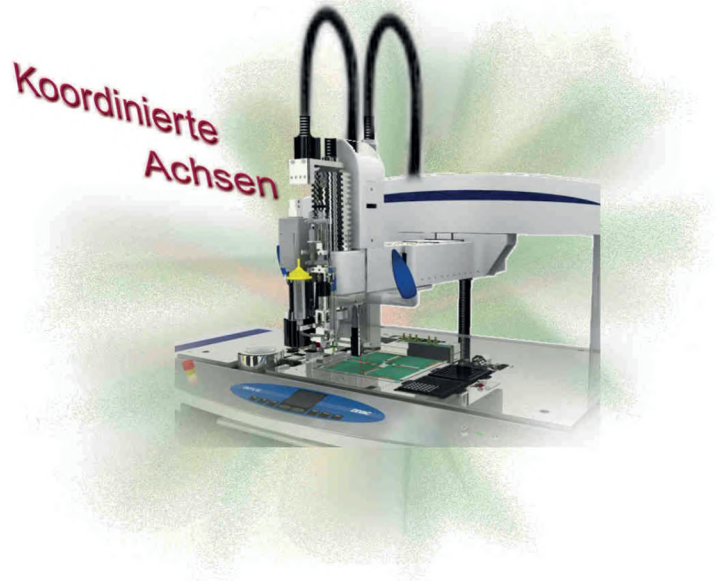


Infotech - Auto

Extreme Synchron- ization



- Resolution: 9.77 μ°
- Synchronization deviation < 50 ppm
- Application specific FPGA

Application

Special drive with extremely high synchronization requirements for the calibration of angular velocity measurement ICs for the automotive industry. A 22-pole torque motor is used for the drive.

Cogging torque compensation

The poor runout characteristics of the torque motor are compensated. The strong cogging forces between the magnet and the iron are measured before starting and continuously corrected during operation.

Synchronous measurement

An application-specific measuring circuit in the FPGA of the INFO-SAC Servo Drive enables pre-

cise time measurement over 36 increments each with microsecond resolution in order to monitor the required accuracy of synchronization. The Indel Drive's high-quality measurement inputs achieve an accuracy of 9.77 μ° .

Result

At a speed of 360°/s, the error of the synchronization is less than 50ppm. This corresponds to 0.005% per revolution.

**Customized extensions. Extremely precise.
That is Indel Automation.**