

## 40-300-ff Creep Tester (mechanical/ dead weight)

### Standards

DIN EN ISO 899-1/ -2



Basic Rig/ Lever System



Camera System



Automated Rig

### Application

Manual and automated dead weight creep test rigs with loading up to 5 kN.

### Features

The Coesfeld Creep Tester (dead weight) offers up to 10 measuring stations. A massive steel frame assures high stiffness, precision and durability. Exchangeable clamping systems for tension, bending and compression tests can be set-up. Optionally the rig can be equipped with load sensor, contact and contact free extensometers. The system can be automated with pneumatic actuators for precise loading sequences and automatic measuring data collection. Up to 10 stations can be fitted into the optional tempering or environmental test chamber.

### Specifications

|                           |   |
|---------------------------|---|
| Measuring stations        | up to 10 (sequent extension of stations possible)   |
| Loading FN                | up to 500 N direct load/ up to 5 kN with lever  |
| Force Sensor              | Exchangeable force package (500N, 1 kN, 2,5 kN, 5 kN, ...)                                |
| Force measuring accuracy  | 0,04 % FN   |
| Loading                   | Dead weight/ Dead weight with lever system  |
| Camera                    | up to 16 Mpx  |
| Optical Lenses            | Precise Optical Lenses (optional telecentric) with day light filter                       |
| Light                     | Infrared Light  |
| Resolution optical strain | up to 0.5 $\mu$ m   |
| Test Chamber              | 2.000 W heating power<br>Heat exchanger with valve controlled closed loop cooling circuit |
| Temperature               | (-50°C)* +45°C to 250°C, *with external cooling, e.g. LN2, chiller, ...                   |
| Temperature uniformity    | +/-2 °C for T<150°C   |



## Dimensions and Connection

|                    |                            |
|--------------------|----------------------------|
| Dimensions (WxDxH) | < 2.000 x 1.500 x 2.200 mm |
| Weight             | < 2.000 kg                 |
| Mains              | depends                    |
| Power              | < 30 kW                    |

|            |   |
|------------|---|
| Interfaces | RJ-45 to PC   |
| Air        | 6 bar, 6 mm hoses inlet   |
| Cooling    | 12 mm hoses inlet and outlet for closed cooling circle  |
| Others     | optional: large volume connection for climatic conditioner<br>optional: hoses inlet and outlet for inert gas connection |

## Accessories

| Incl. | Description  |
|-------|--|
| N     | PC with WIN-Creep software                                       |
| N     | Force Sensor Package   |
| Y     | Tension Grips  |
| N     | Three Point Bending Support                                      |
| N     | Four Point Bending Support                                       |
| N     | Compression Plates   |
| N     | Optical Strain Measurement System (Moving)                       |
| N     | Optical Strain Measurement System (fixed per station)            |
| N     | Tempering Chamber incl. heater and controlled cooling connection |
| N     | Chiller  |
| N     | Air Dryer  |
| N     | Environmental Conditioner  |
| N     | Inert Gas Connection   |

The Coesfeld Creep Tester (dead weights) offers a variety of options to choose in machine specifications and detailed specs of accessories.

Please contact us for a detailed discussion of your measuring tasks.