

15 TO 1 MULTIPLIER - SINGLE POSITION COMPRESSION WITH CIRCULATING BATH -



Model No. ASTM.D2990.30 - 1,000 lb. Capacity, 2" Diameter Compressive Creep Constant Loading Deformation Test Machine with Spherical Seat

The compression loading platen is a spherical seat guided by a linear bearing. The constant load is provided by a counter weighted 15-to-1 compression multiplier loading arm that pivots on a bearing shaft attached to the vertical support column, 1,000 lbs capacity weight tray with hydraulic jack lift, adjustable self aligning loading anvil which is attached to the vertical column, externally mounted 1/1,000" graduated displacement gage. Creep stand is capable of holding a specimen up to 2" diameter with lengths up to 4". The displacement capacity during testing is 0.2".



The unit will be supplied with Isomode vibration pads to reduce any outside vibrations. The unit will also be supplied with (4) 20 pound, (3) 5 pound and (5) 1 pound weights.

The compression creep stand may be used with or without circulating bath. The bath will be custom fitted to the compression constant loading deformation unit. The bath is constructed of heavy gage acrylic providing a rigid structure. The wall which forms the bath can be lowered over an O-ring to specimen setup and removal.



(2) 1/2" diameter supports
1/2" Loading nose
Specimen
Loading Bracket
Alignment bearing

Options:

LVDT displacement gage
Heated Water Bath
Flexure Specimen Support



Items included with D2990.22
Loading Frame
(6) Room Temp. 1" dial gages
(6) Weight Trays
(1) Specimen Alignment Tool
(24) 1.0 lb Calibrated Weights
(6) 1/2 lb Calibrated Weights
10 lbs Can of Steel Shot
(5) Isomode Vibration isolation pads

ADDITIONAL WEIGHTS

Model No. SCW.0200 - 20 pound slotted creep stand weight
Model No. SCW.0050 - 5 pound slotted creep stand weight
Model No. SCW.0010 - 1 pound slotted creep stand weight
Model No. SSW.0100 - Extra can of steel shot (10 lbs)

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ASTM, MISC, CREEP

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<http://www.astm.org/Standards/D2990.htm>

ASTMD2990-09

Standard Test Methods for Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics

1.1 These test methods cover the determination of tensile and compressive creep and creep-rupture of plastics under specified environmental conditions (see 3.1.3).

1.2 While these test methods outline the use of three-point loading for measurement of creep in flexure, four-point loading (which is used less frequently) can also be used with the equipment and principles as outlined in Test Methods D 790.

1.3 For measurements of creep-rupture, tension is the preferred stress mode because for some ductile plastics rupture does not occur in flexure or compression.

1.4 Test data obtained by these test methods are relevant and appropriate for use in engineering design.

1.5 The values stated in SI units are to be regarded as the standard. The values in parentheses are for information only.

1.6 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. A specific warning statement is given in 6.8.2.

Note 1-This standard and ISO 899 Parts 1 and 2 address the same subject matter, but differ in technical content (and results cannot be directly compared between the two test methods). ISO 899 Part 1 addresses tensile creep and creep to rupture and ISO 899 Part 2 addresses flexural creep. Compressive creep is not addressed in ISO 899.

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Material Testing Technology

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