

# PENDULUM IMPACT TESTING MACHINE

Models : AIT-300-N, AIT-300-EN & AIT-300-D



#### 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 strikers are of special alloy steels duly heat treated.
- Model: AIT- 300-N Conforms to IS: 3766-2003, IS: 1598-1977, IS: 1757-1999, IS:1499-2003 & BS:131 Part I, II, III, IV.
- Model: AIT-300-EN Conforms to IS, BS Standards as above & also conforms to BS EN:10045-1993 (for Charpy).
- Model: AIT-300-D is a digital version of model AIT-300-EN.
- 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 AIT-300-N & AIT-300-EN, and digital display for model AIT-300-D.
- Safety guard for the Operator.

## Standard Accessories of Models AIT-300-N, AIT-300-EN & AIT-300-D:

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

#### Technical specifications of Models AIT-300-N, AIT-300-EN & AIT-300-D:

Parameters	Tests	Tests	
Farameters	Charpy	Izod	
Initial potential energy (Joules)	300	170	
Minimum scale graduation for AIT-300-N and 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 X10	10 X10	
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 wight (kg) approx	300		
AIT-300-EN & AIT-300-D	450	450	

### Optional Accessories of Models AIT-300-N, AIT-300-EN & AIT-300-D:

- Specimen setting and centering tong for Charpy test (useful particularly for carrying out tests at Sub-zero temperature).
- Gauge for checking distance of specimen notch from both ends for Charpy and Izod test specimen (One guage for Charpy and One guage for Izod).
- Specimen clamps for round Izod specimen.
- Gauge for checking standard 'U' notch on specimen.
- Gauge for checking standard 'V' notch on specimen.
- Gauge for checking depth below the standard 'U' notch on specimen.
- Gauge for checking depth below the standard 'V' notch on specimen.
- Template for checking cross section of 10 x 10 mm, for Izod & Charpy square test specimen.
- 'U' notch milling cutter.
- 'V' notch milling cutter.

We can also supply- Universal Testing Machines, Compression Testing Machines, Tensile Testing Machines, Spring Testing Machines, Vickers Hardness Testers, Rockwell Hardness Testers, Dynamic Balancing Machines, Portable Dynamic Hardness Testers, Brinell Hardness Testers and Special Purpose Material Testing Machines, etc.

We reserve the rights to change the above specifications without any notice due to constant improvements in design.



Sold & Serviced by -

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