

Interactive

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Interfleet Expands Into India



New Saudi Train Designs

Sweden – Skånetrafiken's New Regional Train X61 On Test

Australia – OSCARs Project Support

UK – Notified Body Certificates for New Class 395 fleet

David's Message



Faced with the challenges of building robust, green economies, improving energy efficiency, reversing global climate change and fostering more attractive, connected communities, the world needs creative new transportation solutions.

Rail can already boast strong 'green' credentials and for the first time in many years politicians around the world are advocating rail transportation as part of the solution.

Governments are also seeing investment in rail infrastructure projects as a means of creating jobs in the face of the world-wide economic crisis whilst simultaneously preparing for when trading conditions improve.

Global investment in rail is currently estimated to be around £120bn per year and rising. Some investments are for brand new rail projects, whilst others are for the upgrading and modernising of existing systems.

Interfleet is becoming a well known brand name in the global rail industry and with its international network of offices, broad skill base and active staff recruitment and development programmes, the group is superbly placed to take advantage of the resurgence in demand for rail.

This edition of InterActive showcases a range of engineering, design and consultancy assignments across the international rail industry.

I hope you enjoy reading it.

David Rollin
Group Managing Director

Interfleet enters India with opening of Mumbai office

Interfleet Technology is opening its first office in India, offering a local presence for clients in India and taking advantage of growing opportunities in the country. Interfleet's new Mumbai operation will be led by Regional Manager Amit Ramteke.

Amit commented: "We have over the past seven years delivered a number of assignments for clients in India. In doing so we have gained valuable experience of the rail sector in the country. The industry is well supported by the Government and there are a number of projects currently being implemented. Several metro schemes are at different stages of development and a monorail market is also emerging.

"With a growing economy, and substantial planned investment in infrastructure, the country presents a significant business opportunity for Interfleet."

Using a cross-disciplinary approach, Interfleet's India office will provide answers on everything from training, rolling stock, rolling stock systems



integration and environmental issues to railway operations, infrastructure and human factors. The office will also be able to call on Interfleet's global resources for additional support.

Interfleet Group Managing Director David Rollin commented: "The Interfleet group has an extensive international reach and our brand is increasingly well known in world rail markets. As a result, we are extending our global footprint with new offices in Auckland in New Zealand, Adelaide in Australia and now Mumbai in India."

Sweden's X61 on test

Interfleet has performed extensive testing of Skånetrafiken's new regional train X61. Spanning over six weeks, the testing included measurement of 170 different test parameters. Some measurements were captured with the help of four IWT3 instrumented wheelsets. Such a large and comprehensive test can only be made by a handful of companies worldwide, and Interfleet is one of them.

The remainder of 2009 will see continued testing on the X61 vehicles, during which Interfleet will perform electrical tests of both individual and multiple-linked vehicles for government approval. The new vehicles are planned to be ready for traffic at the turn of the year 2009/2010.

"These extensive test assignments show that our clients have considerable trust in our broad and deep competence in vehicle testing", said Joakim Jörgensen, Test Manager.



OSCARs presented



Interfleet Australia has played a key role in OSCARs, a project to deliver new state-of-the-art trains to a New South Wales passenger train operator. In June the final set was delivered into service and the project team, together with RailCorp colleagues, gathered at Central Station for a well-deserved celebration.

Interfleet has provided technical support across many areas, including managing the testing, commissioning and introduction into service of the trains, and supporting reliability growth activities. The team of eight Interfleet consultants has added value via increased resource flexibility, improved technical coordination and more efficient assignment management.

Interfleet triumphs with Saudi train designs

Interfleet Technology has recently completed the first phase of a passenger train design project for the Saudi Railway Company (SAR). The submission was well received by SAR and the Railway Technical Review Committee.

Interfleet's Industrial Design team, led by Luis Chomiak, worked with SAR to develop conceptual designs for a fleet of new diesel passenger trainsets to operate on the North-South Railway, currently under development.

Having presented an initial passenger service strategy report, Luis and his team produced interior and exterior design concepts – including vehicle layouts – for executive,

business and economy services, as well as for restaurant vehicles and sleeper coaches.

Close consideration of local cultural and passenger requirements was a key part of this project, with invaluable input received from SAR's in-house architectural design team and project consultants Louis Berger & Canarail.

Interfleet's work will form an integral part of the tender documentation when it is released to potential train builders. We look forward to seeing services running north out of the capital Riyadh to the cities of Hail and Al Haditha and an eventual extension to Amman, Jordan, in the near future.



UK certification for Class 395

Interfleet Certification has recently issued Notified Body certificates for the new Class 395 fleet to support Hitachi, HSBC and Southeastern in obtaining authorisation for the fleet to enter passenger service in the UK.

The Class 395 design is a derivative of Hitachi's modular A-Train concept. It represents the first completely new design of passenger vehicle to be certificated under the Interoperability Regulations in the UK.

Key elements of the project were:

- Strategic support to develop a highly successful acceptance strategy to minimise the risks arising from changing legislation and standards
- Design scrutiny, adopting a flexible approach to the use of alternative Japanese standards and established Japanese design methodology
- Approval of test specifications and supporting/witnessing type-testing
- Production verification using the audit-based Module SD approach
- Technical support, especially in the interpretation of UK requirements
- Delivery of a complete Technical File in a user-friendly/accessible format for review by ORR and ongoing management by HSBC



- Supporting the operator in meeting their safety management system requirements for Engineering Acceptance and registration of the vehicles
- Interfacing effectively with compatibility assessment and client design review teams to ensure all requirements were captured with no duplication of assessment
- Delivering certification six months in advance of fleet passenger service to allow Southeastern to operate a preview timetable service

The Class 395s entered demonstration passenger service in June 2009, in preparation for the full service launch in December 2009. The trains will play a pivotal transport role in the 2012 London Olympics.

Global success



Interfleet recently sold two IWT3 and eight IWT4 wheelsets to clients in three continents – Asia, South America and Europe.

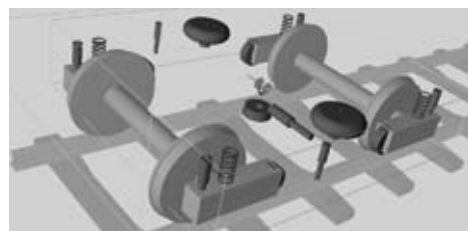
This shows that Interfleet has world-leading and competitive products that capture the interest of clients right across the globe!

www.iwt4.com

China analysis

Interfleet has been working closely with the CNR Changchun Railway Vehicles Company (CNRCC) in China to develop a bogie design for new stock for MTR Corporation in Hong Kong to augment capacity on existing metro lines.

Interfleet's primary role concerns finite element analysis and dynamic analysis of the motor and trailer bogies to ensure adequate fatigue life. Interfleet has also completed a VAMPIRE analysis of the bogies, to ensure dynamic stability and improve ride comfort.



Depot designs

Interfleet's new Depot Concept Model is a modular, scalable template adaptable to suit client requirements and site constraints. Variables include train length, traction supply, servicing roads, heavy-repair roads, stores capacity and accommodation. Based on a generic site and client, the model optimises the operational facility for vehicle maintenance and overhaul activities, minimises environmental impact and reduces life cycle costs.

This powerful visualisation tool will build on Interfleet's extensive portfolio of depot projects for clients such as Irish Rail, Eurostar and FirstGroup.



Continuing to strengthen our excellent team

Marketing and Sales specialist Timothy Zimmer is one of the latest key new recruits at Interfleet's Philadelphia office, with a specific role to further increase market share in line with planned growth. Tim brings with him 25 years of rail equipment and engineered products background.

Neil Cundy recently joined our UK operation as Technical Section Head within the maintenance services team. An MBA qualified engineer, Neil has accumulated a wide knowledge of the rail industry since starting his career as a graduate power-train engineer 20 years ago.

Erling Haugnes has joined the Norway office in Oslo as a Senior Consultant. Erling has nine years' experience within the rolling stock field, both as a project scheduler, maintenance planner and as a project manager.

Anders Ekman has joined the Swedish team. Anders has worked in the Swedish rail sector for 30 years, most recently at Euromaint as Sales Manager.



Tim Zimmer



Neil Cundy



Erling Haugnes



Anders Ekman

Norway cars

Demand for the Flytoget express rail-link service to Oslo Gardermoen Airport has grown strongly in recent years, with some 5.6 million passengers travelling in 2008. In extending its fleet of 16 3-car EMU trains to 4-car units, Flytoget AS turned to Interfleet Technology AS in Norway to support the introduction of new intermediate cars to accommodate future growth.

The new intermediate cars have increased seating capacity by 40%, with 244 seats in each 4-car trainset. The supplier of the 16 new cars was Bombardier Transportation.



Sydney move



Due to recent growth, Interfleet's Sydney office has relocated to new premises at Level 17, 55 Clarence Street, Sydney, just a three minute walk from the Wynyard transport hub.

Interfleet's Regional Director Brian Hastings said: "Successful growth means Interfleet needs more space as we gear up to deliver what our clients want. Our larger office in Sydney allows Interfleet to meet the demand for a range of high quality services and add the value that delights our clients."

AusRAIL 2009

Interfleet Technology is exhibiting at AusRAIL, Australia's major annual rail conference and exhibition. The event will be held in Adelaide, South Australia from 17 – 19th November.

Interfleet has recently opened an office in Adelaide in direct response to the growing demand for railway expertise in South Australia. On Interfleet's AusRAIL stand (number 60) will be Lucie Mitchell, State Manager for South Australia, and her colleagues from Brisbane, Melbourne and Sydney.

Interfleet will also be presenting two papers:

- Day 1 – 2:20pm
'ECP Brakes – A 21st Century Brake of Gauge?'
Lindsay Day and Keith Gollogly
- Day 2 – 4:35pm
'Human Error in Railway Operations Control'
Chris Williams

We look forward to seeing you at AusRAIL 2009!

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