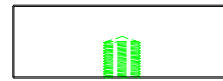
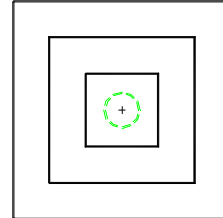
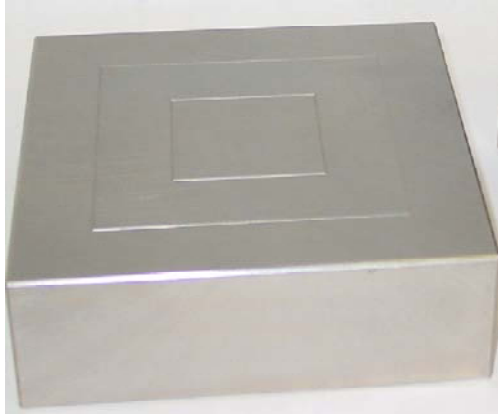


QUASI-STATIC INDENTATION TEST FIXTURE



Specimen:	Width	6" (150mm)
	Thickness	0.16" to 0.24" (4 to 6mm)
	Length	6" (150mm)
Fixture:	Construction	Stainless steel and high strength steel
	Temperature	-20 to 120°F (-29 to 49°C)
	Mounting	1/2"-20 stud top, 1" -14 coupling bottom
	Capacity	20,000 lbs
	Weight	12 lbs
	Dimensions	6" x 6" x 3"
	Standard	Manufactured in accordance with ASTM D6264

Model No. ASTM.D6264.10 - Quasi-Static Indentation Test Fixture

Used to determine damage resistance of composite material to a indentation force from a specified indenter. Includes 1/2" (12.7 mm) diameter stainless steel hemispherical indenter with 1/2" -20 loading threads for mounting in a test machine. Supplied with 6" x 6" sturdy flat rigid support with 1" -14 threaded coupling. Constructed of stainless steel and steel in accordance with ASTM D6264.

MODEL NO. ASTM.D6264.10

ASTM, FIBER, REINFORCED, COMPOSITE,

ACCESSORIES

Upper fixture attachment is supplied with 1/2" -20 female coupling (Common adapter sizes include:)

Model No. M01S21 - 1/2" Male Clevis (Type B) to 1/2" -20 Threaded Stud
Model No. M02S21 - 5/8" Male Clevis (Type C) to 1/2" -20 Threaded Stud
Model No. M03S21 - 1.25" Male Clevis (Type D) to 1/2" -20 Threaded Stud
Model No. M12S21 - 12mm Male Clevis (Type O) to 1/2" -20 Threaded Stud
Model No. S36S21 - 1" -14 to 1/2" -20 Threaded Step Stud
Model No. LN21 - 1/2" -20 Threaded Locking Nut with Knurled OD

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

Contact us for spare or replacement parts

REFERENCE DOCUMENT AND TEST METHOD SCOPE:

<http://www.astm.org/Standards/D6264.htm>
ASTM D6264 / D6264M - 12

Standard Test Method for Measuring the Damage Resistance of a Fiber-Reinforced Polymer-Matrix Composite to a Concentrated Quasi-Static Indentation Force

1.1 This test method determines the damage resistance of multidirectional polymer matrix composite laminated plates subjected to a concentrated indentation force (Fig. 1). Procedures are specified for determining the damage resistance for a test specimen supported over a circular opening and for a rigidly-backed test specimen. The composite material forms are limited to continuous-fiber reinforced polymer matrix composites, with the range of acceptable test laminates and thicknesses defined in 8.2. This test method may prove useful for other types and classes of composite materials.

1.1.1 Instructions for modifying these procedures to determine damage resistance properties of sandwich constructions are provided in Practice D7766/D7766M.

1.2 A flat, square composite plate is subjected to an out-of-plane, concentrated force by slowly pressing a hemispherical indenter into the surface. The damage resistance is quantified in terms of a critical contact force to cause a specific size and type of damage in the specimen.

1.3 The test method may be used to screen materials for damage resistance, or to inflict damage into a specimen for subsequent damage tolerance testing. The indented plate can be subsequently tested in accordance with Test Method D7137/D7137M to measure residual strength properties. Drop-weight impact per Test Method D7136/D7136M may be used as an alternate method of creating damage from an out-of-plane force and measuring damage resistance properties.

1.4 The damage resistance properties generated by this test method are highly dependent upon several factors, which include specimen geometry, layup, indenter geometry, force, and boundary conditions. Thus, results are generally not scalable to other configurations, and are particular to the combination of geometric and physical conditions tested.

1.5 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.

1.5.1 Within the text the inch-pound units are shown in brackets.

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.

Extracted, with permission, from ASTM D6264 Standard Test Method for Measuring the Damage Resistance of a Fiber-Reinforced Polymer-Matrix Composite to a Concentrated Quasi-Static Indentation Force, 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.