

Static strength measurements in the factory: PJM carries out tests using a mobile pressure frame

Graz, Austria. June 2022. The key data of Plasser & Theurer's 09-3X track tamping machine are impressive: 80 tonnes net weight, 35 m length, 8 axles, and 3-sleeper tamping units ensure powerful and efficient working. To determine the stresses and deformations of the vehicle frame, PJM carried out pressure frame tests according to EN 12663-1. The strength tests were performed at the Linz factory of the technology leader and manufacturer of track maintenance machines. This has clear advantages for the machine manufacturer: the entire on-site infrastructure is used and any adaptations to the object can be coordinated with the design engineers and immediately implemented. Using PJM's mobile pressure frame allows the tests to be carried out directly in the factory. Thanks to its modular design, the pressure frame is suitable for every type of vehicle. It has proven its effectiveness in static tests in numerous projects.

"Testing with the mobile pressure frame at the customer's site provides full transparency for the calculation engineers with regard to test procedure. It also greatly facilitates validating the calculation models. This approach ensures the least possible amount of time is spent in projects," explains Martin Joch, CEO of PJM. "PJM handled the measurements very efficiently and professionally. We greatly benefitted from the fact that they were carried out on our premises in Linz," confirms Andreas Pumberger, Head of Railway Testing Lab, Plasser & Theurer.

PJM as a testing laboratory

As an ISO/IEC 17025 accredited testing laboratory, PJM performs measurements, tests, and analyses in the field of vehicle approval. PJM was the first privately accredited testing laboratory in Austria. It carries out approval tests in the areas of driving technology, strength, braking, aerodynamics, and acoustics for



international customers worldwide, among them the suburban rail in Berlin, Chicago, and Riyadh, the metros in Barcelona and Glasgow, the London Underground or the Westbahn (Western Railway in Austria).

PJM at a glance

PJM is an internationally renowned railway system specialist and has successfully implemented projects in 30 countries on 6 con-

tinents. As an accredited testing laboratory according to ISO/IEC 17025, PJ Messtechnik GmbH carries out tests for the approval of rail vehicles worldwide. PJ Monitoring GmbH is a technology leader in the field of rail freight transport automation, providing pioneering, comprehensive solutions.

PJM was founded in 2006. At the Graz site, 60 employees put the slogan "100 % Made in Austria" into practice:



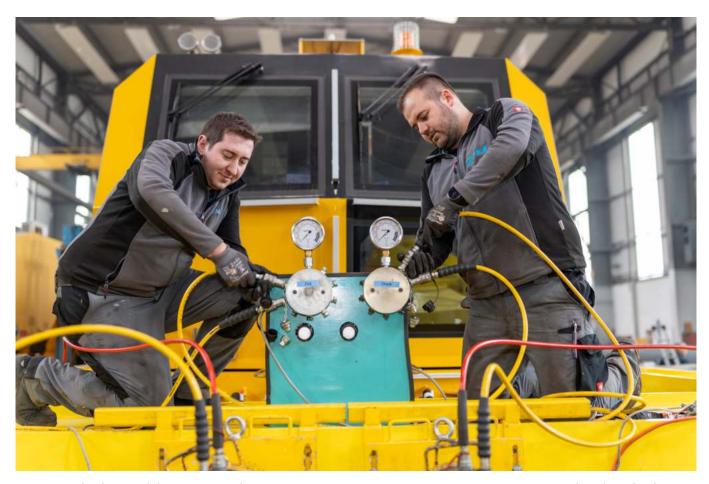
The mobile pressure frame is designed for every type of vehicle and thus also for special machines. Credit: Manuel Hanschitz, free of charge





The static strength tests according to EN 12663-1 for the Plasser & Theurer 09-3X track tamping express were carried out at the factory in Linz.

Credit: Plasser & Theurer, free of charge



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