

3 POSITION DEAD WEIGHT TENSILE CREEP STAND



Model No. ASTM.D2990.16 - 3 Position dead loaded tensile loading creep stand for tensile creep testing in liquid baths in accordance with ASTM D2990 and other creep testing methods. The creep stand will be floor mounted with 3 individual creep testing stations that will accommodate a salt water bath chiller system. Each loading station will be provided with a 10-1 multiplier arm that is pivoted on a knife edge rocker and is counter balanced to provide zero load in the loading chain before dead weights are applied. Each station will be provided with a set of flat faced serrated tensile grips that can be removed from the system for clamping the specimen on the bench. An alignment and clamping fixture will be provided for insuring the specimen proper alignment. The grip assembly with creep specimen will be inserted into the load chain with dowel pins top and bottom. The lower portion of the load chain will be secured to the creep frame and supplied with an articulating coupling for proper alignment.



The capacity of the creep station is 300 lbf at each station. Each station will be provided with 30 lbs of incremented calibrated weight and steel shot so a creep load can be achieved up to 300 lbs \pm 1.0 lb.

Type of Tensile grips supplied: ASTM D638 and most flat specimen up to 1" wide and 0.25" thick.

Maximum creep displacement: 0.5", with out compensation.

Capacity: 300lbf at each station.

Platform: Floor mounted.

Overall assembled dimension 48" wide by 48" deep by 72" tall.

Shipping dimension (Frame) 48" by 30" by 72" tall (can be moved through most standard single door)

Temperature range for grip load train (liquid bath): 5°C to 25°C

Construction: Steel frame with stainless steel bath components

Options: Extra Slotted Weights

SCW.0005 - 1/2 Pound Slotted Creep Stand Weight

SCW.0010 - 1 Pound Slotted Creep Stand Weight

SSW.0050 - 5 Pound Slotted Creep Stand Weight

SSW.0100 - Extra can of steel shot (10 lbs)

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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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