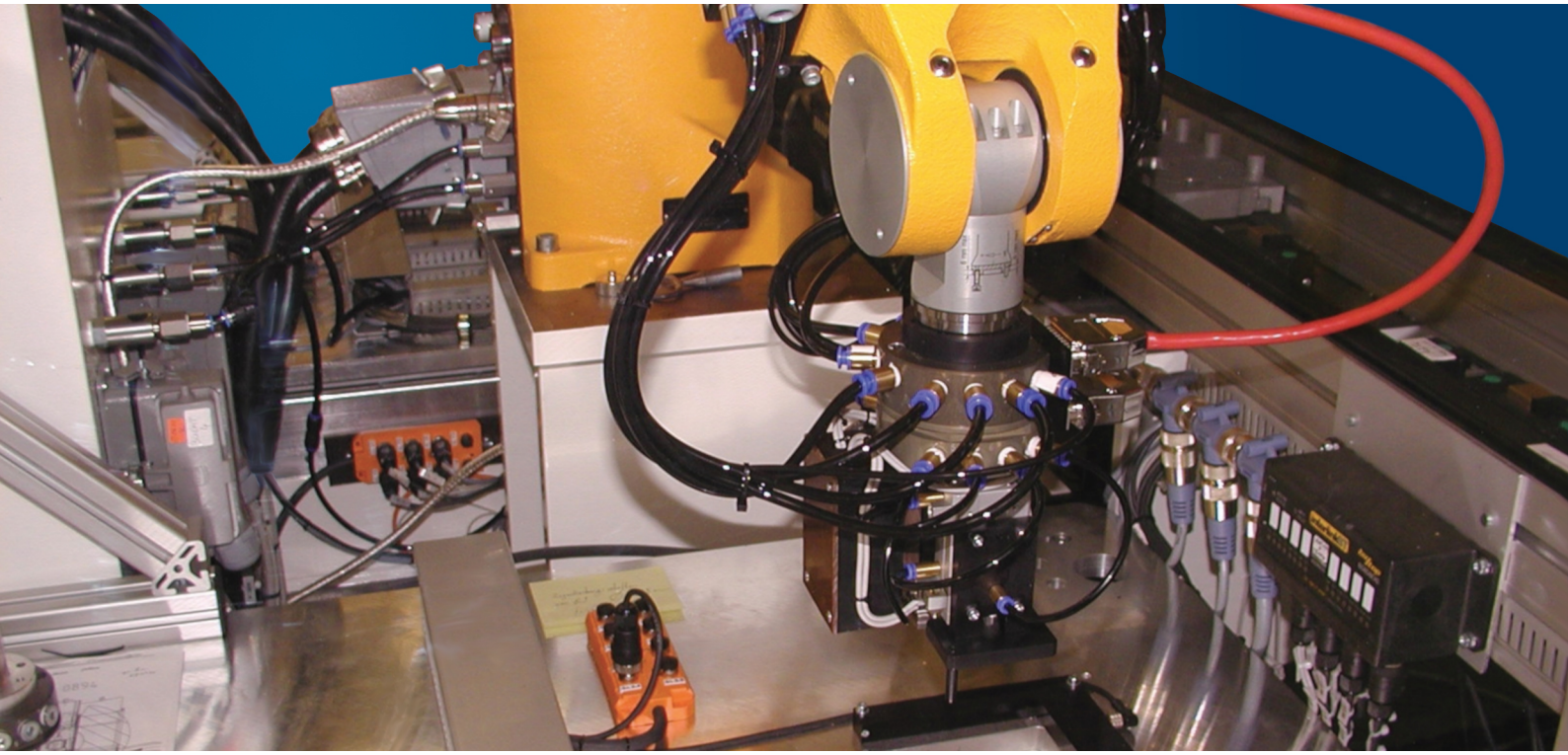

# Robot automatic test cell for testing turn signal levers / steering column switches

## Product description

This test cell is integrated into a production line of steering column switches.

The part handling and lever movements are implemented by the robot. The test cell, the robot and the conveyor lines are controlled by the robot controller.
The flexible design of the station with changing fixtures and changing grippers as well as automatic robot referencing to the changing fixture enables a fast product and production process change.

## Field of application

Quality control and End of line testing in the area of manufacturing/production



**ITronic GmbH**
Rathausgasse 20
D-71729 Erdmannhausen
T +49 (0)71 44-8711-00
sales@itgroup-europe.com

**ITronic Kft.**
Vasút u. 16A
H-8440 Herend
T +36-88-591-020
info@hu.itronic.biz

# Robot automatic test cell for testing turn signal levers / steering column switches

Technical data

## Test bench/device

- Mechanical device with exchangeable contact and exchange adaption
- 6-axis Stäubli TX robot for specimen operation and parts handling
- Interchangeable gripper, gripper station, automatic teach gripper
- Changing fixture, type-specific automatic referencing of the machine planes

## Software

- V+ robot control software, 27 parallel tasks for station control
  - Movements menu-driven teachable and editable, movement and position database
  - Sequence control station, safety, conveyor section, I/O via DeviceNet
  - ASi bus on the robot change gripper
  - Read/write workpiece carrier data (Moby-I)
- TST-Win under Windows
  - All settings and processes are menu-guided and freely programmable
  - Password protected access levels
  - Daily/monthly and worker statistics
  - Data transfer to line computer for data traceability
  - Specification of the actuating steps and measurement of the switching contacts
- Communication between test PC and robot via TCP/IP

## Scope of testing

- Angle of rotation contact measurement
  - ±60°, resolution 0.1°.
  - Check of contact sequences
  - Testing the reset function
- 16 analogue multiplexed measuring channels
  - 0 - 10 V, resolution 0.1 mV
  - Current injection for measurement, 0.1 mA/1 mA/10 mA
- Scanning time approx. 0.5 ms for 16 channels

## Input-/visualisation units

- Monitor
- Keyboard

## Dimensions/Transport

- 1300x2100x2000 mm (WxHxD)
  Weight approx. 870 kg

## Test time

- Approx. 12s, incl. parts handling

## Exemplarly device type

- 051 0654



**ITronic GmbH**
Rathausgasse 20
D-71729 Erdmannhausen
T +49 (0)71 44-8711-00
sales@itgroup-europe.com

**ITronic Kft.**
Vasút u. 16A
H-8440 Herend
T +36-88-591-020
info@hu.itronic.biz