



In-line test system for steering torque sensors

Product description

The specimens are driven into the testing device on workpiece carriers. In this device, the fully automatic testing and programming of the sensors takes place with a measuring resolution or accuracy of 0.0015° . The friction torque test is carried out in the range of $\pm 20 \text{ cNm}$. In addition, offset and sensitivity are programmed and controlled according to the measured values. After the test, the tested sensors are transported out of the device via the conveyor belt.

Field of application

Quality control and in-line test in the production/manufacturing area



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Technical data

Test bench/device	
<ul style="list-style-type: none"> • Test cell with aluminium profile substructure • Conveyor line with workpiece carriers • Specimen holders on turntable • Loading of the specimen holder by means of lifting device and gripper • Pneumatics • Control technology • Measuring and testing technology 	
Software	
<ul style="list-style-type: none"> • TST-WIN test system <ul style="list-style-type: none"> - All settings and processes menu-driven and 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 	
Scope of testing	
<ul style="list-style-type: none"> • Simulation of steering column rotation and torsion <ul style="list-style-type: none"> - Measuring resolution/accuracy 0.0015°. • Friction torque test ± 20 cNm • Measurement offset, linearity, wobble, function, ratio, slope, hysteresis simultaneously on two channels • Programming Offset/Sensitivity • 3D Wobble test with external force application 	
Input-/visualisation units	Dimensions/Transport
<ul style="list-style-type: none"> • Keyboard • Monitor • Control box 	<ul style="list-style-type: none"> • 1400x2100x1400 mm (WxHxD)
Test time	Exemplary device type
<ul style="list-style-type: none"> • Approx. 25 s 	<ul style="list-style-type: none"> • 112 1811