



MTS Exceed™ E22 Series Pendulum Impact Test Systems for Metals

Highly reliable and stable impact testing for metals

Features

- » Rugged cast iron frame absorbs shock and vibration
- » Reliable disc brake for quick pendulum braking
- » New pendulum structure design that helps prevent stuck samples
- » Ergonomic control panel with touchscreen display
- » High-resolution, frictionless encoder for accurate measurement of impact angle
- » Safety enclosure with access switch that locks the pendulum if enclosure is opened during a test
- » CE, USTC compliance

The rugged yet versatile MTS Exceed Pendulum Impact Test Systems for Metals are ideal for measuring impact resistance of metal specimens. With an easy-to-operate control system, stable transmission system, reliable disc brake, new pendulum and frame design, these systems execute accurate, reliable Charpy impact tests.

Conducting impact tests requires careful consideration of safety requirements, and these systems include several features to maximize safe and reliable operation. The transmission system uses precision bearings and two-stage reducer for smooth and steady pendulum operation. The system has an interlock feature that will stop the pendulum in the event of power loss, or if the machine enclosure is open.

The MTS Exceed Pendulum Impact Test Systems provide a solid foundation for establishing global standardized testing

procedures. The multi-language interface and compliance with global safety and ergonomic standards make it a good choice for global institutions and corporations. These systems can be quickly configured, delivered and installed to meet your specific testing requirements; and all MTS Exceed systems are backed by the MTS global service and support team. This highly experienced team is committed to maintaining system uptime and operational efficiency.

By integrating a solid test frame with high-resolution electrical control and comprehensive safety features, the MTS Exceed E22 Series Pendulum Impact Test System for Metals provides highly reliable testing capabilities for QA/QC environments and various high strength tests.

be certain.

Examples of metals material test standards that can be met with the MTS E22 Pendulum Impact Test System for Metals

Examples

Standard	Description
GB/T 229-2007	Charpy Pendulum Impact Tester Method
JJG 145-2007	Pendulum Impact Tester
ASTM E23-12c	Standard Test Methods for Notched Bar Impact Testing of Metallic Materials
ISO 148-1-2009	Metallic materials – Charpy pendulum impact test

Pendulum (without striker)

	Pendulum Energy	Pendulum Part Number
ISO	150J	100301699
ISO	300J	100301700
ISO	450J	100301702
ASTM	150J	100301699
ASTM	300J	100301700
ASTM	450J	100301702

Pendulum Striker

	Striker Part Number
ISO (R2 mm)	100304355
ISO (R8 mm)	100282954
ASTM	100304353

Specifications

	E22.452
Maximum impact energy	450J
Pendulum pre-elevation	150°
Minimum angle resolution	0.025°
Distance between pendulum center and impact point	750 mm
Impact speed	5.24 m/s
Dimension of the main tester (W x H x D)	2240 x 902 x 2145 mm
Weight	1000 kg
Impact test result, digital display	Impact energy (kJ) Impact strength (kJ/m²)
Functions	Friction loss correction Automatic calculation of the pendulum length Brake Linkable printer Linkable PC
Interface	RS 485
Power supply	200-240 V AC, 5A, 50/60 Hz, 1 kW, single phase



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