

IM100F Impact Testers



A range of impact test systems designed for dynamic compression testing. To characterise energy absorption, cushioning performance, resilience and fatigue at varying rates of strain. Used both in R&D environments and for quality control.

Typical materials include EPS, EPU, EPP, rubber, aluminium and composites.

Typical applications include those in the automotive, aerospace, protection and packaging industries.

- Large versatile test chamber.
 - Highly accurate and repeatable drop parameters.
 - Continuously variable drop height.
 - Range of strikers including flat, hemispherical, head form, pedestrian leg form and custom.
 - Wide range of anvils and supports including table anvils, T-slotted right angle anvils and V-block anvils (for testing cylindrical specimens).
 - High quality, laboratory grade instrumentation with traceable calibration.
- Transducer options include accelerometer, force (piezo-electric or strain gauged), and load cells beneath specimen support.
 - High resolution data capture (16 bit at 3 million samples per second).
 - World-class ImpAcqt software for high-productivity testing and advanced analysis.
 - Guided mass system to ensure that the impact geometry is correct throughout the entire test.
 - Very rigid base and anvils ensures very low flexure under high test loads.
 - High levels of safety employing multiply redundant systems, compliant with 89/392/EEC and 91/368/EEC machinery safety directives.
 - Unattended multiple impact fatigue testing.
 - Optional high mass system providing impact masses up to 250kg.
 - Optional high velocity system to extend the maximum impact velocity to 20m/s.
 - Optional direct displacement measurement throughout impact.
 - Optional high speed, fully integrated video system to provide visualization of specimen deformation.
 - Responsive life-time technical support.

Product Range

IM100F-20 2m maximum drop height, impact mass 15kg to 40kg (optional 250kg), impact velocity 1m/s to 6.26m/s (optional 20m/s), impact energy 7.5J to 800J (2000J with high velocity option, 5000J with high mass option).

IM100F-40 4m maximum drop height, impact mass 15kg to 40kg (optional 250kg), impact velocity 1m/s to 8.85m/s (optional 20m/s), impact energy 7.5J to 1600J (2000J with high velocity option, 9800J with high mass option).