Drop Weight Tear Testers

A range of drop weight impact testers for measuring the fracture characteristics and fracture ductility of steel specimens according to the following standards: API recommended practice 5L3, EN 10274, ASTM-E 436 and 'Pellini'.

- Very robust construction stands up to the rigours of high energy testing to provide high reliability with a minimum of downtime.
- Easily interchangeable contact parts simplify maintenance and reduce cost of ownership.
- State-of-the-art testing accommodates impact energies up to 100,000J and specimens up to 50mm thick.
- Very high levels of safety employing multiply redundant systems, compliant with 89/392/EEC and 91/368/EEC machinery safety directives.
- Automated specimen loading provides compliance with cycle times required by test methods, while maintaining operator safety.
- Very rigid base and anvils ensures very low flexure under high test loads.
- Guided mass system to ensure that the impact geometry is correct throughout the entire test.
- Highly accurate and repeatable drop parameters.
- High quality, easy to use control software ensures consistency and enhances throughput.
- Ergonomically designed, no requirement for the operator to work at elevated heights or handle excessive physical loads.
- Optional instrumentation package to measure impact force up to 1500kN. Provides values for peak force and energy to fail, together with a high resolution force-deflection curve to analyse failure mode.
- Optional variable mass system to provide precise control over impact parameters.
- Optional high speed, fully integrated video system to provide visualization of specimen failure mode.
- Optional liquid cooled temperature conditioning bath.
- Optional specimen notching apparatus.
- Responsive life-time technical support.

Product Range

- **DWT40-30** impact energy up to 30,625J requiring a floor-to-ceiling height of 5.5m (1250kg impact mass at 4.5m/s to 7.0m/s impact velocity)
- **DWT40-40** impact energy up to 40,500J requiring a floor-to-ceiling height of 7.2m (1000kg impact mass at 4.5m/s to 9.0m/s impact velocity)
- **DWT40-60** impact energy up to 60,750J requiring a floor-to-ceiling height of 8.2m (1500kg impact mass at 4.5m/s to 9.0m/s impact velocity)
- **DWT40-100** impact energy up to 101,250J requiring a floor-to-ceiling height of 8.2m (2500kg impact mass at 4.5m/s to 9.0m/s impact velocity)



MATEK