Media release

PJM tests pantographs on Stadler Rail's KISS double-decker trains. Wheelset torsional oscillations measurements with 8 telemetry systems

Graz, May 2025: Stadler Rail relies on the expertise of PJM to test the pantographs and wheelset torsional oscillations of the KISS double-decker multiple unit train. Until the end of January, PJM carried out dynamic track tests in the pantograph area as an ISO/IEC 17025 accredited test center. The vehicle tests in accordance with EN 50317 took place on the Western railroad, which runs from Vienna to Salzburg, and on the so-called Franz-Josefs railway in Lower Austria. The measurements were carried out in multiple traction. Hence, the vehicle data and data from two measuring pantographs were recorded synchronously. *'The transition from the development and establishment of our new testing area to customer projects was seamless. We are delighted that the complex pantograph measurements have become an integral part of our testing portfolio after such a short time,'* says Martin Joch, CEO of PJ Messtechnik GmbH.

The double-decker multiple unit train undergoes further test runs. E.g. in February, the rail vehicle was tested for wheelset torsional oscillations. Eight telemetry systems will be used to determine and record the strains on the wheelsets.

The barrier-free double-decker multiple-unit trains will be used throughout Austria for ÖBB's

PJ Messtechnik GmbH /// Waagner-Biro-Straße 125, 8020 Graz, Austria
T: +43 316 22 84 54 /// E: office@pjm.co.at /// **www.pjm.co.at**

local services. They have generously designed boarding areas for a quick passenger change, multi-purpose zones for bicycles and push-chairs, an innovative automatic air conditioning system with natural refrigerant and other technical highlights.

The expertise of PJ Messtechnik at a glance

- Accredited test center ISO/IEC 17025, test areas: running behavior, fatigue strength, brakes, acoustics, aerodynamics and pantograph
- Pantograph measurements according to EN 50317 and simulations according to EN 50318
- PJM is the only company in Austria that is accredited for pantograph testing
- Engineering / design CAD, calculation FEM, simulation MBS / certified by AAR WABL Committee
- Development & series production of instrumented wheelsets
- Autonomous measuring systems for rail vehicles and infrastructure

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 Rhaetian Railway, the Mountaineer passenger train in Canada, the TILO regional railway, the S-Bahn in Berlin and the metros in Riyadh, 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 has specialized in the authorization and project management of track-bound vehicles.
PJM was founded in 2006. Around 75 employees at the Graz site ensure '100 % Made in Austria': R&D, hardware and software development, production and administration come exclusively from Austria.

Further information:
https://pjm.co.at/en

Video on the dynamic track tests:
https://youtu.be/FzhfVM8kcC0

Contact:
Birgit Rami-Jauk
M: +43 676 363 4665
rami@pjm.co.at

PJM carried out pantograph tests in accordance with EN 50317 for the KISS double-decker train from Stadler Rail
Credit: Manuel Hanschitz, free of charge

The measurements were carried out in multiple traction, and the test runs took place mainly in Lower Austria on the Western railroad
Credit: Manuel Hanschitz, free of charge

PJ Messtechnik GmbH /// Waagner-Biro-Straße 125, 8020 Graz, Austria
T: +43 316 22 84 54 /// E: office@pjm.co.at /// **www.pjm.co.at**

Synchronized recording of vehicle data and data from two measuring pantographs *Credit: Manuel Hanschitz, free of charge*

PJ Messtechnik GmbH /// Waagner-Biro-Straße 125, 8020 Graz, Austria
T: +43 316 22 84 54 /// E: office@pjm.co.at /// **www.pjm.co.at**