

IMPACT TESTING MACHINE



Features

Suitable for Charpy and Izod Impact Tests on various materials.

Rigid designs of machine frame and other parts assure minimum energy absorption during fracture which results in improved test accuracies.

The highly stressed and wearing parts like support blocks and striker are of special alloy steel duly heat treated.

Analogue Model Conforms to IS: 3766-2003, IS: 1598-1977, IS: 1757-1999, IS: 1499-2003 & BS: 131 Part, II, III, IV.

Digital Model Conforms to IS, BS Standards as above & also conforms to BS EN:10045-1993 (for Charpy)

Works on pendulum principle, difference between height of drop of pendulum before rupture and height of rise after rupture of specimen is directly proportional to impact energy absorbed.

Direct indication of impact energy absorbed by specimen on large dial for Analogue model and digital display for Digital model . Safety guard for operator.

Technical specifications

Parameters	Tests	
	Charpy	Izod
Initial potential energy (Joules)	300	170
Minimum scale graduation for AIT-300-N & AIT-300-EN (Joules)	2	2
Resolution for AIT-300-D (Joules)	0.5	0.5
Pendulum drop angle (Degree)	140	90
Impact velocity (m / sec)	5.308	3.994
Distance between axis of rotation and centre of strike (i.e. length of pendulum) (mm)	813.5	813.5
Effective weight of pendulum (kg)	21.300	21.300
Max. total friction and windage losses (% of initial potential energy)	0.5%	0.5%
Striking edge:		
Angle at tip (Degree)	30	75
Radius of curvature (mm)	2	0.7
Width of tip (mm)	18	-
Horizontal relief (Degree)	-	10
Vertical relief (Degree)	-	5
Test Piece Supports:		
Suitable for specimen (max) (mm)	10 x 10	10 x 10
Distance between supports (mm)	40(+0.5, -0.0)	-
Taper of supports (degree)	11 +/- 1	-
Radius of curvature at edge (mm)	1 to 1.5	-
Overall size (mm) approx	760(L) x 440(W) x 1925(H)	
Net weight (kg) approx	Analogue Model	300
	Digital Model	450

Standard Accessories

Charpy Striker	1 No
Izod Striker	1 No
Combined Charpy / Izod (10 x 10 specimen) support block	1 No
Specimen Setting Gauges (for Charpy and Izod)	2 Nos
Set of Spanners	1 Set

Optional Accessories :

1. Specimen setting and centering tong for charpy test
2. Gauge for checking distance of specimen notch from both ends for charpy and izod test specimen (One gauge each)
3. Specimen clamps for round Izod specimen.
4. Gauge for checking standard 'U' notch on specimen
5. Gauge for checking standard 'V' notch on specimen
6. Gauge for checking depth below the standard 'U' notch on specimen
7. Gauge for checking depth below the standard 'V' notch on specimen
8. Template for checking cross section of 10 x 10 mm, for Izod & Charpy square test specimen
9. 'U' notch milling cutter
10. 'V' notch milling cutter

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