Hung Ta™ Izod Impact Tester Model HT8041B

Hung Ta Instruments

CCSi features provides this reliable, direct reading Izod Impact Tester for the determination of the resistance of plastics and metals to breakage by flexural shock as indicated by the energy extracted from a cantilever beam apparatus employing a pendulum-type hammer.

The test requires specimens made with a milled notch, hence the test is often referred to as the "notched bar impact test". In the Izod Test (ASTM D256 Methods A, C, D and E and ASTM E23) test, the notch produces a stress concentration which promotes a brittle, rather than a ductile, fracture.

"The notch in the Izod specimen serves to concentrate the stress, minimize plastic deformation and direct the fracture to the part of the specimen behind the notch. Scatter in energy-to-break is thus reduced."
(ASTM D256, Section 1, Note 2.)

The results are reported in terms of energy absorbed per unit of specimen width, or more specifically, the energy absorbed in breaking the specimen which is equal to the difference between the potential energy at the moment of impact and the residual energy.

Index Terms: impact resistance; Izod impact; notch sensitivity; notched specimen; reverse notch impact; 29.035.20; electrical insulating solids; plastics (general); tension (tensile) properties/tests-plastics; tensile-impact energy to break plastics/electrical materials; D1822M; breaking energy; cantilever impact; chip impact strength; impact plastics; impact testing; microcracks; pendulum; plastics; small specimen impact; weathered impact strength; 83.080.01; cantilever beam; impact resistance; plastic molding; unnotched; charpy impact; impact resistance; notched specimen; charpy test; fracture appearance; Izod test; impact test; notched specimens; pendulum machine; 77.040.10.

Hung Ta™ Izod Impact Tester Model HT8041B: Specifications

Model HT8041B-	50	30	17	10	5	1.5	0.1	0.05	0.03	0.015
Capacity: (kgf/m)	50	30	17	10	5					
Capacity: (kgf/cm)						150	100	50	30	15
Distance: (mm) [1]	1322	1250	1220	600	600	400	400	310		
Radius: (mm)	1 mm (Radius of Hammer knife edge)					0.8 mm (Radius of Hammer knife edge)				
Angle: (degrees)	75° (Angle of Hammer knife edge)									
Lift Angle: (degrees) [2]	60°			90°		150°				
Hammer Mass: (kg)	110	90	40	11.5		2.6	1.8	1.3		
Hammer Velocity: (m/sec) [3]	3.6	3.5		3.4		3.8		3.35		
Dimensions: (W x D mm)	900x2600	650x1400	350x1400	500x750		380x580		320x500		
Dimensions: (Height mm)	3000	2200	1900	1400		790		650		
Weight: (kg)	600	400	300	200	180	70	65	50		

[1] Distance in mm between hammer axis center and strike point.

[2] Lift angle of hammer in degrees (approximate).

[3] Velocity in m/sec of hammer at moment of impact (approximate).

Standard Accessories:
- 1 each, 12.7 mm Square Gage;
- 1 each, Level Adjusting Screw Set;
- 1 each, Energy Chart;
- 1 each, Hex Wrench;
- 1 each, Dust Cover.

Optional Accessories:
- Digital Indicator,
- Printer (requires digital indicator).

List Price:	Please Submit a Request for Quotation (RFQ)

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