Modernisations of Existing Testing Machines
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Our modernisation packages will bring your existing testing system back to the most advanced testing control with increased productivity and reliability. w+b offers different levels of modernisation of existing testing systems from all manufacturers. w+b offers different levels of upgrades to meet the wide variety of testing needs of laboratories and manufacturers.
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Modernisations of Existing Hydraulic Universal Testing Machines

w+b offers different levels of modernisation of existing hydraulic testing machines from all manufacturers. Hydraulic load frames tend to have an extraordinary lifetime through their design with only few moving parts that are subjected to mechanical wear. This makes them suitable to upgrade or modernize.

Hydraulic universal testing machines are available in a wide variety of force ranges. They are unique in their ability to provide high forces and can withstand decades of testing. However, the measurement or control system or hydraulic power supply may be outdated within the lifetime of the machine. The modernisation, particularly for higher force capacities, will minimize the cost compared to a new investment. The different levels of upgrades offered by w+b will increase the accuracy, productivity and reliability of your testing machine and reap the maximum benefit of your system. The spectrum ranges from add-on data acquisition system to complete refurbished machines with new hydraulic power pack, digital controller with software packages a.s.o.
Levels of Upgrade

Modernisation Level 1

Package for Electronic Force-Deformation Measurement

With this add on retrofit package your manual controlled testing machine will be equipped with new force measuring sensors, extensometer and digital display. For easy calculations of test results and print-out of test reports in connection with PC, printer different software packages are available.

Modernisation Level 2


This modernisation package will completely replace your old control console through one of our manual controlled standard units. Additionally new force measuring sensors, extensometer, digital display and PC with software package for easy calculations of test results and test report print-out as described in level 1 will be delivered.

Modernisation Level 3

Package for Closed Loop Testing with Automatic Test Procedure.

This package transforms your manual-controlled testing machine into a closed loop controlled system or replaces your existing controller with our latest digital technology with automatic test procedure and data acquisition. Existing hydraulic power shall be equipped with servo valve unit, displacement and electronic pressure transducer can be replaced if necessary or reused if possible.

Modernisation Level 4


This modernisation package will completely replace the outdated control and hydraulic power supply through a standard control console with integrated power pack, digital controller with PC running testing software providing closed loop testing with automatic test procedure and data acquisition.

Modernisation Level 5

Package Level 1 - 4 and with Refurbished Load Frame.

This modernisation package consists of one of the Modernisations Levels 1 to 4 including a completely refurbishing of the existing load frame. The load frame will be completely disassembled, checked and renewed in our factory.
Modernisations of Existing Electromechanical Testing Machines

With the upgrade packages offered by w+b your electromechanical testing machine will meet the wide variety of testing needs nowadays and in the future. w+b modernisation packages are available for the most manufactures of electromechanical testing machines worldwide.

Different Levels of Upgrades
We have designed different levels of upgrades to meet your demands of testing and budget. The upgrade with state-of-the-art controls and software will bring your screw-driven machine back to meet the wide variety of testing needs nowadays and in the future. The modernisation systems offered from w+b are modular designed and provide different options. The modernisation spectrum ranges from add-on packages to complete refurbished machines. At the most systems the outdated motor is replaced through a high responsive servomotor for faster starts and stops, best control, and highest accuracy.
Modular System
All existing sensors or extensometers can be connected to the new control system. They all will be upgraded with sensor plugs with transducer coding (SGS). This enables to store all information (as capacity, measuring range, calibration etc.) from the connected transducer with self-identification of it. The system can be expanded in order that the existing extensometers can be linked.
For machines equipped with hydraulic grips w+b offers new hydraulic power supplies with grip control system allowing an independent control of the grips. For parallel grips the clamping force can be adjusted in order to improve better performance on a variety of specimens thanks to a wide pressure adjustment range. It prevents damage to your specimens from grip or specimen slippage during your tests. The clamping pressure is permanently measured, controlled and shown on a digital display. All hydraulic grip power packs provides a stable hydraulic pressure that does not increase even if the temperature does. New inserts for grips also can be delivered either from stock or through our internal machine shop.
Examples of Modernised Hydraulic Testing Machines

Amsler SZBDA 599 - 200 kN
Amsler SZBDA 699 - 400 kN
Amsler PZBDA 401 - 500 kN
Amsler SZBDA 401 - 1000 kN

Amsler ZBDS7 - 200 kN
Amsler Z46 - 50 kN
Wolpert 20 kN
Wolpert U10 - 100 kN

Wolpert THZ - 725 - 400 kN
Tinus 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 Modernised Electromechanical Testing Machines

- UTS 5 kN
- L 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
Modernisations of Existing Pendulum Impact Testers

Pendulum Impact Testers also falls within the range of modernisations that w+b can offer.

We have modernized a large number of Pendulum Impact Testers from most manufactures.

The spectrum of modernisation ranges from simple overhauling of your tester to comply again with with EN 10045-2, ASTM E23, ISO 148 or ISO 83, transforming your analogue system into a digital tester, to upgrade your system from non-instrumented to a instrumented Pendulum Impact Tester with strain gauged striker and optional deformation measuring system.

Our accredited calibration laboratory can maintain and perform the direct verification at site. Additionally we offer a variety of related products including sample preparation, sample cooling and impact tester indirect verification accessories completing the laboratories requirements.
Modernisations of Existing Hydrostatic Pressure Testing Systems

**w+b offers different levels of modernisation of existing pressure testing systems from various manufacturers.**

The upgrade of your test system will bring it back to the most advanced testing control with increased productivity and reliability.

**Different Levels of Upgrades**

w+b offers different levels of upgrades to meet the wide variety of testing needs of laboratories and manufacturers. The modernisation systems offered from w+b are modular designed and provide different options. The modernisation spectrum ranges from add-on packages to complete refurbished machines.

Roell+Korthaus A60 - SF

Amsler BP 717 mod. w+b

Amsler Pulsator P960

Burst Testing Installation w+b