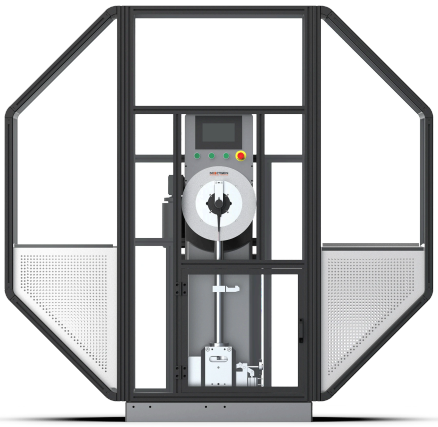
Class G Single-Column Charpy & Izod Impact Tester – High-Precision Pendulum Testing Machine

Standards: ISO 148, EN 10045, ASTM E23, ASTM E1820, ASTM E2298, ASTM E74 (Class AA), ISO 148-2, ISO 14556, ISO 148-3, ASTM E2248

- ULTIMATE USER-FRIENDLINESS
- LEADING DEPENDABILITY AND RELIABILITY
- STRICT COMPLIANCE WITH INDUSTRY STANDARDS
- STOCKED CONSUMABLES AND SPARES
- TRUSTED AFTER SALES TECHNICAL SUPPORT
- LIFETIME PRODUCT SUPPORT ADVANTAGE



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Description

The Class G Impact Tester is a single-column impact testing system designed for Charpy and Izod Impact testing according to ASTM E23, ISO 148, and EN 10045 industry standards. The Class G has two popular models with peak capacities of 450 J (332 ft/lbs) and 750 J (553 ft/lbs) with optional pendulums for 150 J (111 ft/lbs), 300 J (221 ft/lbs), 450 J (332 ft/lbs) and 600 J (442 ft/lbs). The 450 J model is commonly used in educational institutions, government facilities, laboratories, and R&D facilities. The 750 J model is most commonly used in high-level industrial manufacturing facilities like steel production, heat-treating facilities, aerospace, and more. Class G comes standard as a fully enclosed system with the options of adding either a fully automatic specimen feeding system or an automatic cooling cycle.

Metals Impact Tester - Class G - Single Column Charpy & Izod Impact Tester up to 750J

Impact Energy

150 J (111 ft/lbs), 300 J (221 ft/lbs), 450 J (332 ft/lbs), 600 J (442 ft/lbs), or 750 J (553 ft/lbs)

This system comes standard with an analog and digital readout for higher accuracy, along with the option to add the ability to connect the system to a computer for use with our analysis software. NextGen's Class G is a more durable solution for your high-energy pendulum impact requirements, allowing further upgrades to be added in the future.

Learn more about how pendulum impact testers support accurate and compliant material testing.

Watch Video

Watch the Class G Single-Column Charpy & Izod Impact Tester – High-Precision Pendulum Testing Machine product video.

WATCH ON YOUTUBE

Single-Column Charpy & Izod Impact Tester Main Features

- The heavy cast iron base is mechanically designed to avoid any vibrations affecting impact testing results.
- Comes standard with a PLC touch controller.
- Single-column impact frames (front and rear) provide additional structure and support for high-energy testing.
- Standard touch screen display and optional connectivity to a PC for software analysis.
- Motor-driven raising of the hammer with auto-return after completion of a test.
- The electromagnet locks the pendulum securely.
- Fully enclosed testing area for the highest safety while undergoing impact testing.
- The pendulum height and weight are precisely designed to ensure high accuracy.
- Simple and easy design to exchange the striking knife to meet ISO or ASTM standards.
- Designed with a high-precision bearing for the most accurate impact results.
- Pendulum is designed with rounded edges for better wind resistance to reduce any outside factors.
- Quality PLC controller for precision pendulum testing.
- Optional computer with software control is available for a semi-automatic operation. The operator must only change the specimens while the rest is controlled by the PC.
- Optional specimen feeding system is available. Combined with the computer and software, this allows for fully automatic operation.
- Optional cooling system is available to satisfy cold specimen testing down to -180°C.

High-Precision Pendulum Testing Machine Charpy and Izod Technical Specifications

NG-Impact Class G		
Model	NG452 Class G	NG752 Class G
Maximum Impact Energy	450 J	750 J (553 ft/lbs)
Optional Pendulum	150 J (111 ft/lbs), 300 J (221 ft/lbs)	300 J (221 ft/lbs), 450 J (332 ft/lbs), 600 J (442 ft/lbs)
Angle Resolution	0.025°	
Angle of Striking	150° ±1°	
Velocity of Striker	5.24 m/s	
Support Span	40 mm	
Radius of Curvature of Supports	1 mm	
Angle of Slope of Supports	0°	
Angle of Taper of Supports	11° ± 1°	
Radius of Striking Edge	2 mm	
Angle of Striking Tip	30°	
Width of Striking Edge	16 mm	
Specimen Dimensions	55 × 10 × 10 mm, 55 × 10 × 7.5 mm, 55 × 10 × 5 mm	
Overall Dimensions	84.6 × 33.5 × 82.7 in / 215 × 85 × 210 cm	

NG-Impact Class G	
Weight	1875 lbs. / 900 kg
Power Consumption	1.5 kW

Configurations

Name	Description	Model					
Machine Frame	NG452/752 Class G	NG452 D-2	NG752 D-2	NG452 D-3	NG752 D-3	NG452 D-4	NG752 D-4
Framework	Frame	X		X		X	
	Pendulum Lock/Release System	X		X		X	
	Driving System	X		X		X	
	Angle Measurement	X		X		X	
	PLC	X		X		X	
	Dial Gauge Display	X		X		X	
	Touch Screen	X		X		X	
Motor		X		X		X	
Software				X		X	
Accessories	Span Block Specimen Centering Block Centering Tongs Standard Tools Anchor Bolts Wedge Block	X		X		X	

Name	Description	Model		
PC Connection	RS232		X	X
Instrumented Impact System	Force Transducer in Pendulum for quick plotting of the force-time graph Access to more testing parameters on the GenTest software			X

High-Precision Pendulum Testing Machine Specimen Collection and Filtering Device

- A motorized device is used for the collection of broken specimens after undergoing an impact test. Instead of having to manually clean the tester after a test, the collection system will clear the way to prevent the striker from becoming stuck.
- Unique specimen filtering function: automatically judges qualified and unqualified specimens into different collection bins.

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