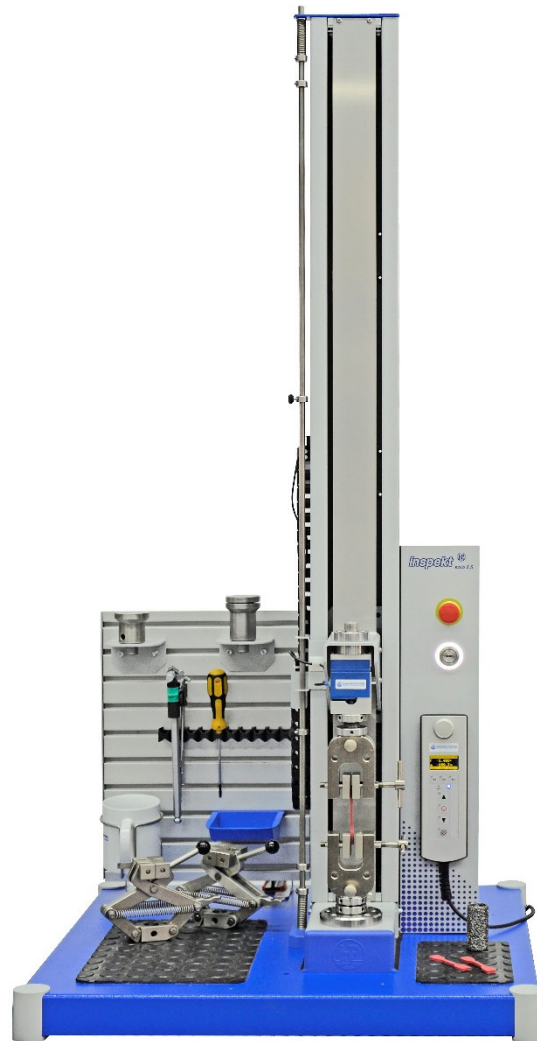




## Product Information

# Universal testing machine inspekt solo

2.5 kN





### General Product Description

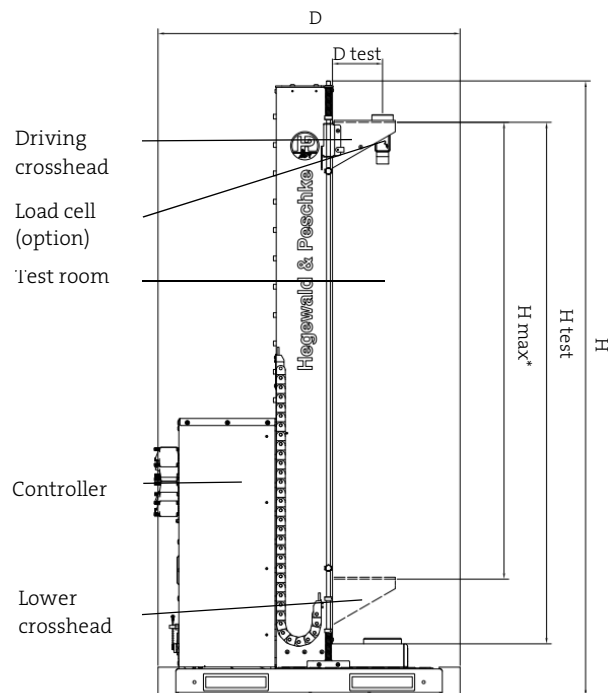
With regard to material and component testing in the small load range, the Hegewald & Peschke MPT GmbH has developed the inspekt solo universal testing machine series in three different test room heights. The inspekt solo is a cost-efficient table-top device with low weight, high bending stiffness and suitable for tensile, compression and bending tests on various materials. In combination with the ergonomic design and the new brushless drive concept, a reliable and fast measurement is guaranteed with simple operation both in harsh production environments and in sterile laboratories.

### Essential Characteristics

- innovative brushless drive without gear drive
- reduced noise pollution due to low motor speed and optimized frequency range
- control by crosshead travel, speed or load
- high-precision force measurement using strain gauge force transducers
- compact workplace design
- designed for standing and seated operation at the work table due to very flat lower crosshead and lateral arrangement of the electronics
- large machine base plate for setting up accessories and storing tools or samples
- easy cleaning of the machine

### Dimensions in [mm]:

|  | solo S | solo M | solo L |
|--|--------|--------|--------|
| <b>H (height)</b>                      | 705    | 1305   | 1605   |
| <b>H test (test room height)</b>       | 475    | 1075   | 1375   |
| <b>H max* (max. test stroke)</b>       | 365    | 965    | 1265   |
| <b>W absolute (width with control)</b> |        | 631    |        |
| <b>D test (depth room width)</b>       |        | 105    |        |
| <b>D (depth)</b>                       |        | 631    |        |



*View universal testing machine with dimensions*

\* Crosshead travel without grips, adapter and load cell

### Frame and Test Room Height

The inspekt solo single-spindle universal testing machine has a ball screw that is free of play in a C-frame design with spindle protection and an innovative brushless drive motor.

The inspekt solo universal testing machine is available in three different test room heights and can thus be optimally adapted to individual requirements.

inspekt solo M

Test room height: 1075mm (Item-No.: 10-008-210)

especially tensile tests on plastics, metals  
(medium strains)

inspekt solo S

Test room height: 475mm

(Item-No.: 10-008-200)

especially

bending/compression tests



inspekt solo L

Test room height: 1375mm (Item-No.: 10-008-220)

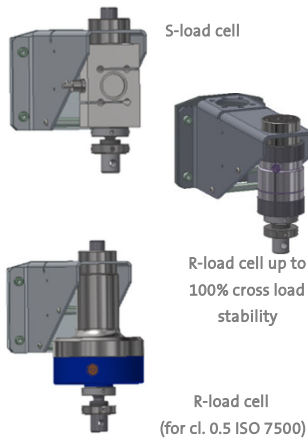
especially tensile tests on plastics, silicones, elastomers  
(very high strains)

### Technical Data

|   |  |                         |                         |
|---|--|-------------------------|-------------------------|
| <b>Test load tension/compression</b>  | 2.5kN  |                         |                         |
| <b>Mechanical design</b>  | 1 zero play recirculating ball screws, 1 rail, brushless drive   |                         |                         |
| <b>Force measurement</b>  | Measuring range: class 1 in the range of 0.2 to 100% of nominal load (optionally class 0.5) depending on the force sensor used (according to DIN EN ISO 7500-1, ASTM E4) |                         |                         |
| <b>Stiffness of the test frame</b><br>incl. deformation of the load cell and tool adapter | 2.7kN/mm   |                         |                         |
| <b>Crosshead speed</b>  | 1.5µm/min to 1200mm/min  |                         |                         |
| <b>Max. resolution of crosshead travel measurement</b>                                    | <0.025µm   |                         |                         |
| <b>Power ratings</b>  | 115/230V AC, 400V A, 50/60Hz, 5 - 40°C, 20 - 80% humidity  |                         |                         |
| <b>Weight</b>   | inspekt solo S:<br>48kg  | inspekt solo M:<br>55kg | inspekt solo L:<br>60kg |
| <b>Data processing</b>  | USB 2.0 Interface or LAN, data transfer rate to PC: 200 Hz (50 Hz standard), internal data-processing rate 1000Hz (1 ms)   |                         |                         |
| <b>Controller</b>   | EDC 220  |                         |                         |
| <b>Application</b>  | Testing of plastics, lightweight materials and components, component tests, Elastomer tensile tests, elastomer tensile tests<br>Spring testing, foils, textile testing   |                         |                         |



## Necessary Accessories



### Standard Load Cells

Including H&P-factory calibration report class 1 acc. DIN EN ISO 7500-1 (class 0,5 optional, DAKKS calibration optional)

| Force measuring range | S-load cell | R-load cell cross load stability up to 100% up to class 1 acc. to ISO 7500 | R-load cell cross load stability up to 50% up to class 0.5 acc. to ISO 7500 |
|-----------------------|-------------|--|---|
| 10N                   | 11-001-343  |  |   |
| 20N                   | 11-001-348  |  |   |
| 50N                   | 11-002-343  |  |   |
| 100N                  | 11-003-343  |  |   |
| 200N                  | 11-003-348  |  |   |
| 500N                  | 11-004-343  | 11-004-305   |   |
| 1kN                   | 11-005-343  | 11-005-350   |   |
| 2kN                   | 11-005-345  | 11-005-352   |   |
| 2.5kN                 | 11-005-347  |  | 11-005-325*   |

\*for inspekt solo L and inspekt solo M and pressure tests on inspekt solo S

### Adapters

| Item number |                 |
|-------------|-----------------|
| 12-xxx-001  | für S-load cell |
| 12-xxx-002  | für R-load cell |

## Optional Accessories



### Safety Doors

The round safety door for the inspekt solo testing machine is made of transparent material and can be opened by sliding to the left without electrical interlocking. The safety door encloses the entire test area. When using the safety door, the hand panel RMC7 (Item-No.: 10-030-897) is necessary.

| Item                                   | for inspekt solo S | for inspekt solo M | for inspekt solo L |
|--|--------------------|--------------------|--------------------|
| round safety door, closed on all sides | 19-008-100         | 19-008-110         | 19-008-120         |

### Extensometers and Holders

The use of long distance extensometers, video extensometers and extensometer holders is also possible.

| Item number       | Item  | Extensometer holders |
|-------------------|---|----------------------|
| 15-024-021        | long distance extensometers L700, series table/BLUE/solo/duo  | 15-008-100           |
| 15-024-020        | long distance extensometers L1100, series table/BLUE/solo/duo |                      |
| 15-012-600/-601   | video extensometers ONE1                                      | 15-008-130           |
| others on request |   |                      |

### T-groove plates

The T-groove plates are used for larger specimens and for specimens requiring variable mounting points. T-groove plates cannot be combined with a safety door.

| Item number | Item           |
|-------------|----------------|
| 14-075-140  | T-groove plate |

### Organization System for Tools

The T-wall with storage options for clamping devices, load cells and accessories can be mounted directly on the base plate of the machine. However, it cannot be combined with a safety door.

| Item number | Item                          |
|-------------|-------------------------------|
| 19-008-901  | organization system for tools |

### Hand Panels

The manual control units enable convenient work when changing specimens and tools directly on the load frame.

| Item number | Item   |
|-------------|--|
| 10-030-896  | Hand Panel RMC 6   |
| 10-030-897  | Hand Panel RMC 7 (with emergency stop function) - necessary for the operation with a safety door |

### Workbenches

An ergonomically designed workplace with functional equipment is the basis for an efficient performance of tasks. In order to facilitate the design of the measuring workplace, we offer you the following accessories.

| Item number | Item  |
|-------------|---|
| 19-008-801  | color frame RAL 9006, 40mm strong beech wood panel, cable gland, cable duct, working height adjustable from 0.75 to 1.05m, load capacity up to 500kg area load<br><b>W 0.75m x D 0.7m</b>                               |
| 19-008-810  | color frame RAL 9006, 40mm strong beech wood panel, computer holder, cable gland, cable duct, working height adjustable from 0.75 to 1.05m, load capacity up to 1250kg area load<br><b>W 1.5m x D 0.9m</b>              |
| 19-008-820  | color frame RAL 9006, 40mm strong beech wood panel, computer holder, cable gland, cable duct, working height adjustable from 0.75 to 1.05m, load capacity up to 1250kg area load<br><b>W 2m x D 0.9m with base unit</b> |

