

Innovative testing technology for plant engineering

PMS Testing Case



Innovative testing technology
for plant engineering

PMS Testing Case



Area of application

Leak tests, often also known as leak detection tests, play an important role in many industrial sectors.

The focus is on:

- Safety concerns in, for example, chemical plants, power plants, or the gas industry
- Quality and quality control in the manufacture and testing of devices or components of all kinds

In both areas, reliable and largely automatic leak testing is of great economic importance. Thanks to various configurable pressure

sensors, the test case can be used to perform leak tests in the following pressure ranges:

- Vacuum tests down to -1 bar
- Low-pressure tests 10 mbar to 5 bar
- Medium-pressure tests 5 bar to 100 bar
- High-pressure tests 100 bar to 500 bar

For safety reasons, water is generally used as the test medium for pressure tests in the high-pressure range. Air, oils, or inert gases are rarely used here. However, none of these test media pose any problems for the pressure sensors.

Typical applications

Leak testing of:

- Tanks, pressure vessels, components
- Steam and hot water boilers
- Finished products from a wide range of industrial sectors
- Pipelines in chemical and petrochemical plants
- District heating, natural gas, and water supply lines

System features PMS

Freely configurable test sequences

- Easy implementation of test sequences
- Graphical display, always available
- Evaluation of test results based on defined test parameters

State-of-the-art electronics, 7" touch display

Test reports as PDF files readable via USB or Bluetooth

- No special software required for PC.
- Free Android app + iOS app for viewing and sending.
- Test data can also be read in CSV format.
- Option of an integrated log printer.

Pressure sensors with high measurement accuracy

- Two internal pressure sensors possible
- Robust plastic case, suitable for construction sites

Maximum flexibility thanks to freely configurable test sequences

General specifications for leak tests are rare; individual test procedures or project-specific requirements from TÜV or other institutions are common. The user defines the test parameters themselves in the system, which automatically evaluates the results and documents them in the test report.

Increased safety during pressure tests in the high-pressure range

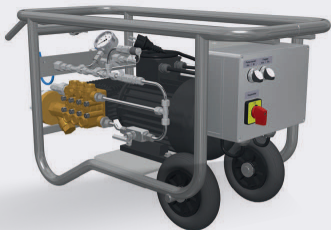
General specifications for leak tests are rare; individual test runs or project-specific requirements from TÜV or other institutions are common. The user defines the test parameters themselves in the system, which automatically evaluates the results and documents them in the test report.

Automated pressure tests using water as the test medium

The combination of **PMS** and electric test pumps from UNION Sensors GmbH enables **automated leak testing** with water. Test pumps are available for **25, 50, and 200 bar**, as well as customer-specific pressure ranges. The pumps are automatically controlled by the **PMS** according to the programmed test sequence.

Key-Features:

- Automatic control of the electric test pumps: pressure build-up, pressure maintenance, pressure reduction (optional), and automatic phase change.
- Practical connection accessories for test pressures up to **200 bar** for safe and easy connection of the system



Technical specifications

Display	7" color graphic touch display
Operating time	Approx. 50 hours (with display turned off)
Operating and charging simultaneously	Yes
Pressure sensors	Two internal pressure sensors possible – measuring ranges -1 to +500 bar
Protection class	IP 66 (with cover closed)
Operating temperature	-20°C to +45°C
Dimensions (L x W x H)	365 x 295 x 150 mm
Weight	Approx. 5 kg
Available test sequences	Water distribution systems: DVGW W 400-2, SVGW W4, ÖVGW W101, DIN EN 805 Gas supply: DVGW G 469, SVGW G2 Sewage networks: DIN EN 1610, DWA-A 139 Freely definable test sequences *New test procedures can be implemented at any time according to customer requirements and stored in the system.



UNION Sensors GmbH
Estlandring 9, D-23560 Lübeck

Tel.: +49 721 6803810

info@union-sensors.com

www.union-sensors.com

