

# IRJ

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**Plasser & Theurer**



## Life beyond diesel

Alternative propulsion technologies gain traction



■ **Init** (Hall 2.1, stand 308) will premiere a new multifunctional back office ticketing system, Mobilevario, which enables passengers to pay for tickets using a credit card, smart card, Samsung Pay, Google Pay and Apple Pay. The German company will also exhibit its Mobile-APC automatic passenger-counting technology, which displays real-time information on vehicle occupancy on passenger information screens or platform screen doors, encouraging even distribution of passengers throughout the length of the train.

BaseCoat/ClearCoat system for exterior paintwork, which provides high resistance to UV-radiation and major variations in temperature as well as chemicals such as hydraulic oil and de-icing agents.

■ ■ **LMT Leuchten + Metall Technik** (Hall 7.1a, stand 306) will showcase Varyo II LED luminaire, which the supplier says can reduce glare from light fixtures due to the combination of louvres and an internal diffuser. Both symmetrical and asymmetrical versions are available in two different lengths with either wide or narrow beams, making Varyo II suitable for a variety of platform layouts.

■ **CZ Loko** (Hall 2.2, stand 303) will present the four-axle EffiShunter 1000 shunting locomotive No 744.105-8 (Track 2/200), the thousandth vehicle manufactured by the Czech supplier. Featuring an asynchronous traction system (ac/dc) and individually-controlled traction motors, the EffiShunter 1000 platform achieves high performance as well as reduced energy consumption, running costs,

emissions, and noise. The shunter is designed for 100km/h operation, although the running gear is capable of operating at higher speeds.

■ ■ **Speno**, Switzerland, (Hall 26, stand 104) will showcase its MRR family of rail milling trains, which can work in multi-pass mode for targeted corrective work, and provide a ripple-free rail finish which, according to the manufacturer, makes additional grinding unnecessary. MRR trains are equipped with Speno measurement solutions, including a rotating eddy-current sensor for the detection of head-checks and spalling, rail profile optical measurement, longitudinal profile measurement, metal removal optical measurement, and continuous track-gauge measurement. The first MRR 600 train was completed in 2017 and the company says the first MRR 400 narrow-gauge milling train will be available soon.

■ ■ **Trimble Rail Solutions** (Hall 25, stand 202) will present the Nexala remote diagnostics solution, which can process large amounts of raw data from onboard systems in real-time to provide a comprehensive view of overall fleet status and location and, help to optimise maintenance staff resources to address faults. The company will also show Trimble Beena Vision's wayside inspection systems which, coupled with software applications and image analysis technology, enable operators to improve fleet maintenance and operation by automating measurements and inspections.

■ ■ **Sperry Rail** (Hall 25, stand 214) will debut Sperry 360°, which uses testing techniques and technologies such as eddy-current to detect potential rail head failures during predictive maintenance and optimised operations. A key component of the 360° solution is an artificial intelligence tool, Elmer, which can process terabytes of data to identify anomalies. Sperry says Elmer uses predictive analytics including algorithms and tools to measure the probability and consequence



■ ■ **Hitachi** (Hall 4.2, stand 304) will showcase its latest digital technology and rolling stock offerings, including the new Caravaggio double-deck regional EMU (Track 4/400) for Trenitalia. The stand will feature interactive displays to demonstrate how its digital technology works and can benefit passengers and operators by increasing capacity, rolling stock reliability, and making journeys more accessible for passengers. The company will also display its latest e-ticketing, predictive train maintenance, smart CCTV and digital signalling solutions.

■ **Ansaldo STS** will also exhibit on Hitachi's stand, and experts will be on hand to discuss work on integrated and automated mobility and how big data and IoT can improve these processes. The company will also focus on the future of signalling technology.