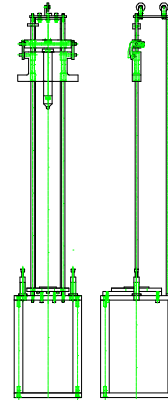


500 IN-LBS DROP WEIGHT IMPACTER



Specimen:	Length	6"
	Thickness	0.125 - 0.5"
	Width	4"
Fixture:	Construction	Steel with protective finish
	Temperature	Room temperature
	Mounting	Free standing
	Capacity	500 in-lbs
	Weight	500 lbs approximately
	Dimensions	19" x 16" x 90"
	Standard	Manufactured in accordance with ASTM D7136

Model No. - ASTM.D7136.10 - Drop Weight Impacter

Includes a 5.6 kg (12.35 lb) pound drop weight, impact tup with 0.625 inch diameter hardened hemispherical tip, twin guide rails that provide a minimum of 1,000mm (39.3inches) of lift for the cross head weight. Supplied with fixtured specimen table, stop blocks, laser crosshead lift indicator, sturdy metal box frame construction, mechanical hoist lifting system, and latch mechanism. Constructed in accordance with ASTM D7136, Boeing BSS 7260, and SACMA Method SRM 2-88.

Dimensions: 19"L x 16"W x 90"H.

Capacity: 500 in-lb

Weight: 5,000 lb approx.

MODEL NO. ASTM.D7136.10

ASTM, DAMAGE, RESISTANCE,

ACCESSORIES

- ACC.D7136.1001 - Optional Velocity sensor
- ACC.D7136.1002 - Optional Rebound catcher(Mechanical)
- ACC.D7136.1003 - Impact specimen hold down jig (impact support fixture for 4" x 6")

SPARE PARTS

Contact us for spare or replacement parts

REFERENCE DOCUMENT AND TEST METHOD SCOPE:

<http://www.astm.org/Standards/D7136.htm>

ASTM D7136 / D7136M - 15

Standard Test Method for Measuring the Damage Resistance of a Fiber-Reinforced Polymer Matrix Composite to a Drop-Weight Impact Event

1.1 This test method determines the damage resistance of multidirectional polymer matrix composite laminated plates subjected to a drop-weight impact event. 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.

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, rectangular composite plate is subjected to an out-of-plane, concentrated impact using a drop-weight device with a hemispherical impactor. The potential energy of the drop-weight, as defined by the mass and drop height of the impactor, is specified prior to test. Equipment and procedures are provided for optional measurement of contact force and velocity during the impact event. The damage resistance is quantified in terms of the resulting 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. When the impacted plate is tested in accordance with Test Method D7137/D7137M, the overall test sequence is commonly referred to as the Compression After Impact (CAI) method. Quasi-static indentation per Test Method D6264/D6264M 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, impactor geometry, impactor mass, impact force, impact energy, 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

Material Testing Technology

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