



A6 Series Lever Arm Creep Testing Machines

2-5

Mechanical Test



Features:

- High precise, versatile usable and therefore cost effective creep testers:
- High stiffness, precision and durability design
- High quality components, the testing software A6-DAS, and control electronics bring you the benefits to own more than many years' of materials testing experience.

Applications:

- Creep tests
- Creep rupture tests
- Stress rupture tests
- Relaxation tests (only with spring loaded system)
- Creep crack tests
- Definition of individual stepless sequences of temperature
- Ambient or elevated temperature
- For long term tests (reaching more than 10.000h)

Description:

A6 offers smart sensing technology which can recognize & calibrate all connected sensors including their defined force limits and environments.

The A6 series especially concentrates on the Creep testing including the most important require Load, Temperature, Strain and datum security.

Standards: Metals Creep tests ISO 204:1997, ASTM E 139-06

A6 lever arm design provides the precise lever arm adjustment with straight-line travel and maintains in-line knife-edge action and optimum loading accuracy. In-line counterbalance adjustment provides simple balancing operation after ratio change.



A6 Series Lever Arm Creep Testing Machines

Specification:

- Tension/Compression Frames
 - Model A6-232
 - Capacity 50 kN
 - Column Width* 500 mm
 - Lever Arm Ratios* 10:1 or 5:1

- Optional Drawhead Drive
 - Speed: 0.1-1.2 in/min (2.5-30.5 mm/min)
 - Travel: 5 in. (127 mm)

- Load Accuracy $\pm 0.5\%$ (with certification of calibration)

- Power Requirements
115 or 230 VAC, 50/60 Hz

- Calibrated load weights
 - Available Sizes (English Units)

0.1 ± 0.00013 lb.	0.2 ± 0.00018 lb.
0.5 ± 0.00033 lb.	1.0 ± 0.00059 lb.
5.0 ± 0.00178 lb.	10.0 ± 0.00286 lb.
20.0 ± 0.0044 lb.	30.0 ± 0.0055 lb.
40.0 ± 0.0066 lb.	
 - Available Sizes (Metric Units)

0.5 ± 0.0005 N	1.0 ± 0.0008 N
2.5 ± 0.0014 N	5.0 ± 0.0026 N
10.0 ± 0.0048 N	25.0 ± 0.0075 N
50.0 ± 0.012 N	100.0 ± 0.019 N
150.0 ± 0.024 N	200.0 ± 0.029 N

- Accessories
 - HT-furnace
 - 3-zone furnace standard up to 1200 °C
 - Internal diameter: 100 mm,
 - Heating length: 300 mm



- Vertical positioning of furnace: furnace stays in the centre of the specimen during test
- Openings for load train, Thermocouples and Extensometers
- Optional side windows for optical strain measurement
- 3 Thermocouples for furnace controller, up to 3 additional Thermocouples for temperature control at the specimen

- HT-controller
 - Integrated, sophisticated Control-Algorithm for a precise Temperature along specimen and to prevent from Temperature overshooting
 - Empirically determined control parameters for different temperatures are no longer required
 - Automatic Controller settings from 80°C...1200°C
 - Temperature-tolerances acc. ASTM E 139
 - Interface for 6 Thermocouples (3 for furnace, 3 for specimen's special configurations)
 - Digital display of temperatures
 - Stand Alone or PC-operation

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Specification:

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- Alignment couplings
 - Quick-change couplings
 - Couplings for threaded or button-head specimens
 - Specimen grips, pull rods, and adapters
- Extensometers, mechanical or non-contacting laser type
- Displacement transducers and controllers



- Load cells
 - Electronic „Plug and Play“-Type
(Calibration and technical data are saved in sensor plug)
 - High accuracy (Linearity, Repeatability, Hysteresis, resolution) acc. to ASTM E 4 and ISO 7500-1
 - High measurement range in class 1 acc. ISO 7500-1 from 0.4 %100% of nominal load

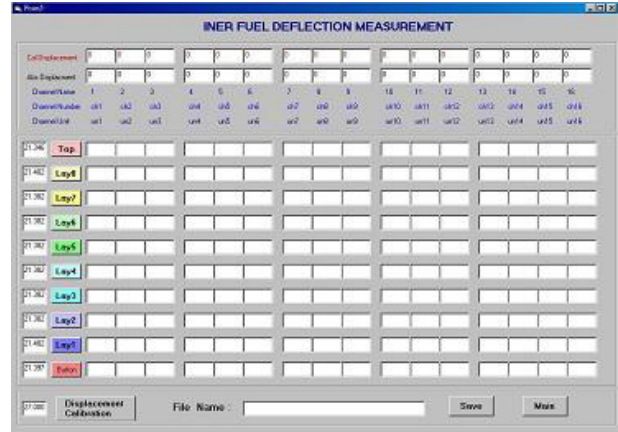




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Specification:

- Advanced computer control and datum acquisition via exclusive A6-DAS software
- Stress relaxation test module
- Constant stress test module
- Cyclic load test module
- Automatic “weightless” and computerized hot-step loading



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Creep 500°C(TI64)

