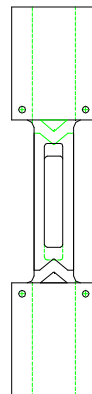


## SINGLE SHEAR OPEN HOLE BEARING STRENGTH TEST FIXTURE TENSION OR COMPRESSION - PROCEDURE B (CS)



Specimen:	Width	1.5"
	Thickness	0.125 - 0.208" (3 - 5mm)
	Length	Up to 8.5"
Fixture:	Construction	High strength steel with protective plating
	Temperature	-120 to 250°F (-85 to 122°C)
	Mounting	Platen to platen or grips (not included)
	Capacity	50,000 lbs
	Weight	12 lbs approximately
	Dimensions	3" x 1.25" x 14" approximately
	Standard	Manufactured in accordance with ASTM D5961

Model No. ASTM.D5961.31 - Stabilized Fastener Bearing Single Shear Fixture for Single and Double Fasteners. Open access to the specimen through a cut out in the fixture halves allows observation of the specimen as the test progresses. The Fastener Bearing Shear Fixture has a 1.5" by 13.5" specimen configuration. The fixture is constructed of high strength steel with a protective black oxide finish in accordance with ASTM D5961. Temperature range: ambient temperature testing.

## **MODEL NO. ASTM.D5961.31**

### **ASTM, TENSION, COMPRESSION, SINGLE,**

#### **ACCESSORIES**

**Upper and Lower fixture attachment could be supported on a platen or flat surface of the test machine.**

**(Common adapter sizes include:)**

Model No. PLAT.RF061.10 - 6" Diameter Round Fixed Compression Platen

Model No. PLAT.RA061.10 - 6" Diameter Round Articulating Compression Platen

Model No. PLAT.SF061.10 - 6" Square Fixed Compression Platen

Model No. PLAT.SA061.10 - 6" Square Articulating Compression Platen

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

#### **SPARE PARTS**

Contact us for spare or replacement parts

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

<http://www.astm.org/Standards/D5961.htm>

ASTM D5961/D5961M-13

Standard Test Method for Bearing Response of Polymer Matrix Composite Laminates

1.1 This test method covers the bearing response of pinned or fastened joints using multi-directional polymer matrix composite laminates reinforced by high-modulus fibers by double-shear tensile loading (Procedure A), single-shear tensile or compressive loading of a two-piece specimen (Procedure B), single-shear tensile loading of a one-piece specimen (Procedure C), or double-shear compressive loading (Procedure D). Standard specimen configurations using fixed values of test parameters are described for each procedure. However, when fully documented in the test report, a number of test parameters may be optionally varied. The composite material forms are limited to continuous-fiber or discontinuous-fiber (tape or fabric, or both) reinforced composites for which the laminate is balanced and symmetric with respect to the test direction. The range of acceptable test laminates and thicknesses are described in 8.2.1. 1.2 This test method is consistent with the recommendations of MIL-HDBK-17, which describes the desirable attributes of a bearing response test method. 1.3 The multi-fastener test configurations described in this test method are similar to those used by industry to investigate the bypass portion of the bearing bypass interaction response for bolted joints, where the specimen may produce either a bearing failure mode or a bypass failure mode. Note that the scope of this test method is limited to bearing and fastener failure modes. Use Test Method D7248/D7248M for by-pass testing. 1.4 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard. 1.4.1 Within the text the inch-pound units are shown in brackets. 1.5 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. Extracted, with permission, from ASTM D5961 Standard Test Method for Bearing Response of Polymer Matrix Composite Laminates 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).