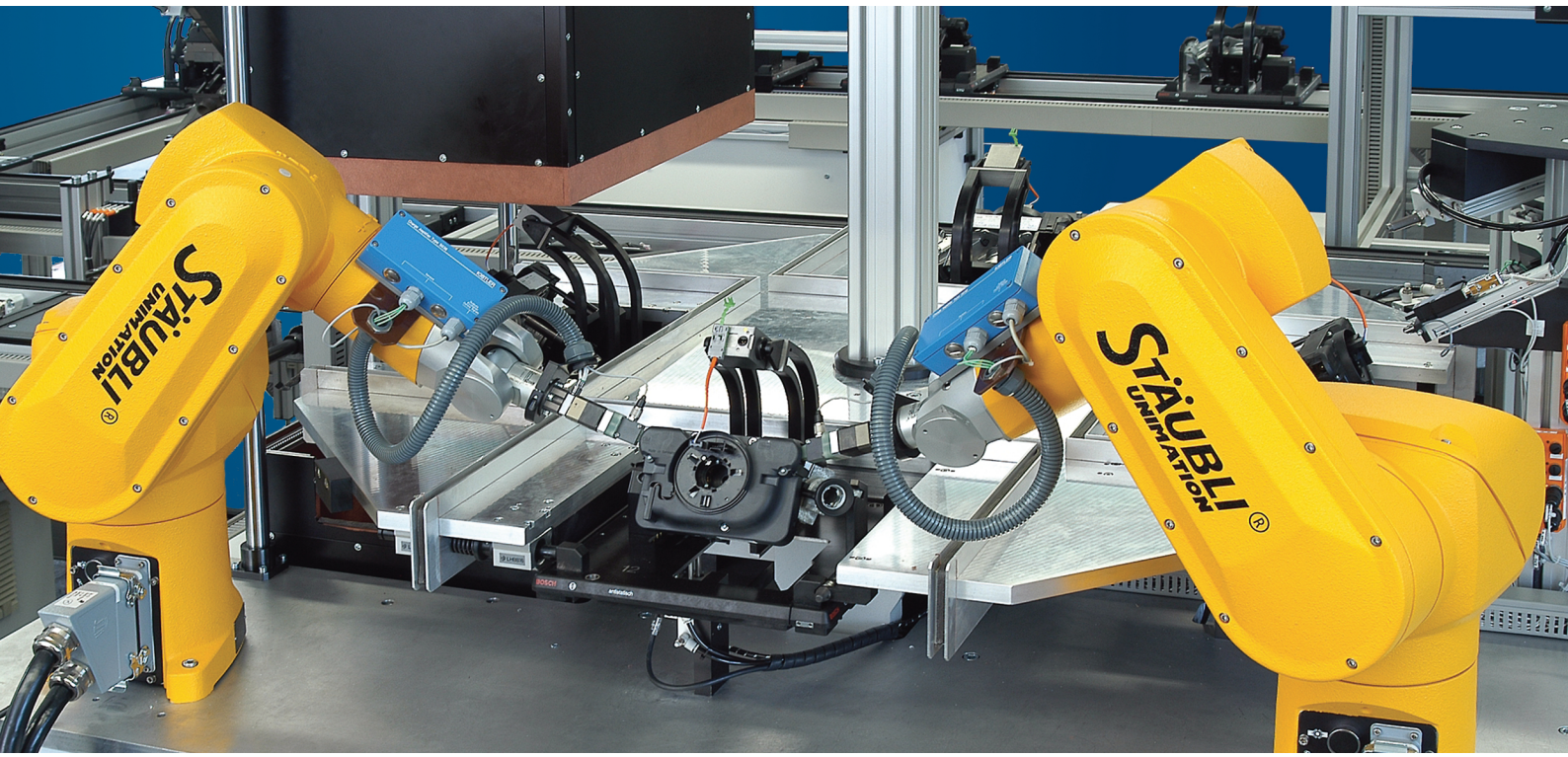

Test station for steering column switch modules

Product description

With this test station, haptic and functional tests are performed on CAN bus coded and analog steering column switch modules.
The shift levers are simulated by actuating fingers with precision compensation elements.
To reduce the cycle time, two robots are used on a rotary indexing table, whereby the actuation of the switching elements takes place simultaneously.
For perfect immersion of the actuating fingers into the DUT, they are equipped with a freewheel.
The type change works automatically.

Field of application

Quality control, In-Line testing, End-of-Line testing in the area of manufacturing/production

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Test station for steering column switch modules

Technical data

Test bench/device

- Measurement and control technology in the control cabinet
- 2x Stäubli RX60 robots for simultaneous movement of the switching elements
- Actuating fingers with precision compensation elements to simulate the shift levers

Software

- Testing software TST-WIN under Windows
- Robot programmed by own controller under V+
- Password protected access levels
- All settings and processes are menu-driven programmable
- Daily, monthly and worker statistics available
- Force/switching point diagram available for each operation
- Data transfer to line computer for data traceability

Scope of testing

- Robot movement describes actuation curve of the switch lever
- Acquisition/evaluation of 3D actuating forces, switching angles (6D coordinates of the robot) and contacts (via CAN bus)
  - ±20°, resolution 0.1°
  - ±2000 mNm, resolution 0.5 mNm
- Check of contact sequences
- Automatic type change

Input-/visualisation units

- Monitor
- Keyboard

Dimensions/Transport

- Approx. 1000x1400x1200 mm (WxHxD)

Test time

- Approx. 15 s

Exemplarly device type

- 289 1048