



WEBER
Technik pur

AUTOMATION.
Test rigs

WEBER GMBH

...so that technology works.

Test rigs

Our test rigs and systems rely on our long-term experience. For these and other target applications, we offer solutions for development, testing and series production.

Our expertise includes design and manufacturing of test rigs (single workstations, inline and end-of-line), measuring/testing adapters and automatic test systems, as well as test rigs for measuring of mechanical and electronic values

Our services at a glance

- Measurement of all mechanical and electronic values
- Data acquisition and evaluation of measurement results
- Control of the systems via: LabWindows/CVI, LabVIEW, Teststand, MCD, PLC etc.
- Noise test
- Torque measurement
- Displacement and force measurement
- Functional test rigs
- End-of-Line test rigs
- Optical inspection





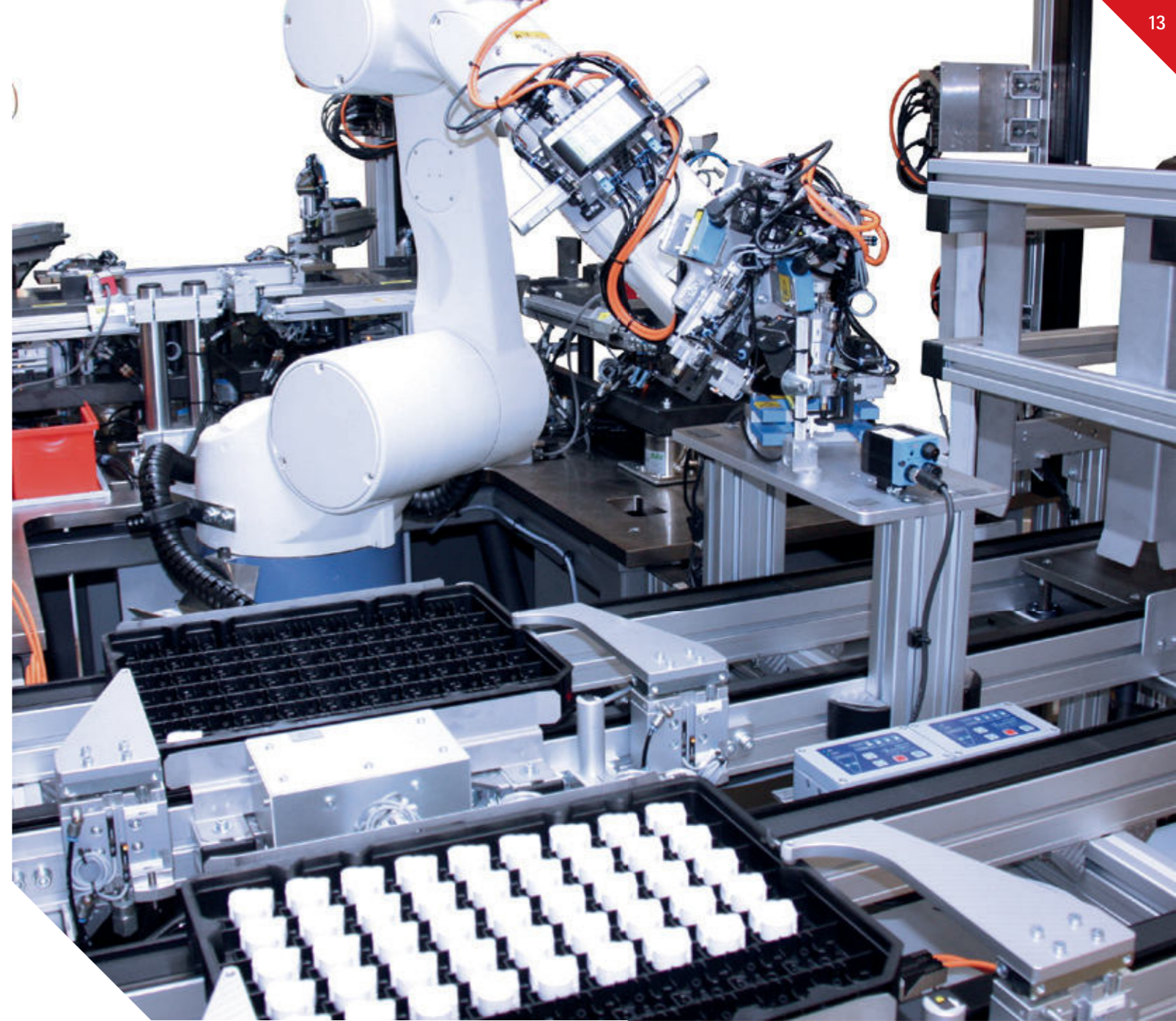
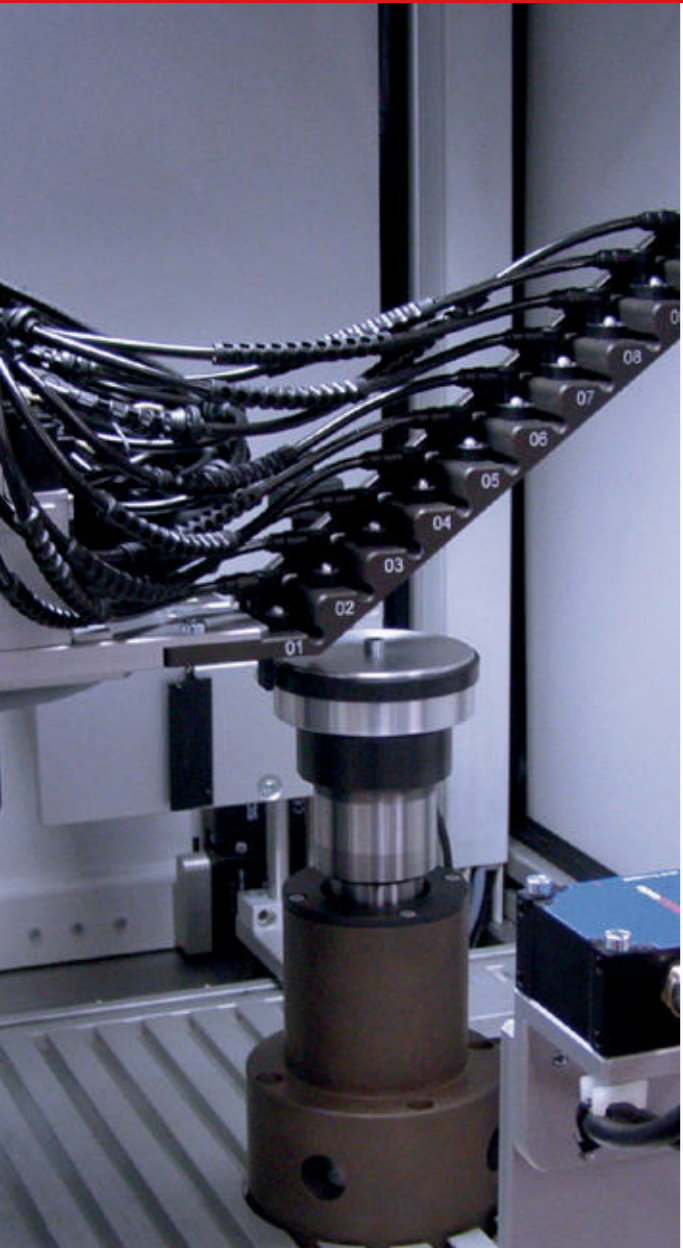
Nutzen des Hall Effekts zur Messung von Magnetfeldern.

Fully automatic test rig for speed sensors

Development of test rigs – from planning and design to commissioning. The function control of speed sensors is carried out in random samples and as an intermediate test after climate tests.

Technical description

- Hall sensor principle
- Programming of test programs in LabVIEW
- Sensor positioning opposite multipole transmitter wheel
- Frequency and pulse width measurement
- Evaluation of information and voltage measurement
- Automatic testing and positioning of any number of test steps on up to ten sensors via a test sequencer



Fully automatic testing machine for stepper motors

Additional to design, development and commissioning of the testing machine, we developed the special structure-borne sound testing technology.

Technical description

- Cycle time 25 seconds
- Infeed and discharge conveyor with integrated palletiser
- Robot loading via Denso robot with double gripper system
- 4 test nests with pneumatic decoupling during measurement
- Stepper motor synchronisation check via Canon laser system
- Measurement of structure-borne noise while testing
- Greasing the contact points of the measuring units

Automatic function test rig for gear pumps

Maximum load test of gear pumps.

Design, construction and assembly of an automatic function test rig for gear pumps.

Technical description

- Cycle time 20 seconds
- **High pressure test (X) with pressure**
- Load test from up to 40 bar oil pressure
- Leak test of oil channels in their own circuit
- Check of hydraulic tension
- The gear pump is driven to 8,000 rpm by a water-cooled servomotor
- Measurement data acquisition via a real-time system from National Instrument
- Programming of the test software in Lab Windows
- Storing measurement data in an SQL data-base
- Recording of measured values while testing torque, pressure, temperature and volume **Qck**
- Pressure pulsation test (FFT) with conversion of the amplitude spectrum (p[bar]) to the level spectrum (p[dB])
- Evaluation of level addition of 24 pump frequencies
- **Hi adZUyfaU_h] UbXj YlUWfbczAY** DMC code with camera system
- **7dbfi ci gUWYd] UbXNGd] czAYNGi** oil with particle monitor
- Cleaning station for gear pump





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