

Charpy Impact Testing Machine



Features:

- For Charpy tests on various materials
- Strictly conforms to ASTM-E-23-2007 specifications.
- 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 by specimen and is indicated by a pointer on a large dial for Model-ASTM & on Digital Display for Model- ASTM (D).
- Single stand design which facilitates fast and easy positioning and centering of specimen which is a basic requirement of sub-zero testing.
- Unique spring loaded braking system for smooth and jerk free braking
- NIST approval of machine with samples from NIST-USA. Can be arranged.
- Digital version of ASTM model will be available soon.

STANDARD ACCESSORIES:

Charpy stirker	1 No.
Charpy support block (fixed to machine)	1 Set
Specimen setting gauge (for Charpy)	1 No.
Set of spanners	1 Set
Foundation bracket (This will be supplied before dispatch of machine for making proper civil foundation)	1 No.

TECHNICAL SPECIFICATION:

Suitable for	Charpy-Tests
Initial potential energy (Joules)	300
Minimum scale graduation for AIT-300-ASTM(Joules)	2
Resolution for AIT-300-ASTM (D) (Joules)	0.5
Pendulum drop angle (degree)	140
Striking velocity of pendulum (m/sec)	5.182
Distance between axis of rotation and centre of strike (length of pendulum) (mm)	775
Effective weight of pendulum (kg)	22.35
Total friction and windage losses of maximum Impact energy (%)	0.75 Max
Distance between physical percussion centre of pendulum and centre of Charpy specimen(mm)	+7.75 Max
Striking edge	
Angle of striking edge (degree)	30 +/- 2
Radius of striking edge(mm)	8 +/- 0.05
Width of tip (mm)	4
Specimen anvils and supports	
Suitable for specimen size (mm)	10x10x55
Distance between Anvils (mm)	40 +/- 0.05
Angle of anvil (degree)	80 +/- 2
Radius of supports (mm)	1 +/- 0.05
Overall size (mm) approx	930(L)x460(W)x2070(H)
Net weight (kg) approx	500

OPTIONAL ACCESSORIES:

- Self centering tong for Charpy test specimen (useful particularly for carrying out tests at sub zero temperature)
- Sub zero temperature bath with digital temperature indicator.
- Go: No-Go gauges for conforming the following parameters of specimen-within the limits specified by the standard
 - a) Center line of notch from both ends.
 - b) Angle of V notch.
 - c) Depth below standard V notch
 - d) Cross section of 10x10 mm specimen.
- Milling cutter for V notch.
- Charpy & Izod notch (V&U) broaching machines.
- Lateral expansion gauge as per ASTM-E-23
- Standard impact specimen for verification of machine from NIST-USA (we also undertake calibration of the machine as per ASTM-E-23 including approval from NIST-USA).

Other Products : Universal Testing Machines (Static and Dynamic), Hardness Tester (Rockwell , Brinell, Vickers, Micro), Impact Testing Machines, Abrasive Cut off Machine, Sample Preparation Equipments, Image Analysis, etc. visit our website : www.gatha.com

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