new build, refurbishment and day-to-day customer service and operations.
- 4 Learn how to improve the passenger experience:** A key focus of the forum will be how operators can address passengers' needs – with insights from specialists who are tackling the issue head on. After benefiting from these experts' experience you can head out onto the show floor to try out exhibitors' solutions in person.
- 5 Don't miss the latest technologies and new product launches:** Many suppliers use Railway Interiors Expo to unveil brand-new products, and you can also check out what your competitors are up to! At this year's exhibition, lightweight composite materials will enjoy a particularly strong presence: there will be more than 20 companies showcasing their advanced material solutions.



### HOLD THE FLOOR

Forbo Flooring Systems will show railcar floor coverings, including saloon products Marmoleum (linoleum), Flotex (flocked) and Tessera (textile).

The company will also focus on entrance systems, which have to withstand heavy foot traffic. One of these systems is Coral FR textile, which the company says meets all the necessary legislation while providing a stylish and effective barrier system. **Stand 9200 & 9204**

### CLEAN UP

Evac will showcase its expertise in developing custom sanitary systems. The company says vacuum toilets with very low water consumption and hygienic waste-water management are the best solution for economic and ecological reasons. Each product is tailored to the customer's needs, and is designed to be quick to install and highly reliable.

Evac has installed more than 50,000 vacuum systems, and its engineering experts use this experience to improve, innovate and develop synergies.

**Stand 4035**



### MAGIC CARPET

Axminster Carpets Group will highlight its range of specialist woven carpets for the rail industry, which it says meet the latest international flammability requirements. The company also has the ability to supply pre-cut car-kit sets to facilitate quicker installation and reduce waste.

**Stand 9130**

## COLOUR CATCHER

Primasil will display Railsil, a black silicone rubber that it says has attained BS6853 Cat 1a and CEN/TS 45545-2 HL3 approvals. The product is currently being developed so that it can be pigmented to any colour. The company initially developed this silicone rubber for carriage designers who wanted a suitable rubber that really was black. The response has been very positive, with some designers now wanting to substitute other materials with Railsil. The problem for Primasil is that they need other colours.

Primasil says that Railsil combines the standard benefits of silicone rubber (including good chemical resistance, electrical properties and resistance to atmospheric oxygen, ozone and water), but unlike other rubber products, it is self-extinguishing and does not give off harmful gases when ignited. It is suitable for a working temperature range of -60° to +250°C. Primasil can supply extruded profiles, cord, tube or strip in the Railsil grade, as well as finished seals and cut gaskets, in low and high volumes. **Stand 2015**



## FOAM COMFORTS

Rogers Corporation will exhibit its Bisco MF1 range of comfort foams for railcar seating. Also on display will be Bisco L3 for dynamic flooring applications, as well as the full line of Rogers' silicone foams and rubbers for rail interior applications including HVAC gaskets/seals, sound blocking materials, window and door seals, vibration isolation materials and gap filling. The company will offer interactive product demos on its stand, as well as the chance to win an Apple iPad. **Stand 9430**



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[railwayinteriors-expo.com](http://railwayinteriors-expo.com)



## TEAM EFFORT

The ISEAT Consortium will present an eponymous railcar seat, the result of a collaborative research and development project to develop lighter, eco-efficient, comfortable and integrated solutions. A full-scale mock-up has been manufactured, designed for high-speed or long-distance trains. The company says it incorporates 'lighter and more natural materials'.

The project fused the skills of many partners: Couro Azul, an Iberian company that produces leather for the

transport industry (Carvalhos Group); Caetano Components, one of the biggest automotive parts groups in Portugal (Grupo Salvador Caetano); Amorim Cork Composites of cork supplier Corticeira Amorim; and INEGI, a research and development organisation specialising in composite applications. This consortium worked with Almadesign for product and industrial design; Alstom for advice on the market and technical issues; and Nibble, an electronics specialist. **Stand 2025**

## COMPLETE CONTROL

Glova will present a variety of toilet systems for different rail applications, tailor-made to customer preferences. The company says it has also developed its toilet management controller to offer greater user friendliness, increased functionality and also to save time for the operator.

The controller can be turned into different tools within seconds to offer what the person in front of the equipment needs. The train crew can, as usual, obtain the standard information; the technician can turn it into a hand terminal, a vacuum gauge, a charter and more; and the reliability engineer can obtain key data on number of cycles, events logged and so on.

Rather than just getting a simple LED indication, it is now possible to get more elaborate information, including remedy advice. On top of that, the hardware part now offers a gateway for CAN, RS485 and USB.

Glova's long and close relationship with train operators has provided vital input in developing this new concept. **Stand 1050**



## SAFE AND SECURE

Q'Straint will showcase its new adaptable QM3 range for securing wheelchairs and occupants while in transit, alongside its renowned line of QRT retractors.

The QM3 range currently includes Standard, Deluxe and Max versions. All have been specifically designed to be easy to operate and compatible with virtually all wheelchairs, powerchairs and scooters.

The QM3 comprises a wheelchair backrest mounted on a tubular steel frame, with varying levels of restraint depending on the version selected. It can be installed as a rear-facing solution in low-floor city buses or in either direction within a train or tram.

Q'Straint says that QM3 meets all the design requirements of PSVAR 2000 (Public Service Vehicles Accessibility Regulations 2000) and 2001/85/EC (Bus Directive). **Stand 9610**



## FRENCH FANCY

On its stand, and in a conference session on 15 November, French design agency MBD Design will present its latest railcar designs – including the Rio de Janeiro Metro in Brazil, MI09 and MI79 refurbishment projects in France, and many other projects in China and elsewhere.

One of its most recent designs was for the new Reims Tramway in France (pictured). Commissioned by manufacturer Alstom, MBD Design created three projects translating the operator's identity, as imagined by designer Ruedi Baur, for the tram's exterior and interior. The chosen concept features vivid blocks of colour on the exterior, neutral colours inside, tinted bay windows and a concave windscreen. **Stand 1035**



## GOOD TO GO

First-time exhibitor TRB Lightweight Structures will display a wide range of lightweight composite materials for applications including floors, exterior and interior doors, toilet modules, ceiling panels and draught screens. TRB has also recently undertaken three major contracts for detainment doors – including full design, validation and manufacturing services.

The company is currently undertaking a contract to supply lightweight composite structures for a high-speed train, including the train manager's office, magazine rack, server and stock room. These are all painted and fully fitted out before they leave the factory, so that they can be installed immediately upon delivery.

The company boasts a team of highly experienced project engineers and an in-house design facility, and recently gained the International Rail Industries Standard (IRIS). **Stand 9606**

## MATERIAL BENEFITS

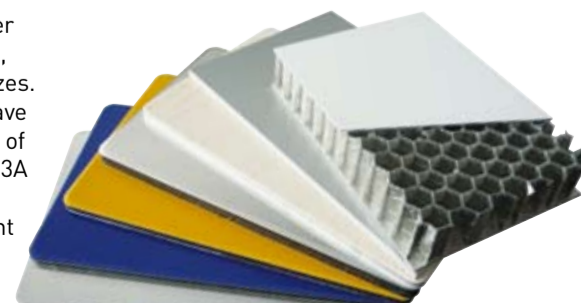
3A Composites will display its latest composite materials for use in the transport sector – Alucore, Alucobond and Hylite. The materials are available in a broad range of colours and surface finishes, and can be used for numerous interior and exterior applications. For

example, Alucore and Alucobond can be used for cabins, doors, intermediate doors, wall and ceiling coverings, entire wagon floors and side coverings.

The company says the materials are easily fabricated and fitted, and that they boast high formability

and stability, excellent weather resistance, simple processing, low weight and large panel sizes.

The composite materials have been used in the construction of rail vehicles for many years – 3A Composites believes that the increasing need for lightweight construction is the reason for these materials' success. **Stand 3025**

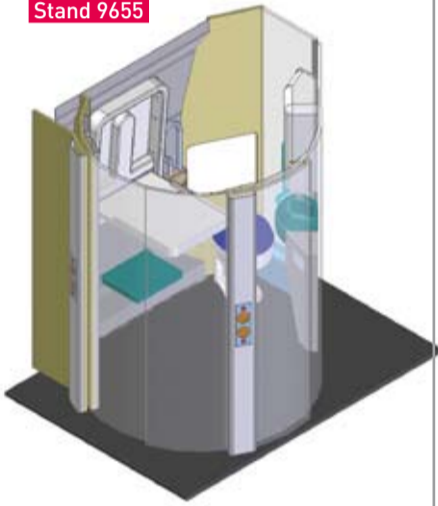


## ACCESS ALL AREAS

PCC.eu will exhibit a newly developed PRM TSI compliant toilet module, which is available in fully assembled or flat-pack form to cover new-build and refurbishment projects throughout Europe. The company says the toilet module covers all PRM TSI requirements for full compliance of British rolling stock to the end of 2019, and that all its toilet module products are Class 1 certified. The new toilet module has been designed to have the smallest footprint possible for universal installation within all rolling stock classes.

The company will also show a carbon-fibre phenolic material that it says not only meets Class 1 fire regulations, but can potentially be as strong as steel. PCC.eu says that by using this composite material, panel reinforcement and structural supporting metals within the vehicle can be reduced without compromising panel strength or crashworthiness.

Stand 9655



## CABLE READY

Huber + Suhner will present several new products and explain how these can be intelligently integrated into railway design.

In addition to the well-known Sencity vehicle indoor antenna family, Huber + Suhner will present the new rugged omni-directional MIMO indoor antenna for railway applications, which is designed for 2.4 and 5GHz.

The company will also display Radox RailCat, a CAT5 databus cable. This was specifically developed for the railway market and Huber + Suhner says it meets the fire performance standards according to DIN 5510-2, BS 6853, NF F 16-101 and the requirement for data transmission according to EN 50288-2-2.

The company will also show its new fibre-optic backbone cable, Railfo Radox. It operates in a broad temperature range and was designed to fulfil high requirements concerning fire and personal safety.

Visitors to the expo can also learn about Huber + Suhner's comprehensive range of RF coaxial cables for railway applications.

Stand 9612



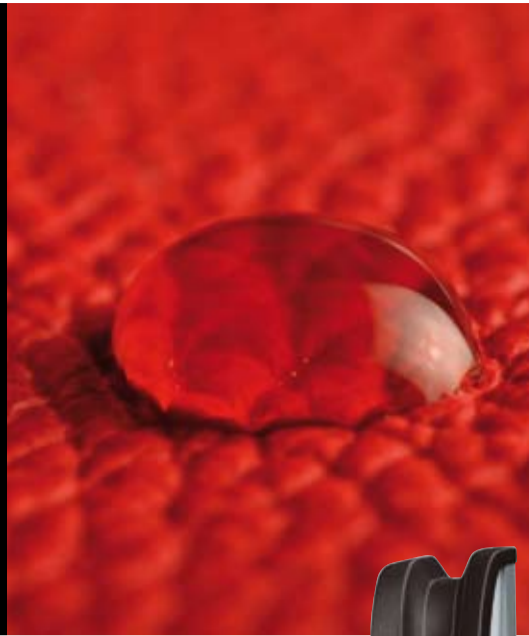
## THE X FACTOR

Boxmark will exhibit Xtreme Railway, a leather designed to be extremely hard-wearing, making it suitable for use in railway carriages on commuter and mainline passenger systems. The company says that Xtreme Railway achieves very high tension, ductility and tear values by using the best central European bull hides, and also offers particularly good abrasion and crease values, even at frost temperature, guaranteeing the leather's durability.

With special finishes, Boxmark says that Xtreme Railway meets all required flame-resistant standards throughout the world and is also already prepared for the future European standard AN 45545-2 (Technical Data p.III).

The company's customers include Poltrona Frau, Walter Knoll, Wilkhahn, Wittmann, Audi, Bentley, BMW, Bugatti, Daimler, Jaguar, Lamborghini, Porsche, Recaro and Siemens.

Stand 9620



## LIVING MEMORY

Savas Seating will show its Livingstone model, an electrically powered seat for public transport drivers. Components such as the front seat cushion, back cushion, upper back cushion, lumbar support and headrest – as well as tilt, slide, cushion depth and seat height – can be adjusted electronically through a simple remote control.

The armrest is attached to the seat pan for stability. Adjustable by a gas spring, the armrest also has a tilt movement and is foldable so that drivers can leave the seat easily.

The Livingstone can be supplied with 10 internal motors. These ensure that each individual can set their personal seating preference – the seat boasts a memory that the company says is 'virtually unlimited'. The personalised memory function is designed to save time and prevent potential health problems caused by misconfigured seats.

The seat is suitable for a full range of operator sizes, from P1 to P99. It is also available in a basic version that can be set mechanically.

Stand 9235



Big Stock.com

## MIXED BLESSING

Advanced Composites Group (ACG) will focus on the application of its composites across mass-transit projects, particularly its MTM82S-C phenolic resin pre-preg system. ACG says the MTM82S-C pre-preg technology enables the manufacture of thin, lightweight sections that provide outstanding mechanical performance and big weight savings for railway interior applications.

ACG will exhibit a full-size MTM82S-C pre-preg standback, currently installed on commuter trains in the UK, as well as composite seats in both glass and carbon fibre, to illustrate the mechanical performance of composite construction.

Typical applications include wall panels, window frames, partitions, connecting archways, floors, ceilings, standbacks, luggage racks, seats and doors. MTM82S-C pre-preg is available on a wide range of carbon and glass-fibre materials, making it suitable for monolithic and sandwich structures.

MTM82S-C pre-preg has been extensively tested and ACG says it is proven to offer outstanding FST fire performance properties, meeting the requirements of BS 6853 Cat 1a, French Standard NFF16-101 rating M1/F1, and German DIN5510 ratings S4, SR2 and ST2.

Stand 9245

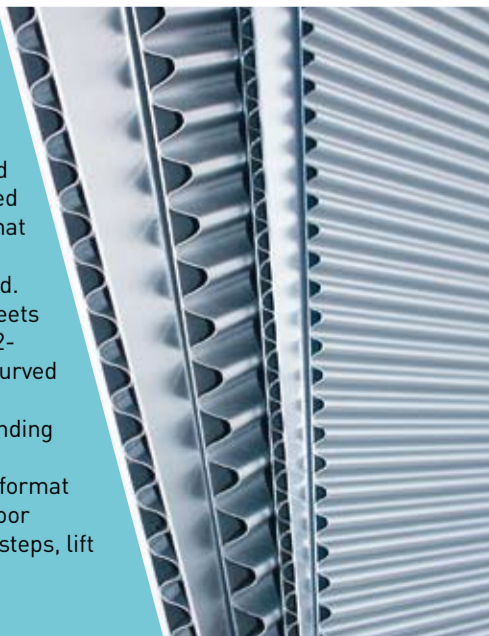
## METAL WORK

Metawell will showcase its aluminium sandwich panels. The company develops and realises solutions ranging from semi-finished panels to ready-made components. The panels can be coated, painted or laminated according to customers' requests. The company says that coil-coated aluminium alloys with a high magnesium content enable high corrosion protection, ensuring durable bonding of the compound.

Metawell's product family includes sandwich panels (two cover sheets with a thin corrugated sheet in between) with overall thickness of 5.2-22mm; and Aluflex (one cover sheet bonded to the corrugation) for curved components and constructions.

The company says its products combine a low weight with high bending strength and dimensional stability, and satisfy the highest fire safety requirements. Applications include panelling and enclosures; large-format ceiling elements (flat/curved); partition walls; floor panels/heated floor panels; seat structures, tables and racks; entry aids (ramps, sliding steps, lift systems); inspection hatches (floor/ceiling); and reinforcements.

Stand 2010



## FRESH AIR

DC Airco will showcase its capabilities as a manufacturer of energy-efficient air-conditioning systems for driver cabs and saloons on trains, metros and trams.

These can be powered from the vehicle's electrical system (24-750VDC or 230-415VAC), and offer a cooling power of 2.5-30kW. The products can be delivered as roof, ceiling or split units depending on customers' requests.

The company boasts more than 20 years of experience in this market, and has supplied many hundreds of units in Europe and Asia.

Stand 9230

## SHOW FLOOR

Milwaukee Composites will display its patented phenolic composite sandwich panels, which are applied primarily as transit vehicle sub-floors. The company says that these panels meet all global fire safety requirements with no fillers, operate in high-moisture environments, and reduce the overall weight of buses and railcars by up to 52%.

Milwaukee Composites has supplied more than 5,100 transit vehicles to more than 25 manufacturers, transit agencies and aftermarket refurbishment companies. The products have been used for ceiling panels, windscreen surrounds, privacy dividers, forward-facing cab doors, elevator platforms and marine panels. Most recently, patented sub-floors are being supplied with an aesthetic floor covering pre-applied prior to shipment. The panels can also be manufactured with a patented radiant heat solution. The company says that heated panels can convert a wide range of electrical inputs to a safe, controlled radiant heat output without the use of buried serpentine cables – providing improved vehicle safety and the ability to dry specific areas quickly with localised heating.

Stand 9427



## LIGHTEN UP

Isovolta will show its portfolio of materials for lightweight rail interiors – including laminates, technical laminates, thermoplastics, pre-pregs and NTF. It will also focus on the services it offers, which include design support, FST testing, application training, logistical support and a customer store.

Stand 9420



## LOCK, STOCK AND BARREL

First-time exhibitor Samuel Wilkes (Engineering) will show a large selection of locks – including heavy-duty and high-security driver cab door locks; toilet door locks; seat locks; ceiling, lighting and interior panel locks; and under-body skirt-panel locks.

The company will also exhibit a range of other interior components, including passenger emergency break glass units; passenger call for aid devices; components for luggage racks; as well as hinges for any

application, from cab doors to small interior panels.

Focusing on locks, hinges and interior fittings for rail and mass-transit vehicles, Wilkes offers a complete design (SolidWorks 3D modelling), prototyping, manufacturing and testing service for all new-build projects. It can also overhaul and repair existing products where refurbishment is the preferred solution. The company's customers include Alstom, Bombardier and Siemens. **Stand 9940**

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## TOP OF THE POPS

Marioff will introduce a completely new Hi-Fog pop-out spray head and an updated version of a Hi-Fog pop-out sprinkler launched in 2010.

Pop-out nozzle solutions are the latest innovations in the Hi-Fog high-pressure water mist systems for rolling stock. They have been designed and thoroughly fire tested to ensure the safety of passengers in a case of fire on board. Both models are hidden in the ceiling and activate only after a fire has been detected – an aspect that the company says enhances the aesthetics of the carriage, reduces the risk of vandalism, and increases the reliability of the fire protection system.

Depending on the fire risks and customer preferences either a pop-out spray head or sprinkler system can be chosen. Whereas a pop-out spray head discharges high-pressure water mist right after system activation, the pop-out sprinkler requires higher ambient temperature to break the bulb first. Marioff says this minimises the risk of false discharges, and enables better visibility in the car for easier evacuation. As only a few pop-out sprinklers are activated, a smaller Hi-Fog unit can be installed, reducing the system's overall weight, costs and volume.

**Stand 9540**



## FOOD FOR THOUGHT

Subway will highlight franchise opportunities for bus and railway terminal operators. Operators can either earn rental income by leasing space to an experienced Subway franchisee (which will build, equip and operate the restaurant); or they can become a Subway franchisee. All owners undergo an intensive training programme, designed to equip them with the skills needed to run the restaurant effectively and serve the customer.

There are Subway restaurants in more than 120 bus and railway terminals. Fresh menu items include soups, and breakfast and snack items. A Subway restaurant has a simple yet versatile design that can be adapted to existing facilities to maximise space efficiency. The company says detailed layout and equipment placement plans can be prepared in a very short time, speeding up the process of opening the restaurant.

**Stand 9446**



## ART DECO

Schneller will show its Indura decorative laminate products, which it says are suitable for 2D and 3D applications, and are resistant to graffiti, durable and easy to clean.

Indura products are available in custom colours, textures and prints, and are offered in film (GTfilm), glass-reinforced (GTglas), and thermoplastic-enhanced (GTform) versions. Indura laminates are designed to be applied in a variety of

ways – including hand application, thermoforming, heat vacuum application and resin transfer moulding – and offer a variety of adhesive options.

Specialising in engineered decorative laminates, Schneller provides continuous roll and sheet production from its facilities in the USA, and has sales and support offices in France and Singapore. **Stand 9214**



## SILICONE ALLY

UK silicone producer Silex and its German partner MVQ Silicones will exhibit a range of extruded, calendered and moulded parts. Both companies are also preferred converters and distributors for US speciality foams manufacturer, Rogers Corporation. Silex says that these strong partnerships facilitate a one-stop shop for production, technical advice and logistical support. The company says the specially selected compounds and materials meet the requirements of BS6853 Cat 1A and NF F 16-101. **Stand 9255**

## FLEXIBLE FRIEND

Margon will exhibit a new WC module concept based on its Fleximodul design, which can easily be adapted to all kind of car bodies and requirements.

The system uses two standard technical columns. One of the columns contains the sink and water system, while the other integrates the bowl and the toilet system. This means that the module's walls are free of technical components and therefore easier to adjust in terms of height, width and special customer requirements.

Margon is a full-cycle metalworking company that specialises in the design, engineering, integration, production and supply of equipment for new



and refurbished rolling stock projects. Its range of products and services covers interiors, WC modules and metal components to specialised welding standards (EN 15085-2 CL1).

**Stand 9110**

## PANEL SHOW

For the first time Superform will be displaying an example of the full aluminium interior solution that it can provide for rail applications. The aluminium panels form a foundation for the components – from roller blinds to grab handles – supplied fully painted and assembled ready for fitting to the car body.

The panels are designed to allow complete design freedom to maximise interior space and ergonomics. Superform says they boast high durability, making them ideal for all rail applications from trams to high-speed trains, and are lightweight and EN45545-compliant. The panels are available in sizes up to 3 x 2m, so they can usually incorporate a number of conventionally produced components into a single pressing.

Superform says it can provide quick feasibility feedback on any



design; all customers need to supply is a concept or CAD file. The company even has the expertise and experience to assist in the development of the design.

**Stand 9950**

## WINDOW SHOPPING

Meunier Group will exhibit systems and components incorporated in its most recent programmes, including windscreens, side window systems, door systems, interior equipment, racks and cabinets. The group's services include 3D design, project management and manufacturing.

**Stand 9233**

## FREE-TO-ATTEND DESIGN & TECHNOLOGY FORUM

View the full programme at [www.railwayinteriors-expo.com](http://www.railwayinteriors-expo.com)

The Design & Technology Forum is a unique feature of Railway Interiors Expo, providing attendees with a three-day conference with top international speakers talking on a wide range of subjects but all focused on railcar interiors and passenger comfort and safety. The free-to-attend presentations deliver content and great value to the event, and many seats are reserved well in advance.

### Day 1 - Tuesday 15 November

#### Railcar interior design: concept, perception and continuity

##### 10:30 - Customers in the spotlight

Dr Mark van Hagen, principal consultant, Netherlands Railways, Netherlands

##### 10:50 - Interior design from the traveller's perspective

Saco Heijboer, programme manager, NedTrain, Netherlands

##### 11:10 - Accessibility of PRM as a source of innovation

Robert Dumortier, product development manager, SNCF, France

##### 11:30 - The Next-Generation Equipment Committee: a unique approach to railcar specification standardisation mandated by the US Congress

Michael Weinman, managing director, PTST Transportation, USA

##### 11:50 - Switzerland's new double-deck trains: from concept to 3D

Axel Kiese, senior fleet manager, Swiss Federal Railways SBB CFF FFS, Switzerland

##### 12:10 - Rolling stock refurbishment design: creating tangible passenger benefits

James Alton, senior industrial designer, Interfleet Technology, UK

##### 12:30 - Floating floor: easy and cost effective

Dr Goran Solenicki, head of new technology development department, TZV Gredelj, Croatia

#### High-speed design and future travel

##### 14:00 - PANEL DISCUSSION

##### Next-generation trains

Joachim Winter, project manager, Institute of Vehicle Concepts of Deutschen Zentrums für Luft- und Raumfahrt (DLR), Germany

##### 14:50 - The hopes, failures and challenges of US high-speed rail: the customer's perspective

Dr Richard Rudolph, chair, Rail Users' Network, USA

##### 15:10 - Australian high-speed vehicle (A-HSV) concept

Mark Loughnan, principal, Hassell Ltd, Australia

##### 15:30 - Why is providing catering important in railcar design

Roger Williams, president, International Rail Catering Group (IRCG), UK

#### Mass-transit railcar design

##### 15:50 - Multicultural design through 2010

Stephane Pottier, design director, MBD Design, France

##### 16:10 - Designing new railcars adaptable to change over the next 50 years

Aaron Weinstein, chief marketing officer, San Francisco BART, USA

##### 16:30 - BMW Group DesignworksUSA's key insights from BART's fleet of the future design programme

Adrian Corry, senior consultant, Public Transportation, BMW Group DesignworksUSA, USA

### Day 2 - Wednesday 16 November

#### Materials and composites – weight reduction and efficiency

##### 10:30 - Advanced lightweight composite materials for railway interiors

Dr Richard Horn, rail market manager, Advanced Composites Group, UK

##### 10:50 - The case for lightweight in rail applications

Philipp Angst, product manager Core Materials, Airex AG, Switzerland

##### 11:10 - Lightweight flame-retardant thermoset composites compounds with low smoke generation

Waldomiro Moreira, ABMACO Member - Associação Brasileira dos Materiais Compositos, Brazil

##### 11:30 - Improved transit vehicle construction and operational cost reductions through lightweight, firesafe, moisture-resistant phenolic composite panels

Ryan Kober, sales manager, Milwaukee Composites Inc, USA

##### 11:50 - Sandwich panels in railway interiors applications

Gunnar Ziwes, manager Sales, Euro-Composites, Luxembourg

##### 12:10 - Aluminium rail interiors: superforming your design!

Samuel Jeffreys, sales engineer, Superform, UK

##### 12:30 - Fire-resistant UP systems for infusion and RTM process

Cyril Becuwe, technical engineer, Nord-Composites, France

#### Fire protection – regulations, standards and implementation

##### 14:00 - Insight into the latest developments of fire safety regulations and TSIs

Bass Leermakers, project officer - Interoperability - TSI sector, European Railway Agency, France

##### 14:20 - Fire protection: blessing or curse? How compensation helps solve problems

Michael Klinger, consultant, IFAB, Germany

##### 14:40 - TS 45 545: does new standard mean new materials?

Franck Poutch, director, Crepim, France

##### 15:00 - Passive safety of standing passengers in public transportation

Marie-Christian Chevalier, LBMC UMR\_T 9406 - Biomechanics and Impact Mechanics Laboratory, Université de Lyon, France

##### 15:20 - Combining high-class fire safety and interior design: HI-FOG pop-out nozzles

Petteri Valkohaapa, manager, Stations & Rolling Stock, Marioff Corporation Oy, Finland

##### 15:40 - Total composite solutions acc. EN 45545-2: coating, gel-coat and resins passing all requirements

Paul Wartenweiler, marketing and sales manager, Walter Mäder AG, Switzerland

### Day 3 - Thursday 17 November

#### Seating design, comfort and safety

##### 10:30 - Towards comfortable train seats for diverse users and activities

Dr Cedric Gallais, project leader in Comfort, SNCF, France

Liesbeth Groenesteijn, project manager, TNO, Netherlands

##### 10:50 - Developing a crashworthy seating system using advanced finite element analysis

Peter Snape, senior engineer, MIRA Ltd, UK

##### 11:10 - The development of the first electrically powered operator seat for public transport

Anneke Noteboom, director - PR and Marketing, Savas Seating BV, Netherlands

##### 11:30 - Comfort, FST, durability and cost benefit lifecycle costs

Kenneth Kozicki, applications engineering manager, Rogers Corporation, USA

##### 11:50 - ISEAT: research and development of integrated components for railway seats

José Rui Carvalho Mendes Marcelino, design manager, Almadesign, Portugal

##### 12:10 - Enhanced design of modular seating for passenger safety and comfort

Rama Krishna Gudipati, APM - Rail, Infotech Enterprises GmbH, India

#### Intuitive lighting and accessibility

##### 12:30 - The application of new-generation LED technology in interior lighting solutions

John Hesketh, director and general manager, LPA-Excil Electronics, UK

##### 12:50 - 24-hour lighting scheme for train drivers: effects of light on alertness

Levent Sahin, design engineer, Lighting Research Center, USA

##### 13:10 - Accessible boarding for everyone: system overview, customer and operator needs

Dr Bernhard Rueger, assistant professor, Vienna University of Technology, Austria

##### 13:30 - Wheelchair passenger safety in trains

Heidi-Marie Kainu, regional sales manager, Q'Straight, UK

\*This programme may be subject to change

PLEASE NOTE THAT ALL PRESENTATIONS WILL BE IN ENGLISH

Attendance at the forum is free of charge to all visitors to Railway Interiors Expo. Reserve your seat by registering in advance at [www.railwayinteriors-expo.com](http://www.railwayinteriors-expo.com)



# EVENT INFORMATION

## THE CITY

Cologne is regularly referred to as the gastronomic centre of Germany. The night life, shopping and entertainment are excellent, and there are more than 3,000 bars and restaurants, over 100 art galleries and a wide range of museums, making this one of Germany's most vibrant and cosmopolitan cities. Situated on the Rhine, Cologne's location has ensured its continued growth as a centre for industry and commerce. The city's infrastructure and traffic connections make it easily accessible by air, road and rail.

## THE VENUE

Railway Interiors Expo 2011 will be held in Hall 9 of Koelnmesse in Cologne, Germany.

## HOTEL INFORMATION

Koelnmesse Service GmbH can assist you with availability and cost of accommodation in its selected partner hotels in Cologne or the vicinity. Please contact Doris Zapf:  
Tel: +49 221 8212273 or email: d.zapf@koelnmesse.de



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## OPENING TIMES

15 November	10.00hrs – 17.00hrs
16 November	10.00hrs – 17.00hrs
17 November	10.00hrs – 15.00hrs

## FOR FURTHER INFORMATION ON RAILWAY INTERIORS EXPO:

Please contact Janet Padgham:  
Tel: +44 1306 743744. Fax: +44 1306 742525.  
Email: j.padgham@ukipme.com.  
UKIP Media & Events Ltd, Abinger House,  
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## EXHIBITOR LIST as of 9 September 2011

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