



No. **258** IMPACT TESTER



PLASTIC - RUBBER

ELECTRIC WIRE - CORD

VINYL LEATHER CLOTH

PAPER - PULP

TEXTILE - DYEING

PAINT - PIGMENT - INK



JIS-K7110, K7111-1, ASTM-D256, D6110, ISO-179-1, 180

➤ FEATURE

This is a pendulum type impact tester best suited for testing plastic materials. Both Charpy impact testing and Izod impact testing can be conducted by replacing the hammer and anvil.
The tester can be assorted with a rotary encoder, which enables automatic scale reading and calculation (Digital Touch Panel/ PC spec.), in addition to the standard analog ver.
The tester specifications are determined by selecting the base model, and adding the necessary options.

➤ SPECIFICATION

Standard	JIS/ISO			ASTM	
	Charpy Impact Test		Izod Impact Test	Charpy Impact Test	Izod Impact Test
Base Standards	JIS B7739: 2011, ISO 13802: 1999				
Reference standards	JIS K7111-1: 2012 ISO 179-1: 2010		JIS K7110: 1999 ISO 180: 2000	ASTM D6110-10	ASTM D256-10
Hammer Capacity*1 (J)	0.5, 1, 2, 4, 5	7.5, 15, 25*2	1, 2.75, 5.5, 11, 22	2.7 or More (Track Record: 0.5, 1, 2, 4, 5, 7.5, 15, 25)	2.7 to 21.7 (Track Record: 1, 2.75, 5, 11, 22)
Anvil	JIS/ISO Charpy Anvil		JIS/ISO/ASTM Izod Anvil	ASTM Charpy Anvil	JIS/ISO/ASTM Izod Anvil
JIS/ISO Charpy Anvil Lift	Necessary	-	-	-	-
Hammer Impact Point Setting Gauge	JIS/ISO Hammer Impact Point Setting Gauge			ASTM Hammer Impact Point Setting Gauge	
Specimen Setting Gauge	JIS/ISO Charpy Specimen Setting Gauge		JIS/ISO Izod Specimen Setting Gauge	ASTM Charpy Specimen Setting Gauge	ASTM Izod Specimen Setting Gauge*3
Option	Digital (Touch Panel, PC) Ver., Safety Cover (Full Cover), Curtain for Litter Control, Hammer Additional Weight, Mini Printer (Thermal paper 10 rolls)*4, CSV Down load Tool (includes LAN cable) *4, Analog Scale & Pointer, Windows PC*5, Additional Weight for Main Body*6				
Impact speed	2.9 m/s	3.8 m/s	3.5 m/s	3.46 m/s	3.5 m/s
Lift-up Angle	150°				
Hammer Edge	R2 ± 0.5 mm, Angle: 30 ± 1°		R0.8 ± 0.2 mm	R3.17 ± 0.12 mm, Angle: 45 ± 2°	
Anvil Edge Radius	R1 ± 0.1 mm		-	R3.17 ± 0.12 mm	
Anvil Supporting Edge	-		R0.2 ± 0.1 mm	-	
Anvil Supporting Length	62 ^{+0.5} / ₀ mm*7		-	101.6 ± 0.5 mm	
Anvil-Edge Distance	-		22 ± 0.2 mm	-	
Dimensions (Approx.)	W500 × D350 × H850 mm (Digital Touch Panel Spec: D + 250 mm, Curtain for Litter Control: W + 520 mm, Safety Cover: W + 500 × H + 275 mm)				
Weight (Approx.)	125 kg (Digital Ver.: + 5 kg, Curtain for Litter Control: + 5 kg, Safety Cover: + 75 kg)				
Power Source	Curtain Type: 1-Phase, AC 100 to 240 V, 3 A, 50/60 Hz, Full-cover Type: 1-Phase, AC 100 V, 5 A, 50/60 Hz, 1-Phase, AC 220 V, 3 A, 50/60 Hz				
Accessories	Assortment of Tools				

*1 Custom Hammers can also be provided. kgf·cm Hammers are also available. 2 kinds of additional weights can be attached to a single hammer./
*2 50 J Hammer is not available./ *3 Setting Gauge differs depending on the size of specimen thickness./
*4 Available when Digital Touch Panel Spec. is chosen./ *5 Required for the CSV Download Tool for the Digital Touch Panel Type spec., and Digital PC Type spec./
*6 Required when more than 15 J Hammer is used./ *7 This length is for JIS K7111-1. If other lengths are required, please let us know.

➤ Example

1 Analog Ver., Charpy (JIS/ISO 7.5 J)

Charpy JIS/ISO 7.5 J Hammer, JIS/ISO Charpy Anvil, JIS/ISO Hammer Impact Point Setting Gauge, JIS/ISO Charpy Specimen Setting Gauge, Curtain for Litter Control, Analog Scale & Pointer

The operator needs to check the pointer value after each test. Test results are calculated manually.

2 Digital Touch Panel Ver., Charpy (JIS/ISO 2 J)/ Izod (ASTM 2.7 J)

Digital Touch Panel Ver., JIS/ISO Charpy 2 J Hammer, ASTM Izod 2.7 J Hammer, JIS/ISO Charpy Anvil, JIS/ISO/ASTM Izod Anvil, JIS/ISO Charpy Anvil Lift, JIS/ISO Hammer Impact Point Setting Gauge, ASTM Hammer Impact Point Setting Gauge, JIS/ISO Charpy Specimen Setting Gauge, ASTM Izod Specimen Setting Gauge (for each specimen thickness variation), Curtain for Litter Control, Mini Printer, CSV Down load Tool, Windows PC

The operator can check the test result calculated automatically on the Touch Panel, and transfer data to PC. Human error is minimized as the test result is automatically measured by encoder and calculated automatically.

*Power source, dimensions, weight may differ by specifications.



No. **258-L** IMPACT TESTER (WITH REFRIGERATING MACHINE)

No. **258-UTL** IMPACT TESTER (WITH ULTRA LOW TEMP. REFRIGERATING MACHINE)

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No.258-L
Option: Acrylic Safety Cover

No.258-UTL
Option: Acrylic Safety Cover

JIS-K7110, K7111-1, ASTM-D256, D6110, ISO-179-1, 180

➤ FEATURE

This tester enables the operator to conduct Charpy and Izod impact tests in low temperature conditions. The low temperature chamber is double-sealed and the inner door is equipped with working gloves so that the temperature inside the oven can be kept constant while the operator is setting the test specimen.

➤ SPECIFICATION

Model	No.258-L	No.258-UTL
Temperature Range	-35 °C to 60 °C (Refrigerating Machine)	-50 °C to 60 °C (Refrigerating Machine)
Hammer Capacity (J)	Track Record Charpy Impact Test: 0.5, 1, 2, 4, 5, 7.5, 15, 25 Izod Impact Test: 1, 2.75, 5, 11, 22	
Safety Device	Interlock System on the Upper Door, Torque Adjustment Device (Only for Izod) Acrylic Safety Cover (Option)	
Others	Refer to the list (No. 258 Impact Tester) on the left.	
Power Source	AC 200 V, 3-Phase, 40 A, 50/60 Hz	AC 200 V, 3-Phase, 30 A, 50/60 Hz
Dimensions/ Weight (Approx.)	W1,110 × D1,050 × H1,770 mm/ 450 kg	W1,670 × D1,480 × H2,130 mm/ 710 kg

No. **258-ZA** IMPACT TESTER (FULLY AUTOMATIC)



No.258-ZA

JIS-K7110, K7111-1, ASTM-D256, D6110, ISO-179-1, 180

➤ FEATURE

This is the fully automatic version of the IMPACT TESTER (Charpy and Izod). A maximum of 210 impact tests can be continuously conducted just by setting the test specimen into the preparation cassette and inputting the test conditions into the computer software. The test specimen will automatically be set from the preparation cassette which is located inside the low temperature oven. The test specimen will be impacted within 5 seconds after being transferred from the preparation cassette.

➤ SPECIFICATION

Hammer Capacity*1 (J)	Capacity 0.5 to 25 J (Charpy), 7.5 J (Izod), Automatic Lift-Up Device, Automatic Stop Device
Anvil	Automatic Specimen Setting Device, Rejection Device for Tested Specimens
Test Specimen	70 pcs × 3 Cassettes (Total 210 pcs) *When specimen size is W10 × T4 × L80 mm
Software	Windows Compatible
Option	Hammer Height Adjustment Device (Only for Charpy), Low Temperature Oven, Specimen Size Measuring Device, Collect Turn Table for Tested Specimen (20 pcs)
Power Source	AC 100 V, 1-Phase, 10 A, 50/60 Hz Low Temp. Oven: AC 200 V, 3-Phase, 30 A, 50/60 Hz
Air Source	0.5 MPa or More
Dimensions/ Weight (Approx.)	W1,150 × D1,050 × H1,950 mm/ 700 kg

*Power source, dimensions, weight may differ by specifications.