

Wabtec wins predictive maintenance contract from Indian Railways

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Wabtec Corporation has been awarded a contract from Central Organisation For Modernisation Of Workshops (COFMOW), Indian Railways for its Online Monitoring of Rolling Stock (OMRS) project.

The new automated OMRS system is part of Indian Railways' "SMART Yard" initiative which aims to improve the availability of the railway's fleet of coaches, wagons, and locomotives by detecting and addressing defects, preventing in-service failures.

Nalin Jain, Digital Electronics Group President, Wabtec Corporation, said: "Indian Railways is at the forefront of deploying digital solutions to modernise their operations and drive efficiency across its rail network.

"This order supports their 'Smart Yard' initiative, which will showcase the next generation of condition-based predictive maintenance technologies. The OMRS systems will streamline Indian Railways' operations by automating the inspections of bearings and wheels and pinpointing customised maintenance to maximise the utilisation of its rolling stock."

The OMRS is a wayside solution comprising Rail Bearing Acoustic Monitor (RailBAM) and Wheel Condition Monitor (WCM/ WILD) to detect faults in the axle-journal bearings and wheels of rolling stock. The RailBAM technology uses acoustic signatures from bearings to identify bearing defects in advance before they would be identified through human inspection.

The WCM technology uses impact forces exerted by wheels on to the rail to identify wheel defects. The OMRS systems enable operators to optimally plan the inspection and removal of defective bearings and wheels based on condition instead of fixed time-based inspection schedules, resulting in a healthier and reliable fleet.

said Sujatha Narayan, Senior Vice President and India Region Leader, Wabtec Corporation, said: “Wabtec and Indian Railways have partnered for decades to continually provide the country with rail technology solutions that enable an efficient, reliable and safe rail network.

“This project will bring in state-of-the-art global digital high-tech solutions to the substantial portfolio of the India business enabling Indian Railways in their journey of modernisation and digitalisation.”

COFMOW is managing the deployment of Indian Railways’ Smart Yards across the country. As part of the contract with COFMOW, Wabtec’s teams in Australia and India will lead the design, development, supply, installation, and commissioning of 97 OMRS equipment sets in various zonal railway locations across the country. The data from all the wayside OMRS systems will be fed into a state-of-the-art Central Data Control Center to be established in Delhi through the Wabtec Fleet ONE software.

Wabtec is a leading technology provider to the Indian Rail Transportation sector for both Indian Railways and metros. Its portfolio includes locomotives to critical sub-systems such as brakes, couplers, doors, air-conditions, pantographs to the smallest of brake pads and power relays, which are used in a variety of rolling stock.

With a 1-million-square-foot operational footprint and 2,800 employees in India, Wabtec has increased its presence in the country over the past few years. The company has a strong engineering presence with more than 1,200 employees, which includes over 500 Digital Electronics technologists.

Photo credit: Wabtec Corporation