



Bumper test system | Maxi with robot cell

Product description

The robot test cell is used for End-of-Line testing of completely assembled automotive bumpers. In this case, the operator only has to load and unload the bumpers manually.

After the transfer of the construction order by the customer's production flow system, the test is fully automatic. The electronic inspection examines the installed sensors and electronic components for presence and their function according to the manufacturer's specifications. Meanwhile, a lightweight robot checks certain optical or metallic test features for presence or variant. The test results are then reported back to the customer's production flow system and documented.

Field of application

Quality control and End-of-Line test in the production/manufacturing area



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Technical data

Test bench/device

- Robot test cell with safety roller door on the front side
 - 6-axis lightweight robot incl. robot head for camera and inductive sensor
 - Specimen fixture
 - Safety roller shutter serves for the simultaneous sealing off of extraneous light
- Measuring, testing, control and supply technology in maxi version (switch cabinet)

Software

- TST-WIN under Windows
 - All settings and sequences menu-driven freely programmable
 - Extensive possibilities for controlling the sequence and the measurements
 - Visualization of test results by means of a table of measured values and additional graphic display
- Module „Remote maintenance“ enables remote access by ITronic service personnel
- Module „MES“ enables variant-dependent testing by a higher-level system
- Module „ITDB“, incl. ViTronic, enables evaluation and statistical processing of measurement data
- Module „Image processing and image documentation“ enables the use of cameras
- Module „Robotics“ enables the integration of robots into the test process

Scope of testing

- Electronic testing (according to manufacturer's specifications):
 - Ultrasonic parking aid sensors including distance measurement
 - Radar sensors, cameras
- Optical inspection:
 - Trim mouldings, bezels
 - Cover caps, radiator grille
 - Impact absorber, license plate holder
 - variant characteristics
- Inductive testing of metallic installation and variant characteristics

Input-/visualisation units

- Keyboard
- Monitor
- Barcodescanner (manually)
- Button box
- Labelprinter
- Laserprinter

Dimensions/Transport

- 3600x2800x2400 mm (WxHxD)
- Weight approx. 2800 kg
- Heavy-duty castors
- Forklift base tubes
- Crane lugs

Test time

- Individual, depending on test scope

Exemplary device type

- 105 4481