Track **performance**

The UK's national rail infrastructure exhibition looks set to offer a compelling opportunity for plant engineers in this key sector. Brian Tinham reports

nfrarail 2008, the UK's major rail infrastructure show, provides an opportunity for plant engineers responsible for ensuring the safety and efficiency of rail equipment, machinery and systems to see engineering innovation in action.

Organiser Mack Brooks says everything will be covered, from signalling and telecommunications, to plant equipment and maintenance, training providers and occupational health and safety services, with some 160 exhibitors. And beyond the specialist railway organisations, visitors will also find the likes of A-Plant, Atlas Copco, Balfour Beatty, Corus, Durapipe, Eaton Heinemann, Flir, Hellermann Tyton, Hilti, JCB, Leica Geosystems, Polypipe, SAFT Power, Saint-Gobain Abrasives, Strainstall, Transmitton, Vaisala, Weidmüller and Westermo.

It's a very broad church – and it needs to be. These are challenging times for the rail sector, as problems with major work on the West Coast Main Line upgrade demonstrated in the first few days of this year, with thousands having to be bussed on their journeys, due to engineering overruns. With the scale of rail infrastructure projects – Crossrail, Thameslink, London Underground renewals, and the raft of station, track and signalling upgrades around the country – plant engineers and a range of equipment and machinery are in big demand.

So we can expect new and useful engineering solutions. Certainly, the signalling side looks well represented, with Alstom Transport, Ansaldo STS, Bombardier Transportation, GE Transportation Systems, Transmitton, Thales and Unipart Rail taking big stands.

Ansaldo, for example, is in the design phase of the signalling renewal project that will control trains across 215 km of the Cambrian line in mid Wales – the first UK application of cab-based ERTMS (European Railway Traffic Management System). Meanwhile, Thales is working

on re-signalling for TubeLines, covering London Underground's Jubilee, Northern and Piccadilly lines. Given the criticality of signalling modernisation programmes for achieving the network's capacity improvements, these should make interesting visits.

It's a similar story with track projects. Exhibitors here include rail products provider Corus, points systems manufacturer Schwihag and Vossloh Fastening Systems, as well as companies providing associated products, such as noise and vibration reduction equipment. In fact, Corus Rail is building sections of track in the main exhibition hall itself to show track equipment in a real world setting.

Just as important, equipment and tools for condition monitoring and maintenance will also be on show, with companies such as Balfour Beatty Rail Technologies and Flir Systems explaining their products and services. Thermography is widely applicable for preventive maintenance in the rail sector, not only for infrastructure maintenance, but for checking efficiency and safety of rolling stock.

Trained thermography

Flir says it will be showing its ThermaCAM T400 infrared camera and discussing its application on the UK Bullet Trains on the new Channel Tunnel Rail Link. Hitachi Rail Maintenance is to use the cameras for a range of tasks, including checking the integrity of fixings on high-voltage jumper cables, assessing the condition of contactor tips and inspecting high resistance contacts on third rail shoe gear.

Incidentally, among other technologies will be solar panels able to provide power for outdoor devices, as well as a system for monitoring rail temperatures during extremes of weather.

Finally, there will be opportunities to catch up on training, in particular by getting along to the SOE's stand, which will focus on the IPlantE engineering campaign. SOE sponsored the Rail Engineer of the Year award in 2007 and will be doing so again this year. At Infrarail, it will be highlighting IPlantE's work

with Metronet to accredit training courses, enabling rail technicians to achieve EngTech under EC(UK).





