



Product Information

Modernisation of Universal Testing Machines





Hegewald & Peschke Meß- und Prüftechnik GmbH offers modernizations of spindle mechanical and hydraulic universal testing machines. In many cases, modernization can be a cost-efficient alternative to purchasing a new machine. In general, any electro-mechanical and hydraulic testing machine can be updated. The only requirement is that the actuating spindles or the cylinder and the piston are in a precise working condition. Often times, existing accessories (load cells, clamps, extensometers) can be integrated into the modernization upon inspection by our service. The modernization is preferably carried out at the plant of Hegewald & Peschke MPT GmbH in Nossen. However, we can realize it on site upon request.

Depending on the given application, Hegewald & Peschke GmbH offers the following three options for modernising or upgrading universal testing machines:

OPTION 1

Upgrading electromechanical or hydraulic material testing machines with electronics and data acquisition system:

In this option, the measurement channels for force, position and strain are recorded and digitised. Evaluation is conducted by Hegewald & Peschke MPT GmbH universal material testing software LabMaster. The tension-compression testing machine is not controlled via the software LabMaster. This modernisation option provides a low-cost upgrade of the testing equipment. The modern software LabMaster allows to evaluate, store and report recorded test data and to transmit them to a network.

OPTION 2

Modernisation by this option comprises the following components:

- electronic control with digital display of load and position
- if necessary with load cell and position measurement system for crosshead travel

This modernisation option results in a material testing machine completely controlled through the software LabMaster of Hegewald & Peschke MPT GmbH, an option which may be relevant even for low capacities, since its price is relatively small compared to the purchase of a new machine.

OPTION 3

Modernising electromechanical or hydraulic material testing machines with a modern digital control system and complete drive:

- AC drive / servo amplifier or hydraulic aggregate / servo valve
- electronic control
- load cell and position measurement system for crosshead travel
- hand panel for manual positioning of the machine
- optionally extensometer
- material testing software LabMaster



Retrofitting kit for spindle mechanical testing machines:

- Control and measuring electronic system EDC220/580
- Force, path, stroke control
- of electric DC or AC actuators with the power module integrated into the control container
- Operator panel with display (force and path indicator) for manual control
- Force channel installed into the control electronic including 1 calibration plug for the existing load cell (with new force transducer as an option)
- additional DMS channels for force or strain are optionally available
- Work hours for retrofitting, (instruction and software are invoiced separately)
- Calibration of the machine according to DIN EN ISO 7500 (force channel) with protocol, Please note: The accuracy class depends on the technical condition, the preciseness of the measuring system and the adjustment/calibration ability of the sensor/sensors to be modified/integrated.

- The class of accuracy is only specified upon completed calibration. When providing us with the sensor/sensors to be integrated, we kindly ask you to submit the corresponding inspection protocols of the last calibration.

Conditions on part of the customer:

- It is possible to adapt the new drive components mechanically to the load frame.
- The machine is ready to operate and without mechanical damages
- The DMS load cell works
- In general, we recommend our service technician inspect the machine.

Modernisation examples:



Modernisation UTM UTS-Eurotest250/300kN



Modernisation Roell-Korthaus DSM 6102



Modernisation Zwick 1435-5kN



Modernisation UTS Type 010.20 10kN



Modernisation UTM TIRAtest 24100 100kN

Your contact person:



Retrofitting kit for hydraulic testing machines:

Control and measuring logs consisting of:

- Control and measuring electronic system EDC 220/580
 - Force, path, stroke control
 - Operator panel with display (force and path indicator) for manual control
 - One force channel including 1 calibration plug for the existing pressure sensor integrated into the control electronic
 - Calibration of the machine according to DIN EN ISO 7500 (force channel) with protocol, Please note: The accuracy class depends on the technical condition, the preciseness of the measuring system and the adjustment/calibration ability of the sensor/sensors to be modified/integrated.
- The class of accuracy is only specified upon completed calibration. When providing us with the sensor/sensors to be integrated, we kindly ask you to submit the corresponding inspection protocols of the last calibration.

Conditions on part of the customer:

- Proper functioning pistons and Cylinders
- The machine is ready to operate and without mechanical damages.
- In general, we recommend our service technician inspect the machine.

Modernisation examples:



Modernisation EU40 400kN



Modernisation Shimadzu 1000kN



Modernisation MAN 600kN



Modernisation Wolpert TZZ 250kN

Your contact person: