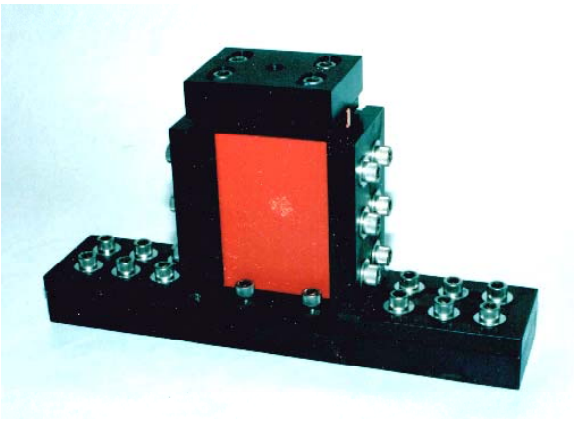
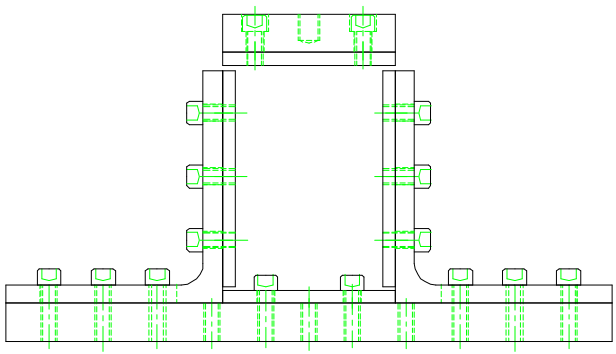
MTT

MODEL NO. ASTM.D7137.11

ASTM, COMPRESSIVE, RESIDUAL, DAMAGED,

COMPRESSION AFTER IMPACT TEST FIXTURE (CS)





Specimen:	Width	4.0”
	Thickness	0.125 - 0.500”
	Length	6”
Fixture:	Construction	High strength steel with protective finish
	Temperature	-120 to 250°F (-85 to 122°C)
	Mounting	1/2”- 13 coupling top, platen bottom (not included)
	Capacity	20,000 lbs (88.9 kN)
	Weight	35 lbs
	Dimensions	3” x 14” x 10”
	Standard	Manufactured in accordance with ASTM D7137

Model No. ASTM.D7137.11 - Compression After Impact Test Fixture
Accommodates specimens measuring 4” x 6” x 0.125-0.500” thick. Supplied with 1/2” -13 UNF threaded coupling for upper attachment to your test machine. Base of fixture sits on a compression platen (platen not included). Constructed from high strength steel in accordance with ASTM.D7137.

Construction: High strength steel with protective finish
Temperature Range: -120 to 250°F (-85 to 122°C)
Mounting: 1/2” -13 top, platen bottom (not included)
Capacity 20,000 lbs (88.9 kN), Weight: 35 lbs
Dimensions: 3” x 14” x 10”

Material Testing Technology

420 Harvester Court - Wheeling, IL. 60090 – Ph: (847) 215-7448 Fax: (847) 215-7449 E-mail: sales@mttusa.net

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ACCESSORIES

ACC.D7137.1101 - Optional Gussets Welded On

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 (Tyep 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/D7137.htm
ASTM D7137 / D7137M - 12
Standard Test Method for Compressive Residual Strength Properties of Damaged Polymer Matrix Composite Plates
1.1 This test method covers compression residual strength properties of multidirectional polymer matrix composite laminated plates, which have been subjected to quasi-static indentation per Test Method D6264/D6264M or drop-weight impact per Test Method D7136/D7136M prior to application of compressive force. The composite material forms are limited to continuous-fiber reinforced polymer matrix composites with multidirectional fiber orientations, and which are both symmetric and balanced with respect to the test direction. The range of acceptable test laminates and thicknesses is defined in 8.2.
Note 1—When used to determine the residual strength of drop-weight impacted plates, this test method is commonly referred to as the Compression After Impact, or CAI, method.
1.2 The method utilizes a flat, rectangular composite plate, previously subjected to a damaging event, which is tested under compressive loading using a stabilization fixture.
Note 2—The damage tolerance properties obtained are particular to the type, geometry and location of damage inflicted upon the plate.
1.3 The properties generated by this test method are highly dependent upon several factors, which include specimen geometry, layup, damage type, damage size, damage location, and boundary conditions. Thus, results are generally not scalable to other configurations, and are particular to the combination of geometric and physical conditions tested.
1.4 This test method can be used to test undamaged polymer matrix composite plates, but historically such tests have demonstrated a relatively high incidence of undesirable failure modes (such as end crushing). Test Method D6641/D6641M is recommended for obtaining compressive properties of undamaged polymer matrix composites.
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