

Gearboxes Test Bench.



Built from our proven track record in maintenance work, TRADINSA presents the Test Bench for Gearboxes as the equipment to ensure reliability in terms of repairs and maintenance in all types of gearboxes.

This is a versatile piece of equipment which is easy to use and fit, to which we have added state-of-the-art railway technology.

Using software specially designed for this equipment, the Test Bench enables us to check the main parameters for repairs

and maintenance in reducers; running-in cycles, temperature, vibrations, torque, sound level, etc.

As all Tradinsa's equipment, we provide staff training and any additional requirement or peripheral elements to meet our customers' needs.

Gearbox Test Bench

Description

It comprises a bench built of high-resistance steel and includes two counterpoints and different elements to ensure the stability of the axle throughout all test processes..

With a design that carefully takes functionality and safety into account, it adapts perfectly to all types of axle and reducer and to all widths available on the market.

The Test Bench includes all types of coupling adapted to the features of any gearbox.

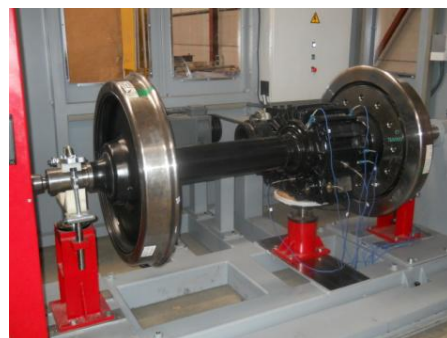
Data equipment and control acquisition

The equipment is complemented by a safety system perimeter that includes electro-mechanical closing mechanisms and emergency stop and alarm to ensure the safety of the operator during test cycles.

The Test Bench includes an industrial PC with specifically developed software for this equipment and its control panel, to ensure proper handling.

Tests

- Variable running cycles in terms of speed and direction.
- Possibility of setting times for each cycle.
- Possibility of setting acceleration rates.
- Measuring and recording of temperatures.
- Measurement and recording of vibrations in time domain and frequency (mm, mm/s, mm/s² o mg).
- Measuring and recording of sound level.
- Measuring and recording of engine torque.



Características principales

Dimensions (LxWxH)	2446x2241x2250 mm
Weight	2400 kg
Test capacity	Up to 6500 rpm on the primary
Axle length	From 1750 to 2950 mm
Max. Wheel diameter.	1300 mm
Electrical features	380Vac III+N+T, 50Hz /60 Hz 15 kW 230Vac III+N+T, 50Hz /60 Hz 20 kW
Adjustments and regulations	Axle length Gearbox position (parallel or perpendicular)
Temperature probes	6x temperature probes with magnets 1x oil sump temperatura probe 1x room temperature
Accelerometers	5
Sonometer	Optional: manual or automatic
Speed test accuracy	± 1 rpm /0.28 % F.E.
Temperature measurement accuracy	± 0,1 °C /0.36 % F.E.
Vibrations measurement accuracy	± 0,01 dB /0.2 % F.E.
Sound level measurement accuracy	± 0,1 db /0.5 % F.E.
Torque measurement accuracy	± 1 Nm /1 % F.E.