

## Drop Weight Tester

The Drop Weight Impact Tester capable to perform Fracture Toughness/Pellini test as per ASTM E208 and Tear Test of ferritic steel as per ASTM E436.

### Machine Specifications:

- **Drop Energy Range:** 300 J ~10000J
- **Overall machine height:**  $\leq 3650$  mm
- **Drop Height :** ~ 1500 mm (adjustable)
- **Drop weight with Tup/Striker:** 30,60,90,130,200, 500, 600, 700 Kg (Total: 08 weights)  
(Note: The machine overall height should be  $\leq 3650$  mm, however drop height & weight can vary to achieve the desire energy level)
- **Drop Velocity:**  $\geq 4$  m/sec
- **Standard Compliance:** The machine should be in compliance with applicable testing standards including ASTM E208 & E436, API 5L3, EN10274.
- **Machine Features:**
  - Interchangeable flexure inserts and fixtures
  - Electrical and mechanical test area safeguards with safety circuit and interlocking safeguards
  - Touch screen operation with electronic display of drop height, drop energy and drop weight
  - The stepless adjustable drop height to achieve desire energy level
  - Base table/plate with auto specimen center-aligning system
  - Weight Lifting system with high precision in height and safety features
  - Full closed safety shield
- **Test Specimen:** Capable to perform test of P1,P2,P3 specimen as per ASTM E208 and standard specimen of ASTM E436
- **Machine Structure:** Four Columns Floor version main frame made of solid steel plate with high stability under impact

### Specimen Support and Anvils:

- **Pellini Test Anvils:** Specimen support/anvils for testing P1,P2,P3 specimen compatible with ASTM E208 Requirements (hardness: 58-62HRC)
- **Tear Test Anvil:** Specimen support/anvils for testing standard tear test specimen compatible with ASTM E436 Requirements (hardness: 58-62HRC) along with spacers to test various thicknesses specimens.

**Striker:**

- Striker/Tup made of high impact resistance alloy steel
- Striker tip radius  $25.4 \pm 0.1$ mm & hardness > 50HRC
- Dimension should be compatible with ASTM E208 & E436
- Easy to change, separate weight mechanism that fixed/jointed by alignment pin and high strength screw bolt.

**Lifting system:**

- Chain type Lifting system operated by servo motor to lift Striker/Weight with high precision in height and power failure self locked safety mechanism which ensure that striker does not drop accidently due to power failure.
- **Tool Kit:** Tool kit having necessary tools for assembling/disassembling fixtures and for machine maintenance

**Accessories:** Separate prices of additional Spare striker, anvil, set of IC card of panel and all other Compatible accessories/Adaptors/fixtures should be quoted

**Optional:** Optional accessories may also be mentioned.

**Manuals:** Operating, Maintenance and calibration Manual in English language.

**Calibration Certificates:** Calibration Certificates for machine height mechanism and each weight

**Installation and Training:** Installation and training of the machine for operation/maintenance by the manufacturer's authorized/trained person

**Warranty/Guarantee:** At least 01 year

**Brand:** ToronTech, Imatek Ltd, TMI or Equivalent

**Origin:** USA, Western Europe, Japan (Local and China origin is not acceptable)

**Make:** Any

## CHECK LIST

Please carefully fill all the entries by either encircling "YES" or "No" and mention specifications of offered components when "No" is encircled. Use separate sheet if required. Duty filled check list must be submitted along with offer.

### Drop Weight Impact Tester

Machine Specification:			Encircle		Offered Specs (Where "No" is encircled)
1	Drop Energy Range	300 J ~ 10000J	Yes	No	
2	Overall machine height	≤ 3650 mm	Yes	No	
3	Drop Height	~ 1500 mm (adjustable)	Yes	No	
4	Drop weight with Tup/Striker	30,60,90,130,200,500,600,700 Kg (Total: 08 weights)	Yes	No	
5	Drop Velocity	≥ 4.0 m/sec	Yes	No	
6	Standard Compliance	ASTM E208 & E436, API 5L3, EN10274	Yes	No	
7	Touch screen operation	Electronic display of drop height/energy and weight	Yes	No	
8	Machine Structure	Four Columns Floor version main frame	Yes	No	
9	Safety Features	Full closed safety shield, emergency stop & power failure self locked safety mechanism	Yes	No	
10	Drop height adjustmant	The stepless adjustable drop height mechanism	Yes	No	
11	Specimen center-aligning system	Auto specimen center-aligning system	Yes	No	
12	Test Specim compatibility	standard specimen as per ASTM E208 and E436	Yes	No	
13	Pellini Test Anvils	Support/anvils for testing P1,P2,P3 specimen (hardness: 58-62HRC)	Yes	No	
14	Tear Test Anvils	support/anvils for testing standard tear test specimen (hardness: 58-62HRC)	Yes	No	
15	Striker	Striker tip radius 25.4±0.1mm & hardness > 50HRC, Easy to change, separate weight mechanism Dimension as per ASTM E208 & E436	Yes	No	
16	Lifting System	Chain type Lifting system operated by servo motor power failure self locked safety mechanism	Yes	No	
17	Calibration Certificates	for machine height mechanism and each weight	Yes	No	
18	Tool Kit:	for assembling/disassembling fixtures	Yes	No	
19	Additional Spare	Separate prices of additional Spare striker, anvil, set o' IC card of panel etc.	Yes	No	
20	Manuals	Operating and Maintenance Manual in English language	Yes	No	
21	Installation and Training	Installation and training by the manufacturer's authorized/trained person	Yes	No	
22	Warrantee/Guarantee:	At least 01 year	Yes	No	
23	Brand	ToronTech, Imatek Ltd, TMI or Equivalent	Yes	No	
24	Origin	USA/ European / Japan	Yes	No	