

# TUBULAR IMPACT TESTER CODE: 10027

### AS PER BS 3900-E13 / ISO 6272, ASTM D 2794.

Surface coatings are regularly subjected to damage by impact. This instrument provides proper evaluation of the coating resistance to impact by falling weight method.

The instrument consists of a graduated (in both Cm and Inches) vertical seamless light weight aluminium tube, mounted on a heavy solid base. This tube acts as a guide for a predetermined weight with indenter & handle, and an adjustable weight holding ring.

The height of fall, means the force of impact can be altered by adjusting the ring guide from variable heights up to 1 meter onto the sample panel firmly placed on the base plate. The force of impact can be increased or decreased by replacing the falling weights.

All clamping arrangements are so designed to hold the guide tube firmly, without scratching the guide tube.

The basic instrument has been designed as per ASTM D 2794 with Ball indentor size of 16mm, falling ball weight 2lbs.

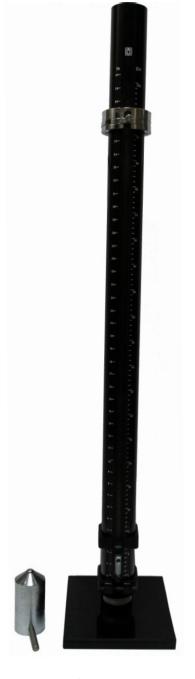
BS 3900-E13 /ISO 6272 with Ball indentor size of 20mm, falling ball weight 1 kg.

Conformity to other standards can also be provided on request.

### **APPLICATIONS**

It is used in various fields like:

Paints, Varnishes, composites etc. Plating, Plastic coatings, Coil coatings



Plastics, Resins Laminations



**STANDARD MODEL:** 40" tube length and 2lbs 1Kg. weight (approx.)

**WEIGHT** : 14.5Kgs. (approx.)

**DIMENSIONS** : 250 x 225 x 1200 (approx.)

### **ACCESSORIES**

10027-01: 2lb/1Kg. weight 10027-02: 4lb/2Kg. weight 10027-03: 6lb/3Kg. Weight

10027-04: With die sets and weights for use as DUPONT impact tester

## VARIABLE IMPACT TESTER CODE: 10027-10

#### **STANDARDS**

The instrument is supplied with various accessories, so that the user can convert the system to test as per many different international standards like ISO:6272-1,2, ASTM D 2794,, ASTM G14, JIS K5600,EN:12206,13523, AAMA 2605,QUALICOAT 2006, 2008 and other similar standards.

STANDARD	WEIGHT	BALL BIA	DIE
ISO6272, DIN55669 ECCA T5	1 + 1Kg	20mm	27mm
ASTMD2794	2lbs	15.9mm(5/8"	16.3mm(0.64")
ECCAT5, T6, ASTMD 3029	2 + 21bs	15.9mm(5/8"	16.3mm(0.64")
NFT 30-017,	1 Kg	23mm	22mm
SNV 27109	2lbs	12.7mm(1/2")	12.7mm(1/2")



### **CONSISTS OF**

- a. A dual graduated guide tube with both inches and Cm graduation.
- b. A sturdy base with inbuilt spirt level.
- c. A set of 6 dies of sizes 13.9,16.3,17,20,21.2,27 inner dias
- d. Falling weight of 1 kg with 12.7mm indentor
- e. 1 Kg add-on weight
- g. Falling weight of 2lbs with 12.7mm indentor
- h. Falling weight of 2lbs with 15.9mm indentor
- i. 2 lbs add-on weight
- j. Easy sample clamp which also acts as a protection.
- k. Distance Ring to control indentation depth from 1mm to 9mm







### **METHOD OF USE**

Loosen the Allen bolt on the clamping ring. Insert the guide tube into the ring. Tighten the Allen bolt just enough to hold the tube in place. Remove the Top cap of the tube, slowly insert impactor into the tube, without letting it fall, and then slide it to the base.

Screw in the impactor handle into the impactor through the slot. Loosen the clamp bolt and adjust the position of the tube so that the handle is in level with the '0' marking on the scale.

Tighten the clamp allen bolt, enough to hold the tube and not let it shake during operations.

Insert the holding ring onto the tube and then tighten the allen bolt, to hold it in place without exerting to much force on the tube.

The test panel is placed on the base, and the weight is lifted and fixed to the ring to the required height.

Now drop the weight once from the required height. lift the weight and clamp it to the ring, inspect the panel.

The height is increased by 2.5cm (1 in.) intervals until coating failure is seen. The impact testers can be used as a pass/fail test by calculation of the impact energy (height x mass), and for the classification of the test sample.

For detailed procedures please refer to the relevant standard(s).



**DESIGNED & MANUFACTURED BY:** 



### **Culture Instruments**

# 37, III MAIN ROAD, VYALIKAVAL, BANGALORE - 560 003. (INDIA)
PH: 91 - 080 - 23349239 / 23449007 / 09886780513

Email: cultureinstruments@gmail.com / sales@technoinstruments.co.in

Website: www.technoinstruments.co.in

Works: D-428, 10th MAIN ROAD, PEENYA 2nd STAGE, P.I.A, BANGALORE - 560 058. (INDIA)