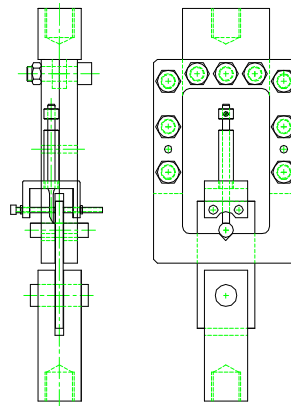


## TENSILE LOADING CLEVIS SET WITH LOADING (5) PINS



Specimen:           Width           3"  
                          Length          5"

Fixture:

Construction	High strength steel with protective black oxide finish
Temperature	-120 to 250°F (-85 to 120°C)
Mounting	1"-14 couplings
Capacity	2,000 lbs
Weight	Approximately 12 lbs
Dimensions	6" x 1" x 12"
Standard	Manufactured in accordance with ASTM E238

Model No. ASTM.E0238.10 - Pin type Bearing Strength Fixture for Metallic Materials.

The fixture consists of a "Y" shaped loading yoke with 1"-14 threaded coupling. The loading yoke will be provided with a 0.75" slip fit dowel pin attachment for the lower section of the test specimen. The bearing pin will be loaded by a split loading frame with a vee groove notch to position the bearing pin. The window in the loading frame will be 3" by 5" to provide clearance for an extensometer bracket. The fixture will be supplied with 5 different diameter bearing pins. Each pin will be heat treated to 65 Rc. Diameter (0.125", 0.187, 0.250", 0.375, 0.500"). The fixture is constructed from high strength steel with protective black oxide finish in accordance with ASTM E238.

## **MODEL NO. ASTM.E0238.10**

### **ASTM, PIN-TYPE, BEARING, TEST, METALLIC,**

#### **ACCESSORIES**

**Upper and lower fixture attachment is supplied with 1" -14 female coupling. (Common adapter sizes include:)**

Model No. M03S36 - 1.25" Male Clevis (Type D) to 1" -14 Threaded Stud

Model No. S42S36 - 1.25" -12 to 1" -14 Threaded Step Stud

Model No. S48S36 - 1.5" -12 to 1" -14 Threaded Step Stud

Model No. S60S36 - 2" -12 to 1" -14 Threaded Step Stud

Model No. LN36 - 1" -14 Threaded Locking Nut with Knurled OD

#### **SPARE PARTS**

SPA.E0238.1001 - Extra Set of (5) Pins (1/8", 3/16", 1/4", 3/8", 1/2")

#### **REFERENCE DOCUMENT AND TEST METHOD SCOPE:**

<http://www.astm.org/DATABASE.CART/HISTORICAL/E338-91R97.htm>

ASTM E338 - 91(1997)

Standard Test Method of Sharp-Notch Tension Testing of High-Strength Sheet Materials

1.1 This test method covers the determination of a comparative measure of the resistance of sheet materials to unstable fracture originating from a very sharp stress-concentrator or crack. It relates specifically to fracture under continuously increasing load and excludes conditions of loading that produce creep or fatigue. The quantity determined is the sharp-notch strength of a specimen of particular dimensions, and this value depends upon these dimensions as well as the characteristics of the material. The sharp-notch strength:yield strength ratio is also determined.

1.2 This test method is restricted to one specimen width which is generally suitable for evaluation of high-strength materials (yield strength-to-density ratio above ? 700 000 psi/lb[dot]in. or (18 kgf/mm )(g/cm )). The test will discriminate differences in resistance to unstable fracture when the sharp-notch strength is less than the tensile yield strength. The discrimination increases as the ratio of the notch strength to the yield strength decreases.

1.3 This test method is restricted to sheet materials not less than 0.64 mm (0.025 in.) and not exceeding 6 mm (0.25 in.) in thickness. Since the notch strength may depend on the sheet thickness, comparison of various material conditions must be based on tests of specimens having the same nominal thickness.

1.4 The sharp-notch strength may depend strongly upon temperature within a certain range depending upon the characteristics of the material. The test method is suitable for tests at any appropriate temperature. However, comparisons of various material conditions must be based on tests conducted at the same temperature.

Note 1-Further information on background and need for this type of test is given in the first report by the ASTM Committee on Fracture Testing of High-Strength Sheet Materials. Note 2-The values stated in SI (metric) units are to be regarded as the standard.

1.5 This standard does not purport to address all of the safety problems, 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.

Extracted, with permission, Standard Test Method of Sharp-Notch Tension Testing of High-Strength Sheet Materials copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. A copy of the complete standard may be purchased from ASTM International, [www.astm.org](http://www.astm.org).

*Material Testing Technology*