

Automated rail transport picks up speed: DB Cargo pilot train with automated brake testing has started parallel operation at MEG

Graz, July 2022: Automated brake testing is also picking up speed in Germany. A pilot train with the automated brake testing system has been put into parallel operation by DB Cargo at Mitteldeutsche Eisenbahn GmbH (MEG). The technology has been developed by PJM and has been regarded as the European reference system since the positive evaluation by TÜV. The automated brake test meets all technical and formal criteria as well as safety-relevant specifications. The next step of the approved system is the roll-out. The brake test system is also designed for further automation steps.

Thanks to the energy-autonomous and efficient power supply and local radio system, the system is now available and can be used flexibly for retrofit and new vehicles. The modular design ensures compatibility with future DAC. Depending on the operating grade, the brake test will be carried out

automatically 4 - 6 times a day or around 1,800 times a year.

The automated brake test is an important component in making rail freight transport more efficient, faster and more attractive. The automated system creates efficiency: the time saved for a 400-meter freight train is around 2 x 35 minutes and the process can be carried out by the locomotive driver or wagon master alone. This is a major advantage from the perspective of the future labour market. The shortage of skilled workers and shunting personnel will increase in the coming years due to demographic developments. "It's high time to replace outdated work and tedious manual tasks with automated processes. Automation brings the urgently needed efficiency boost as well as increasing the profitability of rail transport. And it creates attractive job profiles," analyses Günter Petschnig, CEO of PJM.



At a glance: The automated brake test in operation

- The automated brake testing system is an innovation by the development alliance of SBB Cargo, PJM and Rail Cargo Austria.
- The automated brake test meets all safety-relevant specifications in terms of operation and vehicle.
- February 2022: The evaluation is completed and SBB Cargo prepares serial operation. In parallel with the operational trials, SBB Cargo is adapting its operational processes to the new automated system, e.g. in the areas of training, IT or the workshop.
- Mercitalia Intermodal runs a pilot train for intermodal transport.

July 2022: Within the project AmaBPro, a pilot train of DB Cargo was equipped with the PJM system and has recently started parallel operation. AmaBPro is part of the program "Future Rail Freight Transport" initiated by the Federal Ministry of Transport and Digital Infrastructure. The TU Berlin (Institute of Land and Sea Transport, Rail Vehicles Department) is also on board as a project partner.

Awarded digital rail freight

PJM's digital rail freight technology has already received 6 awards, including the RailTech Innovation Award 2022 and the Austrian Export Award in recent weeks.

PJM at a glance

PJM is an internationally renowned system specialist in railway business and has successfully implemented projects in 30 countries on 6 continents. PJ Messtechnik GmbH, as an accredited testing laboratory according to ISO/IEC 17025, carries out tests for the approval of rail vehicles worldwide. PJ Monitoring GmbH is a technology leader in rail freight automation with forward-looking comprehensive solutions.

PJM was founded in 2006. 60 employees at the Graz site ensure "100% Made in Austria": R&D, hardware and software development, production & administration come exclusively from Austria.





The automated brake testing system has been in operation with a DB Cargo pilot train since June. The handover took place at MEG in Schkopau.

Credit: PJM, free of charge



DB Cargo has equipped a pilot train with the PJM system as part of the AmaBPro project, and parallel operation has recently begun.

Credit: PJM, free of charge

