



The difference is measurable®

# MOTORIZED PENDULUM IMPACT TESTING SYSTEM

MPX Series

The Instron® MPX Series of motorized pendulum impact testers are preferred for metals impact testing to Charpy and Izod standards. Available in capacities from 300 to 900 Joules, the MPX is efficient and easy to operate making it suitable for highvolume testing. The MPX includes an integrated guard and safety control system that meets the stringent requirements for the European CE mark and for ISO 13849.

Bluehill Impact comes standard with the MPX, and is Instron's newest impact testing software. Bluehill Impact not only increases the power and flexibility found in previous versions of Instron's impact testing software, it also boasts many advanced capabilities such as pre-loaded test methods, real-time analog dials with digital data, and enhanced reports and data exporting.

## FEATURES AND BENEFITS

- Standard capacities include 300, 450, 600, 750, and 900 Joules
- Automatic test start at door closure for efficient testing and adherence to standards for non ambient specimen testing
- Optional interchangeable hammer weights conveniently adjust the system capacity without removal of the hammer shaft
- Motorized hammer lift and automatic return to start test position for increased productivity and operator safety
- Hammer brake, clutch, and latch mechanisms respond quickly for faster operation
- Safety enclosure with interlocks protects the operator by preventing the hammer from releasing when doors are open
- Adjustable latch height adds configurability for testing at lower energies and velocities
- Standard base design meets ASTM and ISO recommendations
- Charpy anvil inserts and striker are selectable to meet a range of international test standards



## OPTIONAL ACCESSORIES

- Interchangeable hammer weights
- Foundation preparation kit includes template and fasteners
- Instrumented Charpy tups and Impulse Data Acquisition Software
- Izod striker and specimen vise
- Supports for testing sub-sized specimens
- Lateral expansion gauge
- NIST Charpy reference standards for ASTM E23

## STANDARDS

The MPX is designed to meet the following standards:

- ASTM E23
- ISO 148
- EN 10045
- GOST 9454
- AS 1544
- JIS Z 2242
- JIS B 7722

## SPECIFICATIONS

Impact Energy		Release Angle (Adjustable)	Pendulum Length		Maximum Hammer Speed		Encoder Resolution	System Dimensions (w x d x h)		Net Weight		Power
Joule	lbf-ft	Degree	mm	in	m/s	ft/s	Degree	mm	in	kg	lbs	
300-900	221.3-663.8	150	762	30	5.3	17.4	0.009	2200×1117×1990	86.6×44×78.3	1293	2850	230 Vac, 1 Phase, 50/60 Hz, 15Amp

## SOFTWARE

Built on our popular and adaptive Bluehill platform, Bluehill Impact is Instron's newest and most powerful impact testing software.

Test faster than ever before, with its meticulously crafted visual design, is built from the ground up for touch interaction. Bluehill Impact features large touchpoints and intuitive gestures to make the user experience simpler and smarter than ever before.

Charpy/Izod testing with Instron's powerful Bluehill platform includes features such as:

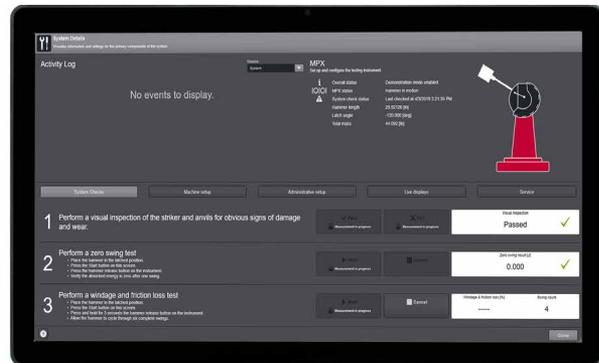
- Real time analog dials and digital data with a modern user interface
- Clear visual indication of pass or fail based on user-input criteria
- Pre-configured test methods to ASTM E23 & ISO148
- Prompted Test Method sequence for consistent testing
- Simple, automatic, configurable System Checks for friction to ensure the accuracy of test results
- User interface clearly displays the system status/position to ensure operator safety
- Bluehill's modern report generator allows users to create customized report templates that can be linked with test methods and used to export test results
- Result export files are customizable for enhanced compatibility with Laboratory Information Management Systems
- Easy to configure control charts making test results simple to analyze
- TrendTracker plug-in included

The MPX uses a very high resolution encoder and no analog dial, enabling NIST range of verification from as low as 0.4 Joules.

## ASTM E23 USABLE RANGE OF HAMMER CAPACITY

Initial Potential Energy (Joules)	Resolution at 15 Joules	Lower Limit Usable Range
300	0.016	0.4
450	0.023	0.6
600	0.029	0.8
750	0.036	0.9
900	0.044	1.1

Reference ASTM E23-18 Section A2.4.3



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