

Fatigue Test systems for the railway industry



Picture just for reference

Application

The multipurpose testing bench can perform biaxial static and dynamic tests (tensile, compression, bending and torque) on complete track set.

Standards

EN 13146-1 (Determination of longitudinal rail restraint),

EN 13146-2 (Determination of torsional resistance),

EN 13146-4 (Effect of repeated loading),

AREMA chapter 5, as well as other standards belonging to entities such as GOST, UIC, AS, etc.

Models and features

Model	HST-RI150/50	HST-RI300/50
Maximum capacity main actuator	± 150 kN	± 300 kN
Maximum capacity secondary actuator	± 50 kN (others available)	
Calibrated measuring range	2% to 100% of the nominal capacity of the load cell	
Class	1 according to EN-ISO 7500 standard	
Resolution in force	5-digit floating point	
Frame	High stiffness by means of 4 columns	
Vertical testing space 1	1000 mm	1000 mm
Measurement of the piston position	0-300 mm	0-300 mm
Position transducer (main actuator)	Magnetostrictive transducer. Inside piston mounting. Resolution: 0.5 micron	
Position transducer (secondary actuator)	Digital transducer. Resolution: 1 micron	
Piston stroke (Main and secondary)	300 mm (±150 mm)	300 mm (±150 mm)
Power supply	3 ph 380 V + N + T, 50/60 Hz (Connection power to be defined according to the hydraulic unit installed)3	