

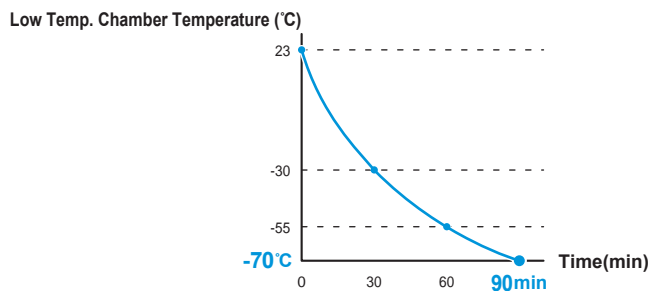
UNIVERSAL IMPACT TESTER



YASUDA SEIKI SEISAKUSHO × ESPEC
= IMPACT TESTING AT **-70°C**

With the accumulated experience of YASUDA SEIKI SEISAKUSHO and environment creating technologies of ESPEC, impact testing at ultra low temperatures as low as **-70°C** is now an option for resin composites, notably engineering plastics. For impact properties and toughness evaluation in environments yet explored, this tester is our solution.

ULTRA-LOW TEMPERATURES REACHED FAST AND COST-EFFICIENTLY



With the Two Zone Refrigeration Circuit, the time consumption from room temperature (23°C) to -70°C has been reduced to 90min. The circuit also eliminates the need of LN₂ and LCO₂, reducing running costs and maximizing test efficiency.

ADVANCED CONTROLS



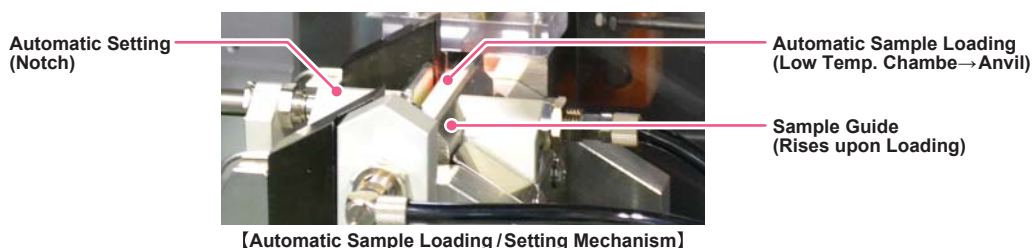
[Test Control Panel]



[Low Temp. Chamber Panel]

Once inputting the test type, hammer capacity and specimen diameter, the tester will automatically set the specimen and begin testing with a single press of a button. The impact force will automatically be calculated and displayed; the test results will also automatically be saved, which can be outputted in .CSV format via PC connection. The Low Temp. Chamber is Espec's model P-200, equipped with its own color LCD Touch Panel for direct and dynamic control.

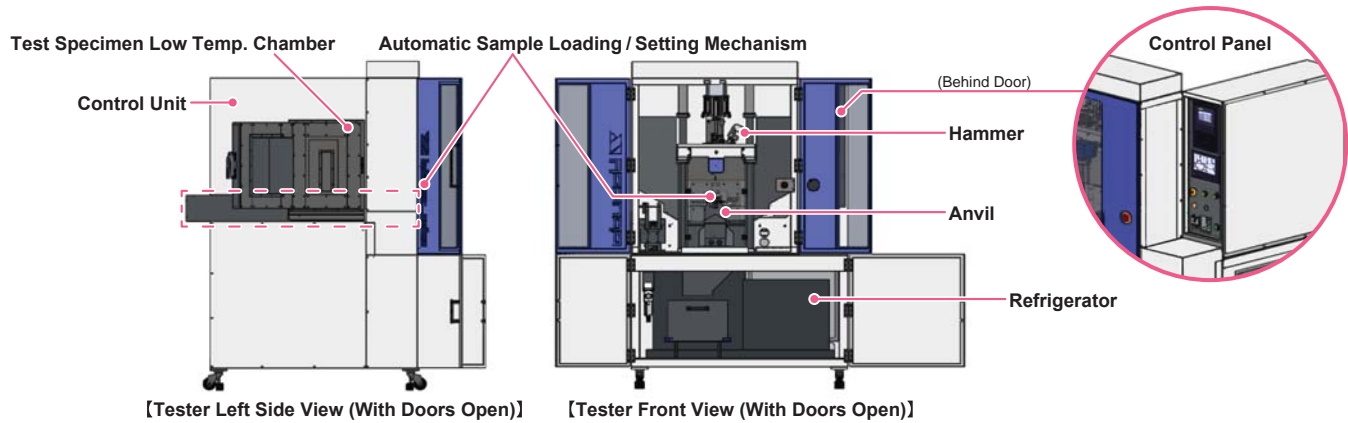
AUTOMATIC SAMPLE LOADING / SETTING MECHANISM PROVIDING ENHANCED TEST EFFICIENCY AND REPRODUCIBILITY



[Automatic Sample Loading / Setting Mechanism]

The test specimen is required to be tested within 5 seconds after exiting the Low Temp. Chamber by standards. This tester will load the specimen from the chamber to the anvil and set the specimen in place automatically and precisely with the Automatic Sample Loading / Setting Mechanism. This mechanism enables fast and precise testing with great speed and high reproducibility.

REFERENCE SPECIFICATIONS



CONTENT	REFERENCE VALUE
Dimensions	W1,300mm×H1,980mm×D1,355mm (Excluding Partial Protrusion)
Utilities	AC200V 3Φ 50/60Hz 20A (Without Options) Compressed Air 0.5MPa or above
Supporting Test Method	Charpy Impact Test (JIS K7111, ISO 179) CFRP (Carbon Fiber Reinforced Polymer) Charpy Impact Test (JIS K7077)* Izod Impact Test (JIS K7110, ISO 180, ASTM D256)*
Supporting Hammer Capacity	JIS/ISO Charpy 0.5, 1, 2, 4, 5, 7.5, 15, 25J JIS/ISO Izod 1, 2.75, 5.5, 11, 22J* ASTM Izod 1~21.7J* Please contact us for further variations.
Sample Set Method	Air Cylinder Powered Automatic Sample Loading/Setting Mechanism
Supporting Test Specimen Dimensions	80mm×10mm t4mm (JIS/ISO) 80mm×10mm t2mm or t3mm (JIS K7077)* 63.5mm×12.7mm t3.2mm (ASTM)* 63.5mm×12.7mm t6.4mm (ASTM)*
Sample Loading Capacity	70pcs/Magazin×3Magazines 210pcs Total (JIS/ISO Edge Wise)
Low Temp. Chamber Capacity	-70°C~60°C
Safety Measures	Interlock Equipped Safety Cover Low Air Pressure Detection Low Temp. Chamber Overheat Detection Refrigerator Overcurrent/Overload Detection/Breaker Ventilator Overcurrent/Overload Detection/Breaker Grounding Anchor/Bracket (Accessory)
Options	Test Results Mini-Printer (Thermal Dot) Specimen Dimension Automatic Measurement* Automatic Hammer Lifting Mechanism* Automatic Hammer Recognition* Automatic Anvil Recognition*

*Release scheduled for 2017.

- The specifications are for reference and may be changed without notice.
- The information is as of November 2016.

HEAD OFFICE
121-1 SHIMOYAMAGUCHI, YAMAGUCHI-CHO,
NISHINOMIYA-CITY, HYOGO
651-1412 JAPAN
TEL:+81-78-907-1511 FAX:+81-78-907-1522
E-mail:general@yasuda-seiki.co.jp

FACTORY
121-1 SHIMOYAMAGUCHI, YAMAGUCHI-CHO,
NISHINOMIYA-CITY, HYOGO
651-1412 JAPAN
TEL:+81-78-904-1964 FAX:+81-78-904-2890
E-mail:general@yasuda-seiki.co.jp

TOKYO BRANCH
9-4-101, 3-CHOME, ITABASHI, ITABASHIKU,
TOKYO
173-0004 JAPAN
TEL:+81-3-3579-8995 FAX:+81-3-3579-8997
E-mail:tokyo@yasuda-seiki.co.jp