



Dynamic component testing

Dynamic component testing is performed at the Dynamic Test Laboratory (DTL) that forms a part of VUZ Testing Laboratory No. 1462 accredited according to ČSN EN ISO/IEC 17025. We provide services in the field of testing of rail vehicles, road vehicle parts, infrastructure and other engineering areas.

We perform tests in accordance with technical specifications, directives and standards and based on particular requirements of our customers in the field of dynamic strength and durability.

Our customers rely on the highly qualified staff of the VUZ laboratory. Our laboratory is the right choice for orders in the field of both destructive and non-destructive testing. We are ready to meet individual requirements in the field of mechanical engineering.

We offer great variability of tests thanks to the modular construction of test benches.

DTL HALL EQUIPMENT:

- › Two fully sprung testing blocks with a clamping field (33x11 m a 6x11 m)
- › 30 hydraulic linear actuators in the power range of 20–630 kN
- › Hydraulic uniaxial pulsator with the power range of ± 2500 kN
- › Single-purpose thermomechanical test bench for wheel tests according to ČSN EN 13 979
- › Bearing test bench for bearing performance tests according to ČSN EN 12 082
- › Test bench for tests of axles and wheels according to ČSN EN 13 261
- › 140-channel measuring system MGC plus
- › 26-channel control system EU 3000 incl. an ITRM module (an iteration module for reproduction of measured signals from real conditions)
- › 3D development environment of test projects in Inventor software

PORTFOLIO OF ACCREDITED TESTS:

- › Strength tests of bogie frames and their components
- › Fatigue tests
- › Thermomechanical tests
- › Non-destructive testing
- › Testing of wheels, axles, bearings and other rolling stock components
- › Strength tests of vehicle seats
- › Other tests from the field of engineering and transport industry

PORTFOLIO OF NON-ACCREDITED TESTS:

- › Stress analysis of strained components
- › Functional tests of machines and their components
- › Tensometric measurements
- › Fatigue tests of concrete units and structures
- › Tests of bus bogie frames
- › Other tests from the field of engineering and transport industry

Contact:

Výzkumný Ústav Železniční, a.s.
Novodvorská 1698/138b, 142 00 Praha 4
+420 241 493 135
www.cdvuz.cz



REFERENCES:

- › Stadler
- › Škoda Transportation
- › MAPNA Locomotive Engineering & Manufacturing Co.
- › Pojazdy Szynowe PESA Bydgoszcz
- › MSV Metal Studénka
- › Talleres Alegria
- › CRRC ZELC Verkehrstechnik
- › Konvekta
- › Tatravagónka
- › Bochumer Verein Verkehrstechnik