



# PENDULUM IMPACT TESTING MACHINE



## **OVERVIEW :**

- The pendulum Impact Tester Model IT 30 is designed for conducting izod, Charpy test.
- The test methods confirm to BS : 131 : part 4-1972 (amended 15 Aug. 1993)  
BSEN : 10045-2 : 1993 & ASTM : E-23-94a.
- The Pendulum is mounted on antifriction bearings. It has two starting positions, the upper one for Charpy & the lower one for izod testing.
- On release, the pendulum swings down to brake the specimen and the energy absorbed in doing so is measured as the difference between the height of drop before rupture and the height of rise after rupture of the test specimen and is read from the maximum pointer position on the dial scale.
- It is read on digital readout in case of electronic machines.
- There are two strikers and one combined support available for lifting in to the pendulum and on to the base of the machine for Izod. Charpy test, Changing from one striker to another is achieved simply by fixing the new striker into it's position.

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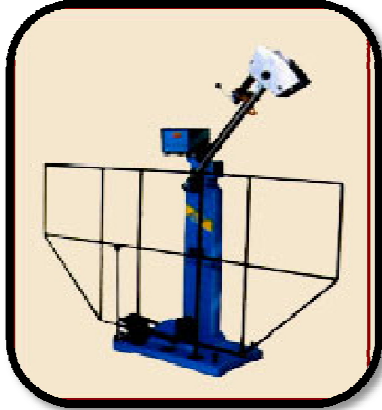


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## FEATURES :

- For Charpy, Izod Tests for various materials
- Model VIT-300-N is as per IS 3766-1977, IS 1598-1977, IS 1757-1988, IS 1499-1977 and BS 131 Part I, II, III, IV
- Works on pendulum principle, Difference between heights of drop of pendulum before Rupture & 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 VIT-300-N, VIT-300-
- Safety guard for the Pendulum

## CHARPY TEST :



- The Charpy test piece rests on alloy support anvils, fitted on the base of the machine rigidly held in position by Allen screws.
- End stopper is provided for quick and accurate locating of the test piece centrally between the supports.

## IZOD TEST :

- The Izod test is clamped vertically in Izod support fitted on the base of the machine.
- The support is provided with a machined vertical groove to suit the test piece size.
- The front clamp piece and the Allen screw enable clamping of the test piece in correct height with the help of Izod setting gauge supplied.

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## MODEL IT-30 (ASTM) :

- This impact tester offered with 300 J energy exclusively for Charpy test confirming to ASTM- E-23.
- This machine is geometrically checked in the works to the more stringent requirements of the American standard.
- The accuracy of the machine is then verified by PROOF TEST by testing the standard test specimens supplied NIST, USA.
- All two sets of the five specimen must agree with the normal values within certain tolerance specified.

## TECHNICAL SPECIFICATION :

MODEL	IT-30	IT-30D	IT-30 (ASTM) Charpy Test	IT-1.5	IT-0.5
Maximum capacity	300 J/168 J	300 J/170 J	300 J	15 J	5J
Minimum Scale Graduation	2J	0.5J	2J	0.1J	0.05J
Overall Size (Approx.)	1.1m x 0.45 m x 1.65 m (H)	1.32m x 0.45 m x 1.05 m (H)	1.4m x 0.5 m x 1.9 m (H)	0.5m x 0.3 m x 0.52 m (H)	0.5m x 0.3 m x 0.52 m (H)
Net Weight (Approx. )	375 kg	375 kg	450kg	70 kg	70 kg

## OPTIONAL ACCESSORIES FOR IT 30 / IT 30 D :

- Caliper gauge for checking V notch for Izod & Charpy.
- Templates for checking 10 x 10 mm cross section of Izod / Charpy test specimen.
- Izod support for 0.450 dia Izod round specimen.
- Self centering tong for quick and accurate setting of Charpy test specimen.
- 'V' notch milling cutter
- 'U' notch milling cutter
- Depth notch gauge including V & U notch gauges for checking depth blow V/U notch, angle and radius.

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