Series 2100
Direct Load
Creep Testing Systems

Maximum Reliability
at Minimum Cost
ATS Series 2100 Direct Load Creep Testing Systems offer an economical solution to performing direct load creep and stress rupture testing per ASTM requirements. Currently, ATS produces three distinct lines of direct load test frames. The operation of each model can be greatly enhanced with the optional WinCCS II computer control and data acquisition software package. *(See Bulletin 2020 for more information.)*

For high-volume, medium-capacity testing, the Model 2115 Multi-Station Direct Load Creep Tester is ideal. A compact frame with four, six, or eight independently-controlled test stations provides ample testing capacity and maximum versatility while conserving valuable laboratory space. Standard load capacity is 400 lbf. (1.7kN) per station. Optional accessories include high-temperature furnaces, ovens/cooling chambers, extensometers, displacement transducers, pneumatic weight elevators, compression test fixtures, cyclic load systems, calibrated load weights, and more.

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**Model 2115**

Model 2115 Eight-Station Direct Load Test System shown in a typical creep testing setup, including alignment couplings, temperature chambers, extensometers, calibrated load weights, and pneumatic weight elevators.
ATS Model 2120 Multi-Station Direct Load Creep Testers are designed to perform low-capacity creep and stress rupture tests in a very compact arrangement, performing simultaneous tests on various specimens under identical environmental conditions.

The standard frame consists of six test stations, each with a load capacity of 100 lbf. (0.44kN). An optional environmental chamber encloses all stations to maximize temperature uniformity over each specimen, as opposed to the individual chambers of the Model 2115 system. Additionally, an optional electric weight elevator is designed to be automatically lowered upon elongation of any specimen, increasing the overall safety and reliability of the system.

As always, an extensive list of optional accessories is available, including ovens/cooling chambers, extensometers, displacement transducers, automatic or manual weight elevators, specimen grips, compression test fixtures, calibrated load weights, and more.
When efficient, high-capacity direct load creep testing is required, the ATS Model 2140 Single-Station Direct Load Creep Tester is the system of choice for laboratories and institutions worldwide, especially when coupled with the versatile and dynamic WinCCS II software package.

These economical single-station frames are available in standard load capacities of 400 lbf. (1.7kN), 600 lbf. (2.6kN), 800 lbf. (3.5kN), and 1,000 lbf. (4.4kN). A full range of tests can be performed with components from our proven line of optional accessories, including high-temperature furnaces, ovens/cooling chambers, gas-tight retorts, extensometers, displacement transducers, manual or automatic weight elevators, specimen grips, compression test fixtures, calibrated load weights, and more.

Model 2140 Direct Load Test System shown in a typical creep testing setup, including alignment coupling, temperature chamber, extensometer, calibrated load weights, and electric weight elevator.
### Specifications

**Model 2115**
- **Number of Stations**: Four, six, or eight*
- **Load Capacity**: 400 lbf. (1.7kN) per station*
- **Load Accuracy**: ±0.25% (using calibrated weights)
- **Optional Weight Elevators**: Pneumatic-actuated
- **Optional Environmental Chambers**: One per station, each controlled independently
- **Power Requirements**: 115 or 230 VAC, 50/60 Hz

**Model 2120**
- **Number of Stations**: Six*
- **Load Capacity**: 100 lbf. (0.44kN) per station*
- **Load Accuracy**: ±0.25% (using calibrated weights)
- **Optional Weight Elevator**: Manual or electric
- **Optional Environmental Chamber**: One per frame, enclosing all specimens
- **Power Requirements**: 115 or 230 VAC, 50/60 Hz

**Model 2140**
- **Number of Stations**: One
- **Available Load Capacities**: 400 lbf. (1.7kN) 600 lbf. (2.6kN) 800 lbf. (3.5kN) 1,000 lbf. (4.4kN)*
- **Load Accuracy**: ±0.25% (using calibrated weights)
- **Optional Weight Elevator**: Manual or electric
- **Power Requirements**: 115 or 230 VAC, 50/60 Hz

### Load Weights
- **Standard Calibration**: National Bureau of Standards, Class "T"
- **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

* Custom models with varying numbers of test stations or increased load capacity are designed and built to order.

**Specifications subject to change without notice**

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* Applied Test Systems, Inc.  
  http://www.atspa.com
Applied Test Systems, Inc. has an excellent reputation in the materials testing industry as a leading supplier of custom equipment. We welcome all inquiries into any system or setup you may have in mind. Below are just a few examples of how we can put our decades of experience to work for you.

**Series 2120 Direct Load Creep Tester** with special 12-station configuration. Environmental chamber includes hand access ports.

**Series 2140 Direct Load Creep Tester** with a custom retort, test oven, manual weight elevator, and manual controls.