



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

Standards: [ISO 148](#), [EN10045](#), [ASTM E23](#), [ASTM E1820](#), [ASTM E2298](#)



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Description

The [Class D 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 D has two popular models with peak capacities of 450J and 750J with optional pendulums for 150J, 300J, 450J and 600J. The 450J Model is commonly used in educational institutions, government facilities, laboratories and R&D facilities. The 750J Model is most commonly used in high level industrial manufacturing facilities like steel production, heat treating facilities, aerospace and more. Class D 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 D - Single Column Charpy and Izod Impact Tester up to 750J

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

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 D is a more durable solution for your high energy pendulum impact requirements allowing further upgrades to be added in the future. [Learn more about Pendulum Impact Testers and Testing.](#)

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 PLC 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

Technical Specifications

NG-Impact Class D		
Model	NG452 Class D	NG752 Class D
Maximum Impact Energy	450J	750J
Optional Pendulum	150J, 300J	300J, 450J, 600J
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)	55x10x10 , 55x10x7.5, 55x10x5	
Overall Dimensions	85" x 34" x 83" / 215 x 85 x 210 cm	



Weight	1985 lbs. / 900 kg
Power Consumption	1.5 kW

Configurations

Name	Description	Model					
		NG452 D-2	NG752 D-2	NG452 D-3	NG752 D-3	NG452 D-4	NG752 D-4
Machine Frame	NG452/752 Class D						
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	



NEXTGEN
MATERIAL TESTING

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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 manual 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.

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