



FALLING WEIGHT IMPACT TESTER TORONFWI™-ISO

ISO3127, ISO11173, BS EN744, BS EN1411

ToronFWI™ -ISO Falling Weight Impact Tester is designed to measure the impact resistance of thermoplastic pipes using either the staircase or round-the-clock method.

Test samples are struck by a falling striker with a defined mass and shape, dropped from a known height onto specific points around the pipe's circumference. This process helps determine the actual impact performance of a production batch or extrusion run.

To operate, simply place the sample on the V-block, close the chamber, and start the test. The striker is automatically lifted into position by the internal drive system.

The tester supports two methods: the round-the-clock method and the staircase method.

APPLICATIONS

- **Plastic Pipe Manufacturers & Extrusion Plants** - Used to evaluate the impact resistance of thermoplastic pipes during production and batch testing, ensuring compliance with ISO 3127, EN 744, and other standards.
- **Quality Assurance & Certification Agencies** - Provides standardized impact testing for independent verification, certification audits, and regulatory compliance across global piping standards.
- **Research & Testing Laboratories** - Essential for studying material toughness, fracture behavior, and impact resistance of thermoplastic pipes under controlled conditions.

- **Water Supply & Irrigation Industry** - Ensures pipes used in potable water and irrigation systems can withstand handling, transportation, and installation impacts.
- **Gas Distribution & Energy Industry** - Applied to test polyethylene and other thermoplastic gas pipes for resistance to sudden impact loads, reducing risk of field failures.
- **Construction & Infrastructure Projects** - Used in acceptance testing of pipes for sewage, drainage, and underground utility installations where impact strength is critical.
- **Pipeline Maintenance & Failure Analysis Centers** - Supports forensic evaluation of damaged or failed pipes to determine impact resistance and identify root causes of failure.
- **Universities & Technical Institutes** - Provides hands-on training for students and researchers in impact testing methods, fracture mechanics, and material performance evaluation.

FEATURES

Falling Weight Impact Tester ToronFWI-ISO Features

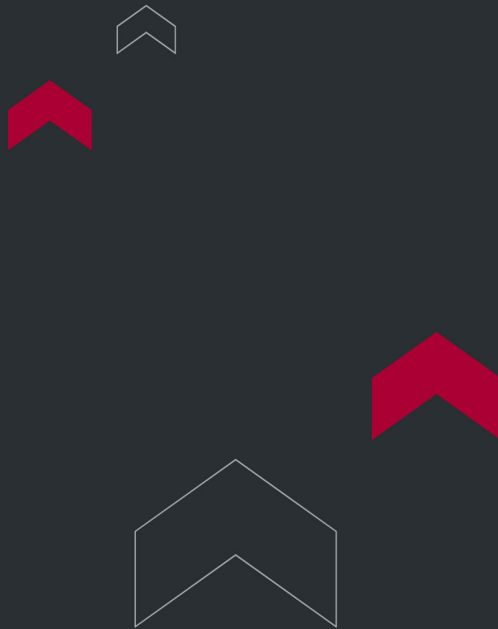
1. The anti-rebound device ensures a 100% catch rate.
2. Easy to use with a clear, integrated touch display.
3. Two-hand activation for added operator safety during testing.
4. Built-in safety features prevent the impact weight from releasing unless all doors are securely closed.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Impact height	50mm to 2000mm
Height error	Within ± 2 mm
Overall dimensions	1100mm (L) $\times$ 600mm (W) $\times$ 3800mm (H)
Energy losses	<0.25%
Masses of strikers	0.25kg to 16kg, permissible tolerance: $\pm 0.5\%$
Rising speed	12m/min
Anti-rebound catching rate	100%
Test specimen range	$\Phi 10$ mm to $\Phi 630$ mm
Test standards	ISO 3127, EN 744 etc
Display	Touch Screen

Installation Requirements:

1. Air source (8bar)
2. Voltage 220V 50HZ (110V is also available)
3. Lab height : 5m
4. Lab ground shall be flat and solid.



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