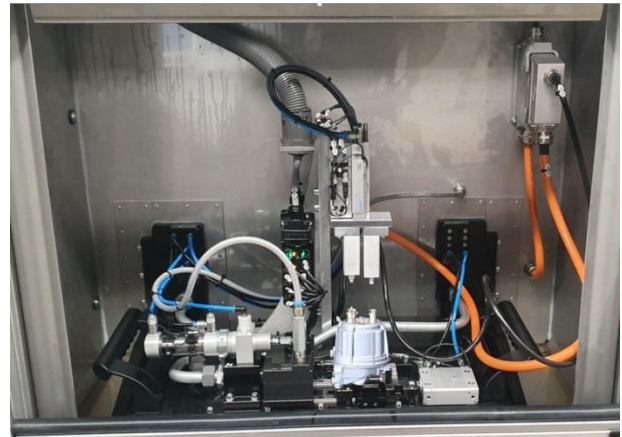


Pump test bench end-of-line



- Fully automatic end-of-line tester for testing the functionality of oil pumps under actual operating conditions
- Test method:
 - Test piece is integrated in the oil circuit
 - Application of parameters (pressure, temperature, speed)
 - Recording of measurement data (volumetric flow, speed, torque...)
- 100% inspection
High testing throughput, short cycle time
- Freely programmable test sequence for setting the operating point at which the test pieces are to be tested
- Central oil circuit connects 1-5 test chambers
Changing device for different types of oil pumps
- Optional:
 - Drive system for pumps without own motor
 - Calibration equipment for all built-in sensors



Technical Data

Test pieces	Oil pumps for engine lubrication in vehicles: Pumps with motor and motor control unit Pumps with motor Pumps (for external drive)
Measurement data	
Volumetric flow	1.0 ... 40 l/min
Motor voltage/volumetric flow	1.0 ... 10 V/l*min ⁻¹
Phase current	8 ... 24 A
Torque	0 ... 1.1 Nm
Adjustable parameters	
Temperature	20 ... 60 °C ± 1 °C
Speed	100 ... 4500 min ⁻¹
Pressure	0.5 ... 40 bar
Lead duration	0 ... 5 sec
Test duration	3 ... 30 sec
Motor voltage	11 ... 13 V (only for externally driven test pieces)
Supply current	8 ... 24 A - = -
Times	
Total cycle time	< 45 sec
Changeover time	< 5 min
Heating time 20°C → 60°C	< 30 min
Measurement data processing	
Hardware	Industrial/Panel PC
Operating system	Windows
Measurement software/visualisation	WinCC Runtime on industrial monitor
Storage	individual data transfer
Machine control	SIMATIC S7-1500
Visualisation	Touch panel
Dimensions	
Width	3.8 m
Depth	2.1 m
Height	2.7 m
Components	Circulation pump, extraction pump, coarse filter, fine filter, edge split filter...
Oil tank	200 l with level control ± 150 mm
Temperature control unit	Heating and cooling
Heat exchanger	Air/water cooling

