



Wabtec's Innovative Adaptive Wheel Slide Protection Solution Gains Certification

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PITTSBURGH--(BUSINESS WIRE)--Dec. 6, 2022-- Wabtec Corporation's (NYSE: WAB) DistanceMaster solution took a major step toward improving braking performance for transit rail operators with the certification of the company's adaptive wheel slide protection (WSP) technology. The solution addresses the wheel and rail adhesion bottleneck enabling transit systems to improve efficiency and increase network capacity.

The company obtained the conformity certifications (EN15595:2011 and EN15595:2018) and the Interoperability Constituent certification (as required by Technical Specifications for Interoperability) from RINA following extensive tests in laboratory and operational environments. Wabtec conducted the laboratory tests at Deutsche Bahn Systemtechnik's accredited lab in Minden, Germany. The company also worked with Eurailtest, an accredited laboratory, to test the adaptive wheel slide protection technology in an operational environment on an SNCF Regiolis train.

"This certification opens the door to the use of our new generation of high-performance adhesion solutions on new mainline trains, as well as retrofits on existing trains," said Lilian Leroux, President of Wabtec Transit. "It includes the SNCF Regiolis fleet, where DistanceMaster will start contributing to reducing maintenance costs this autumn as the rainy season begins and the leaves begin to fall."

In addition to obtaining the certifications, the testing also proved that Wabtec's DistanceMaster Adaptive WSP shortens stopping distance and avoids wheel damage even in extremely low adhesion conditions.

SNCF had a specific interest in the project as some of its Regiolis trains operate in areas where adhesion can be extremely low. The previous generation of wheel slide protection technology, while state of the art, was reaching its limits. SNCF decided to support the certification process and play a key role in this innovative project following strong test results on Wabtec's unique test bench, which simulated the extremely low adhesion conditions faced by SNCF's Regiolis trains.

"We are extremely grateful to SNCF for its support on this project, which demonstrates that close collaboration between industry and rail operators facilitates and indeed accelerates the delivery of fully validated and proven solutions," said Leroux.

The adaptive WSP technology enhances DistanceMaster's capabilities, which already includes a deceleration compensation algorithm that redistributes braking effort along the train to leverage available adhesion in the event of a difference between requested and achieved deceleration. It also integrates Smart Sanding, a solution in which sanding is activated safely by the WSP algorithm, ensuring that adhesion is recovered quickly before the axel locks.

Overall, DistanceMaster offers train operators a myriad of benefits. It improves safety by reducing the extension of braking distance in degraded conditions by up to 90 percent. Braking distance extension can be reduced further with Smart Sanding contribution. Shorter guaranteed braking distance also enables operators to reduce train headway. The solution also improves management of extremely low adhesion, reducing wheel damage, which lowers maintenance costs. Lastly, adaptive wheel slide protection requires no setting campaign, which usually takes up to two to three weeks. The result is a reduction in maintenance costs, technical risks, and lead times.

About Wabtec

Wabtec Corporation (NYSE: WAB) is focused on creating transportation solutions that move and improve the world. The company is a leading global provider of equipment, systems, digital solutions and value-added services for the freight and transit rail industries, as well as the mining, marine and industrial markets. Wabtec has been a leader in the rail industry for over 150 years and has a vision to achieve a zero-emission rail system in the U.S. and worldwide. Visit Wabtec's website at www.wabteccorp.com.

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