



NEXTGEN MATERIAL TESTING

YOUR QUALITY TESTING CHOICE

Class G Single-Column Charpy & Izod Impact Tester

High-Precision Pendulum Testing Machine

Standards: [ISO 148](#), [EN10045](#), [ASTM E23](#), [ASTM E1820](#),
[ASTM E2298](#), [ASTM E74 \(Class AA\)](#)



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



Description

The [Class G Metals Impact Tester](#) is a Single column impact testing system designed for Charpy and Izod Impact testing according to ASTM E23, ISO 148 and EN10045 industry standards. The Class G has two popular models with peak capacities of 450 J and 750 J with optional pendulums for 150 J, 300 J, 450 J and 600 J. 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 and Izod Impact Tester up to 750 J

Impact energy: 150 J, 300 J, 450 J, 600 J or 750 J

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.

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Single-Column Charpy & Izod Impact Tester Main Features

- The heavy cast iron base is mechanically designed to avoid any vibrations having an effect on impact testing results.
- Comes standard with PLC touch controller.
- Single column impact frame (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
- 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 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

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Technical Specifications

NG-Impact Class G		
Model	NG452 Class G	NG752 Class G
Maximum Impact Energy	450 J	750 J
Optional Pendulum	150 J, 300 J	300 J, 450 J, 600 J
Angle Resolution	0.025°	
Angle of Striking	150° ±1°	
Velocity of Striker	5.24m/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°	
Thickness of Striking	16 mm	
Specimen Dimensions (mm)	55 × 10 × 10, 55 × 10 × 7.5, 55 × 10 × 5	
Overall Dimensions	85" × 34" × 83" / 215 × 85 × 210 cm	
Weight	1985 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	
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 GenTest software					x	



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High-Precision Pendulum Testing Machine Specimen Collection and Filtering Device

- 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 avoid the striker becoming stuck.
- Unique specimen filtering function: automatically judge qualified and unqualified specimens to different collection bins

*** Request a [formal quotation](#) or send an e-mail to sales@nextgentest.com for the most up-to-date pricing and applicable discounts and incentives.**