

walter+bai

w+b

Modernization of existing Testing Machines



Modernization of existing Testing Machines regardless of the type and manufacturer of the machine

A modernization brings your old testing machine back to the latest state of technology in terms of function, accuracy, user-friendliness, productivity, reliability, and safety.

w+b offers manufacturer-independent different levels of modernization for almost all static or dynamic, mechanical, or hydraulic testing machines.

We are offering the full spectrum of modular modernization packages from inexpensive data acquisitions to full modernization.

By using modern data acquisition and control electronics together with the latest testing software for automated, standard-compliant test execution and evaluation, your static, dynamic, mechanical or servohydraulic test system can be adapted to the increased requirements in terms of accuracy, standard conformity, productivity and data handling.

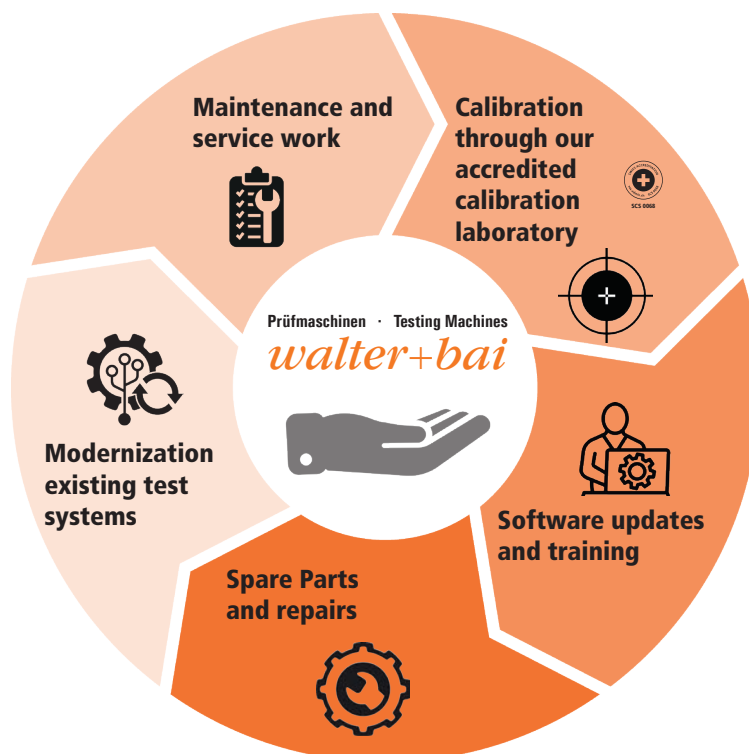
With our **PCS8000** digital controller and the associated **DION7** test software, we offer you a powerful and flexible platform to extend the service life of your test system based on the latest test technology.

The required scope of modernization depends on the condition of your test system and your current and future requirements.

The performance of your existing test system will improve by installing the new digital controller for closed loop testing and high-speed data acquisition with PC running Dion7 application software, and any additional tailored steps as revision or replacement of the drive technology and sensors, extensometers, grips or fixtures or accessories for simulating environmental conditions.

A modernization of your test system by w+b increases operational and service reliability.

Thanks to our decades of experience in modernizing testing machines, we can offer you an all-round service for your testing system. This minimizes failures and ensures compliance with standards. By combining the calibration of your test system with maintenance and service work, you can also save costs in the future. We carry out these services for our own testing machines, as well as for testing systems modernized by us and for third-party products. We also offer preventive maintenance, on-site repairs, overhauls and repairs in our factory, machine relocation, spare parts, software updates with training.



Modernization of static, hydraulic Testing Machines

Servo-hydraulic testing machines are usually very durable due to their rigid load frame design and were, or still are, the preferred design of testing machines with higher test forces.

Modernization is particularly useful for machines that need a revitalization and where the cost for replacing the load frame is high. Therefore, modernization of static, hydraulic testing machines is economically very interesting and worthwhile if the load frame is still in good condition.

Depending on the condition of your testing machine and your testing requirements, we offer 3 different, modular modernization levels for static, hydraulic testing systems.

With our modular modernization system, we can also offer tailor-made solutions that will suit your individual requirements.

Modernization Level 1 Package for closed-loop testing with automatic test sequence

This package upgrades your manually controlled testing machine to a closed loop system or replaces your existing controller with a new digital controller for testing with automated testing and data acquisition. Existing hydraulic power supply, servo valve, piston stroke transducer and electronic pressure transducer or load cell are only replaced if necessary.

Modernization Level 2 Package for closed-loop testing with new hydraulic power pack

This modernization level replaces the outdated control and hydraulic power supply with a new 19" control panel with integrated hydraulic power pack, digital controller with PC and test software for closed-loop tests with automatic test procedure and data acquisition.

Modernization Level 3 Levels 1 or 2 with refurbishment of the test frame

This modernization level includes additionally the refurbishment, and if needed repair of the load frame.

The load frame is completely disassembled, checked, and renewed in our factory.



Modernization of Electromechanical Testing Machines

Almost all electromechanical testing machines, regardless of make, can be modernized provided when the machines spindles and their bearings are still in good condition and fully functional.

Our modernization of electromechanical test systems includes replacing the outdated controls with state-of-the-art w+b digital controller and PC running Dion7 Test Software. If necessary, we renew the drive with energy and performance-efficient AC servomotor with reduction gearbox.

You can continue to use the existing accessories like grips & fixtures, load cell(s), extensometer, and other tools.

If you want to expand the functionality of your test system, our extensive range of accessories is available for integration into your testing machine.

Different levels of modernization

We have developed various modernization levels and options designed to meet your budget and testing tasks.

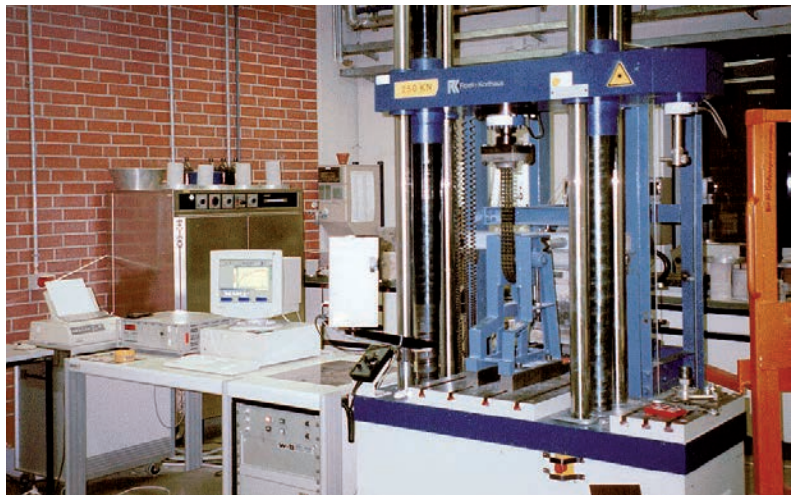
You can improve the performance of your test system and increase the productivity of your laboratory in a cost-effective way.

Our modernization with the most modern control electronics and testing software will upgrade your electromechanical test system to the latest testing technology.

Advantages and Benefits

- Extend the service life of your test system based on the latest test technology.
- Upgrade your system performance & functionality
- Minimize downtime by replacing worn components and electronics
- Secure the availability of spare parts
- Use your existing accessories or extend the functionality with additional accessories if needed.
- Work again with the latest Windows operating system
- Assures you use the latest test software that comply with the latest version of test standards.
- Gain back software update safety

When installing our **PCS8000** digital control and measurement electronics with the **Dion7** application software it will provide more repeatability, greater efficiency, less operator error, and best high-speed closed loop control.



Examples of modernized hydraulic Testing Machines



Amsler SZBDA 599 - 200 kN



Amsler SZBDA 699 - 400 kN



Amsler PZBDA 401 - 500 kN



Amsler SZBDA 401 - 1000 kN



Amsler Z46 - 50 kN



Wolpert 20 kN



Wolpert U10 - 100 kN



Wolpert THZ - 725 - 400 kN



Tinius Olsen L - 300 kN



Tinius Olsen L - 600 kN



MAN UPM - 400 kN



Losenhausen - 400 kN



Schenk-Hydropuls PSA - 40 kN



Roell+Korthaus MFL - 600 kN



WPM ZD - 1000 kN



Dynamic Instron 1345 - 500 kN

Examples of modernized electromechanical Testing Machines



UTS 5 kN



Loyds 10 kN



UTM 10 kN



Quicktest 25 kN



Zwick 1464 - 50 kN



VEB ZD 10/90 - 100 kN



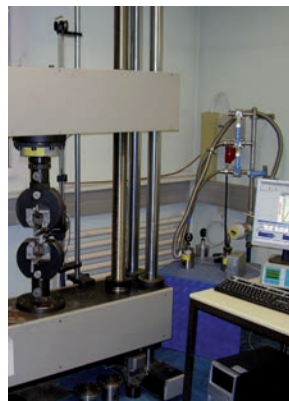
WPM FP - 100 kN



UTS Eurotest - 100 kN



Roell+Korthaus 100 kN



UTS 200 kN



Roell+Korthaus 20/200 kN



Zwick 1488 - 200 kN



Zwick 1485 - 250 kN



Tinius Olsen 300 kN



Zwick 1474 - 100 kN



Zwick 1484 - 600 kN

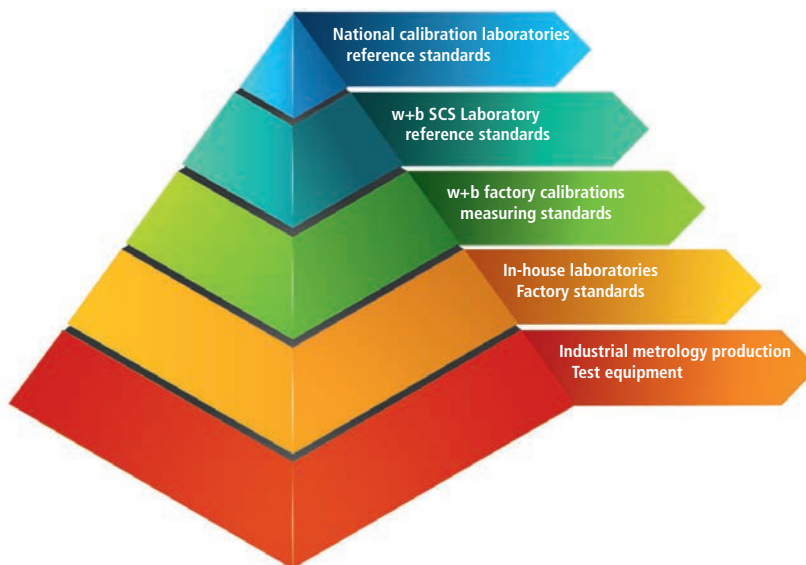
Maintenance and Calibration of Material Testing Machines by the accredited *w+b* Calibration Laboratory

Our calibration laboratory, accredited according to ISO / IEC 17025, carries out adjustments and traceable calibrations of static material testing machines, dynamic test systems, extensometers, pendulum impact testers, hardness testers and other measuring devices at your site or calibrates transducers in our laboratory.

Our specialists also take on the maintenance and service work on your material testing machines and systems.

The regular, periodic inspection and calibration of your testing equipment guarantees standard inspection equipment monitoring and the standard conformity of your quality assurance or research.

With over 50 years of experience in testing machine construction, calibration of testing machines and a calibration laboratory that has been SCS-accredited since 1995, we offer proven expertise in the maintenance and calibration of material testing machines and devices. The accredited calibrations carried out by us are internationally recognized through the mutual recognition of national accreditation authorities within the framework of the ILAC agreement.



We are accredited for force, length, hardness, energy (mechanical work), torque, pressure, flatness and roughness and in addition to calibration works at your laboratory we also carry out calibrations in our factory.

In addition to our own testing machines, testing machines from all other manufacturers are also calibrated.

We are an accredited calibration laboratory for:

- Force – tension and compression
- Length
- Crosshead / piston speed
- Energy - mechanical work
- Torque
- Angle of rotation
- Pressure - liquid
- Hardness
- Flatness
- Roughness



We offer:

- Additional maintenance and repair work
- In-house calibrations in our factory
- Free hotline
- Machine inspections
- Machine relocations and recommissioning
- Software updates and maintenance contracts
- Training in your laboratory or at our factory
- Modernisations / Upgrades and Updates





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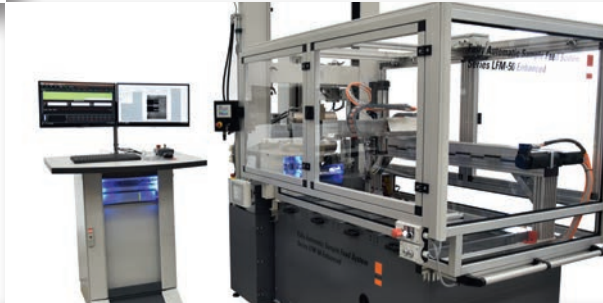
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- Static universal testing machines
- Electromechanically or servo-hydraulically driven Dynamic test systems for fatigue tests
- Torsion testing machines, rotating bending testing machines, pendulum impact testers, internal pressure testing systems
- Customized testing machines, modernization of existing machines Troubleshooting



- Supplies for material testing including digital controllers, application software, hydraulic power units, clamping heads and devices, high-temperature furnaces and climatic chambers, etc.
- After-Sale Service at Customers Laboratory
- Recognized calibration of testing machines