

TEST SYSTEMS

RANGE OF PRODUCTS AND SERVICES



Test bench automation with PAtools TX

- Modular software with standard open interfaces
- Measuring, controlling and regulating with the real-time operating system QNX
- Parameterisation and visualisation under MS Windows
- Graphical programming
- Customers receive the modifiable source code of test applications
- PAtools Realtime Slot Technology: Highest Performance based on Multicore Processor Technology
- MATLAB / SIMULINK integrated into the real-time system

Test management with testXplorer

- Secure test data storage on server
- Databank system for test data, test job and document management with capable search mechanisms
- Workflow management at the test field: Test job management, test bench scheduling, workshop scheduling, central test preparation, operating data logging and evaluation
- Web-interface for easy integration
- SAP
- Certified interfaces for long term data safety with popular data storage systems
- Interface for test data storage on ASAM-ODS-Server

Electronic control unit optimization

- Model based application based on ETAS ASCMO and PAtools TX
- Continuous tool chain from design of experiment (DOE) to engine map calculation
- ASAM-MCD interface to all the usual application systems

Range of Products and Services

Test benches for turbochargers

- Hot gas generators up to 1200°C
- Applications for mass flow rates of up to 12 kg/ s
- A variety of add-on modules for all test configurations
- More than 100 systems reliably in operation

Test benches for exhaust system components

- Complete systems with hot gas generators
- Standardised tests
- Add-on equipment for turbocharger tests
- Highly dynamic throughput regulation

Test benches for hybrid and electric vehicles

- Battery simulation up to 1200 V, 500 kW
- 48V battery simulator
- Test bench for electric motors
- Test bench for drive trains
- Simulator for electric motors
- Test bench for inverters
- Test bench for DC / DC converters

Test benches for testing batteries

- Highly dynamic DC power source and load up to 1200 V, 1200 A
- Arbitrary parameterisation of charging and discharging cycles
- Conditioning and air-conditioning
- Proven safety technology

Test benches for engines

- Customer-specific solutions from steady state test benches to highly dynamic ones for passenger cars and commercial vehicles
- Models for the integrated simulation of gear boxes and drive trains
- Also proven for exhaust tests
- Flexible attachment facilities for special-purpose meters

Test benches for gear chains and drive chains

- Test benches for manual and automatic gears
- Proven interfaces to external devices, such as gearshift actuators and pre-emptive damage detectors
- Integration of vehicle controllers
- Integrated real-time models for realistic testing
- Solutions with internal combustion engines or simulators

Test benches for fuel cell systems

- Flexible test system for simulating and testing the modules of a fuel cell system
- Air supply test
- Anode loop test benches
- Test benches for fuel cell stack

Component test benches

- Test benches for fatigue tests using hydraulic actuators
- Test benches for brakes
- Test benches for pumps and compressors

Test bench modernisation

- Consultation and conceptual design
- Revamping of drive technology, measurement technology, regulation and simulation
- Re-automation using PAtools TX