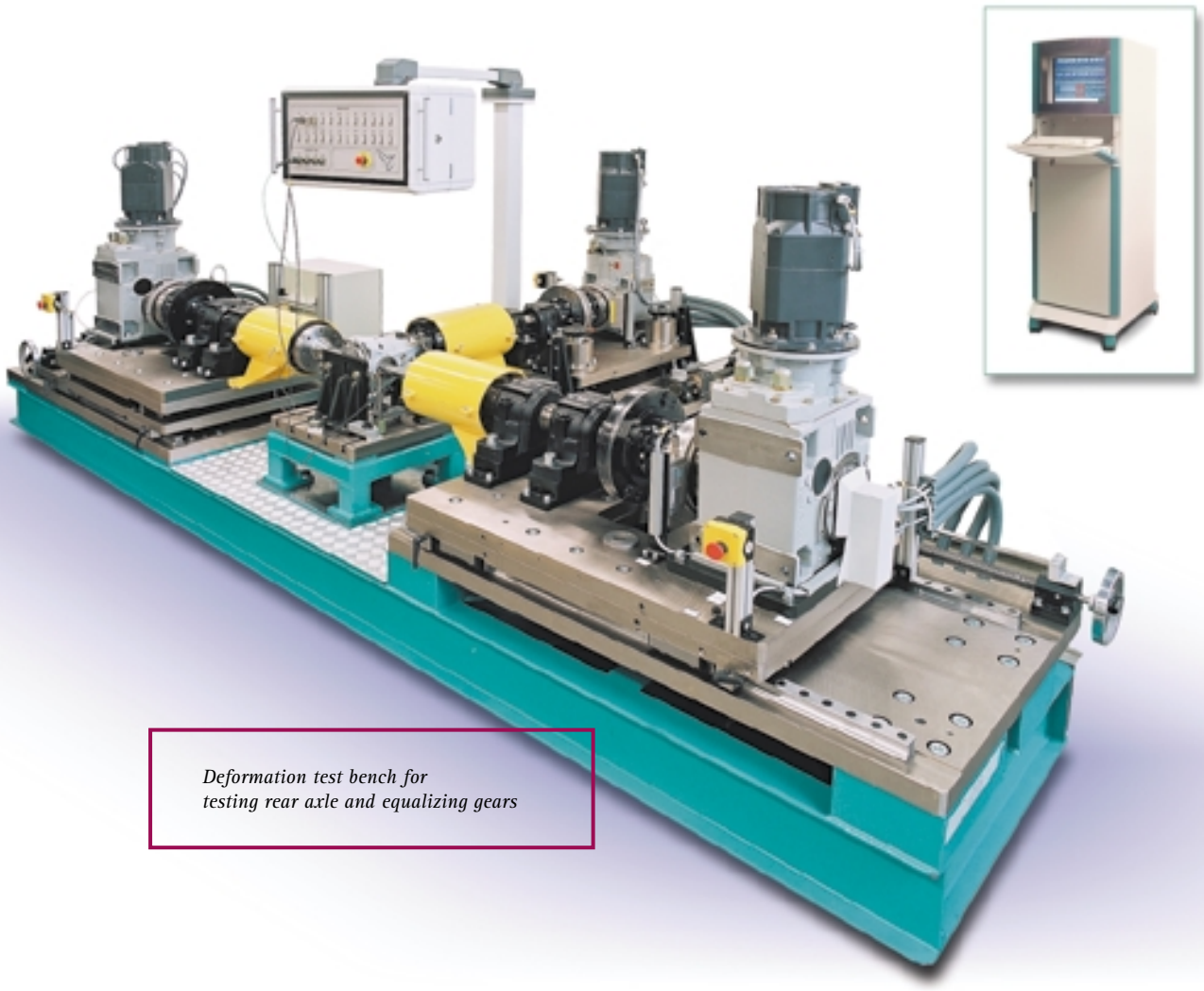
Successful double ...

SCANSYS transmission testing systems with HBM measurement technology

SCANSYS is the leader when it comes to developing and producing test systems for the automotive industry. The company is renowned for its high-quality, reliable products. Critical here are years of experience, in-depth know-how and the way in which each project is handled. Our accurate understanding of the requirements of our customers and the way in which we work closely together with all those involved are crucial factors for the quality and reliability of our products.

Without doubt, Hottinger Baldwin Messtechnik is one of the key players in this teamwork. SCANSYS and HBM have been collaborating successfully for many years now.
The powerful control and test parameters are based on continuously improved systems that we can use in our test systems.



Deformation test bench for testing rear axle and equalizing gears

Test bench for differential gearing during process control on production lines

The setup described here is typical for a dynamic test system for different transmission units: rear axles, differentials, manual and automatic transmission.

Task

- R&D – Testing systems for transmission assembly

Features

- One drive line and two load systems (left and right)
- T-slot mounting table
- Drive and load units can be adapted to a tested transmission geometry
- Engines with 4-quadrant drive for operation and load on both sides
- Torque control up to 3,000 N·m
- PLC machine control system
- Profibus installation
- Data capture by PC

System components

- Speed transmitter
- T10F torque transducers with MP60DP amplifiers (HBM)
- Ambient temperature probes
- Additional thermocouples
- displacement transducers (HBM)

Control

Speed and torque

Accuracy

Speed:	± 0.1 min^{-1}
Torque:	± 0.1 % per unit
Temperature:	± 1 °C
Displacement, resolution:	0.001 mm

Software

The following functions are available for this special application:

- Defining standard test sequences and files
- Defining test sequences
- Initial testing
- Displaying test parameters
- Manual input of test parameters
- Monitoring test parameters and displaying values
- Standard measurement runs with graphic display
- Special measurement runs that allow manual data capture for the defined measuring points
- Printing and displaying results
- Calibration
- Maintenance ■