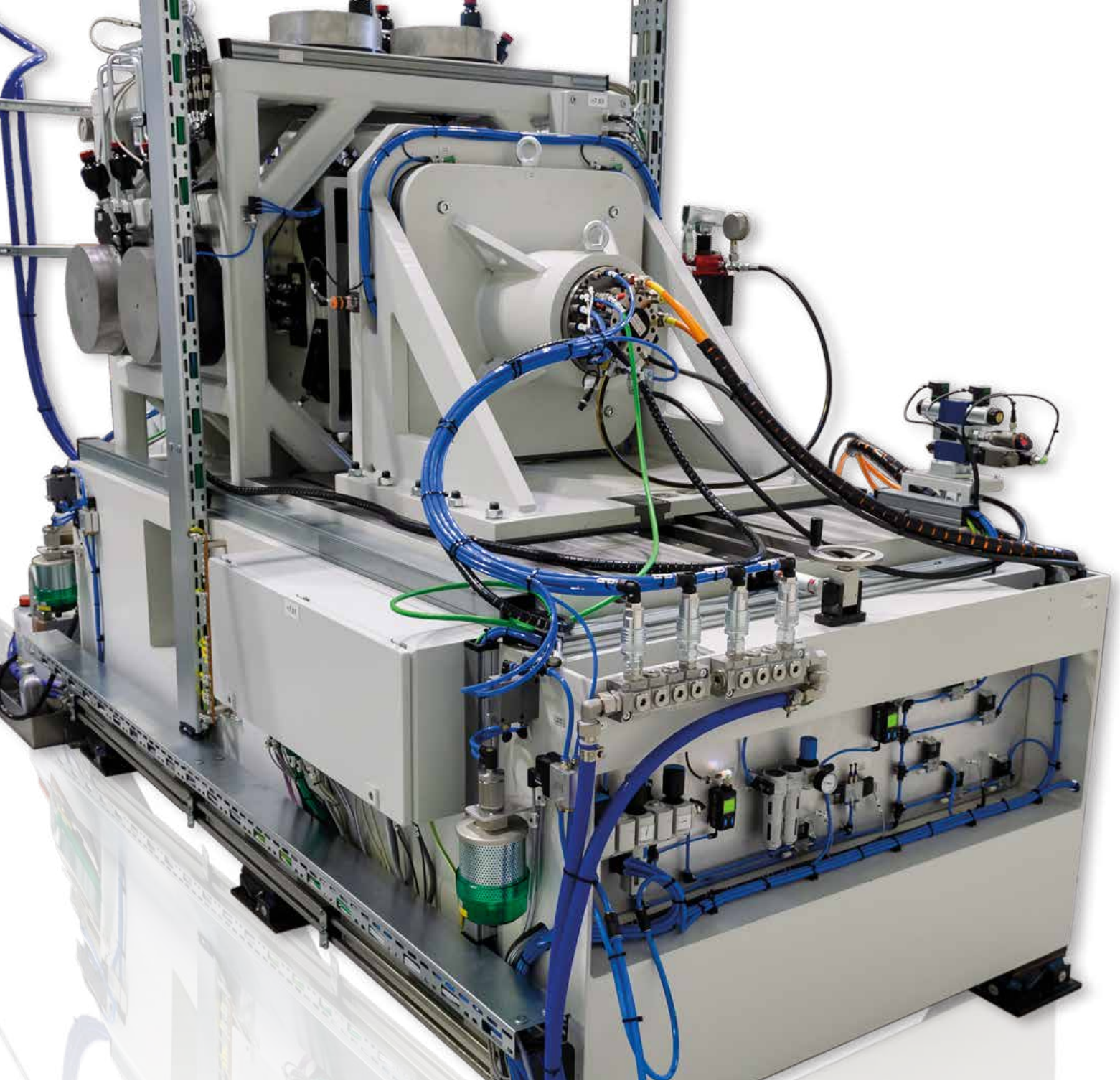

SL100

TEST STAND FOR MOTOR SPINDLES

BLUM NOVOTEST

SL100

TEST STAND FOR MOTOR SPINDLES | LABORATORY TEST STAND

Laboratory test stand for machine tool motor spindles

The development/laboratory test stand for motor spindles is used to test dynamic loads and perform extensive long-term testing. The testing process is controlled by means of a modular software architecture that is visualised on two monitors. Testing processes can be individually programmed and customised by the user.

Test procedures:

– Long-term analyses
– Life-cycle test
– Load test
– Vibration test
– Torque test
– Maximum rotation speed test (under load)
– Comparison test (e.g. different lubrications)
and much more...

Measuring sizes:

– Rotation speed
– Forces (axial/radial)/bending moment
– Torque
– Temperatures (bearing, cooling water, coil)
– Displacement axial/radial
– Vibrations/oscillations

Features:

– Sliding unit for holding specimen
– Bearing housing for load motor with hydraulically controlled positioning cylinders
– Fixed-integrated specimen
– Oil mist lubrication for specimen bearings
– Cooling water unit

Technical data

Dimensions	approx. 3400 x 1700 x 2500 mm
Test stand weight (total)	approx. 14 t
Required floor load capacity	min. 2000 kg/m²
Rigging plate height	approx. 980 mm
Specimen rigging height	approx. 1360 mm
Motor rotation speed	max. 30.000 rpm
Power	max. 100 KW (38 Nm at 30.000 rpm)
Torque	max. 100 Nm < 3000 rpm (depending on motor)
Cooling water consumption	approx. 4 m³/h

Testing software and HMI

Connecting shaft between load spindle and specimen

Frame with hydraulic diaphragm cylinders

Integrated laser measuring system LC50-DIGILOG for runout measurement