Our Services

- Measurement of noise and vibration, identification of noise and vibration sources, proposals for reduction of vibration and anti-noise measures - machines and equipment, means of transport
- Vibrodiagnostics of turbines, generators, gearboxes, pumps
- Operational balancing of rotary machines
- Checking the dynamic properties of concrete foundations of machinery
- Experimental modal analysis
- Calculation of dynamic behavior of rotors and rotor systems
- Experimental modal analysis of end windings of generators
- Measurement of acoustic performance
- Telemetric measurements of stress, temperature and other physical quantities on rotating parts
- Measurement of noise and vibration of aggregates in biogas stations

References

- ČEZ (CZ)
- Doosan Škoda Power (CZ)
- BRUSH SEM (CZ)
- ŠKODA Praha Invest (CZ)
- PROFESS (CZ)
- ŠKODA ELECTRIC (CZ)
- Brush HMA Bv (GB)
- ETD Transformátor (CZ)
- Siemens (D)
- ŠKODA TRANSPORTATION (CZ)
- Wikow Gear (CZ)
- ČKD Howden (CZ)
- AVL List (A)

Technical equipment

- PULSE multianalyzer - Bruel & Kjaer
- ME’scopeVES software for modal analysis, Vibrant Technology
- ABACUS measuring system – 24 channels
- NI (National Instruments) measuring system
- ADRE measuring system, Bently Nevada
- Bruel & Kjaer electromagnetic excitation device
- Bruel & Kjaerp recision integrating sound-level meters
- Bruel & Kjaer intensity probe
Reference projects

Vibration tests, turbine balancing

- Measurement of dynamic stress of blades at rotation
- Experimental modal analysis of steam turbine blades
- Vibrodiagnostics of turbines
- Balancing of rotary machines

Measurement of noise

- Measurement of noise in means of transport

Experimental tests and computer modelling

- Experimental identification of dynamic properties of steam turbine rotor systems’ foundations
- Dynamic tests of power blocks foundations
- Modelling of operational mode shapes of steam turbines foundations
- Design and calculation of the prototype of a segment bearing for the turbine rotor system

Research and Testing Institute Plzeň is built upon more than a hundred-year tradition of research, development and innovation in the Škoda engineering company.