

# MPV®-VentuS® by WINDHOFF PJM carried out vehicle testings

Graz, March 2025: The German specialist for rail vehicles, railway and shunting technology has developed the next generation of a multi-purpose vehicle. WINDHOFF Bahn- und Anlagentechnik GmbH had commissioned the Austrian system specialist PJM to carry out the test runs for approval on the German rail network. As an accredited test center in accordance with ISO/IEC 17025, PJM carried out vehicle tests in the areas of braking and running characteristics as well as static tests to determine derailment safety and wheelset torsional vibrations.

MPV®-VentuS® is a modular system that can be used to create a wide variety of vehicle configurations. The range of working modules includes various cranes, platforms, contact wire pusher, but also containers or contact wire measuring systems. The power system also has a modular design so that adjustments can be made very easily over the course of the vehicle's service life and, for example, a vehicle that is currently diesel-electric with a generator and electric motor can be converted to all-electric at a later date. The MPV®-VentuS® vehicle family is designed on the basis of DIN EN 14033 and auhtorized with the European TSI homologation. The MPV®-VentuS® type GAF, which was tested together with PJM in Austria last year, is for Deutsche Bahn (DB) and is a track maintenance vehicle that is one thing above all: futureproof! The vehicle was officially presented at InnoTrans 2024, and in February 2025 Windhoff and DB received authorisation to place the MPV



VenuS GAF modular ancillary vehicle on the market. The vehicle is approved on the basis of the European TSI from the 4th railway package.

PJM is an experienced specialist for the entire development and approval process for rail vehicles. Customers appreciate PJM's great expertise in vehicle measurements as well as in the engineering areas of calculation, simulation and design, customers value our experience in project management. 'It is important to us, to complete our customers' projects just in time and successfully. For WINDHOFF too, we were able to carry out the vehicle tests and analyses within a short time frame,' explains Martin Joch, CEO of PJ Messtechnik GmbH.

## **Extract from the type test standards:**

- → Static tests in accordance with EN 14363:2016 Safety against derailment
- → Braking tests according to TSI Loc&Pas Regulation No. 1302/2014 and EN 14033-1:2014
- → Assessment of dynamic running behavior in accordance with EN 14033-1:2017 and EN 14363
- → Measurements and evaluation of wheelset torsional vibrations in accordance with VDB Guideline 003

## **About PJM**

PJM is an internationally renowned system specialist for rail transport and has successfully implemented projects in 30 countries on 6 continents.

As an accredited test center in accordance with ISO/IEC 17025, PJ Messtechnik GmbH carries out tests worldwide for the approval of rail

vehicles. These include the new Nightjet generation of ÖBB, the new passenger coaches from České dráhy, the Rhaetian Railway, the Mountaineer passenger coach in Canada, the TILO regional railway, the S-Bahn in Berlin and Riyadh and the metros in Chicago and London. With its WaggonTracker system, PJ Monitoring GmbH is a technology leader in the automation and digitalization of rail freight transport. PJ Motion GmbH specializes in the approval and project management of track-bound vehicles. PJM was founded in 2006. Around 85 employees at the Graz site ensure '100 % Made in Austria': R&D, hardware and software development, production & administration come exclusively from Austria. In the past 5 years, PJM has received 13 awards, including the Austrian State Prize for Digitalization and the Austrian State Prize for Engineering Consulting, the Austrian Mobility Award and the European RailTech Award and ERCI Award.

Further information on PJM: <a href="https://pjm.co.at/en">https://pjm.co.at/en</a>

### **About WINDHOFF**

WINDHOFF Bahn- und Anlagentechnik GmbH is a specialist in manufacturing and distributing a wide range of high-tech products in the fields of rail vehicles and railway and shunting technology. The Rheine-based company has been an established name in mechanical and plant engineering since 1889. With the aim of improving efficiency, safety and working conditions for rail infrastructure and railway depots around the world, WINDHOFF plans, produces, sells and maintains rail vehicles and a wide range of railway and shunting technology systems.



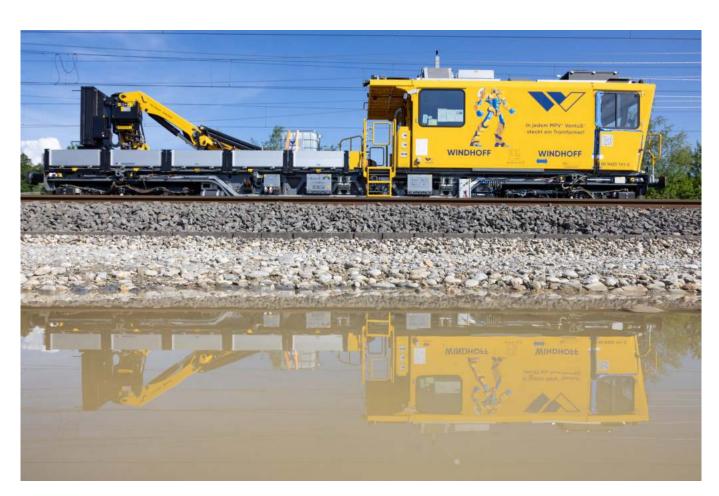
Further information on MPV®-VentuS®: <a href="https://www.windhoff.de/en/rail-vehicles/mainline.html">https://www.windhoff.de/en/rail-vehicles/mainline.html</a>

Video on the dynamic tests: <a href="https://youtu.be/VqtylK2Rm8I">https://youtu.be/VqtylK2Rm8I</a>



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WINDHOFF relied on the expertise of PJM for testing the new MPV®-VentuS®.

Credit: Karl Heinz Ferk, free of charge





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Credit: Manuel Hanschitz for PJM, free of charge



Credit: Karl Heinz Ferk, free of charge

