



- No. 148-HD HEAT DISTORTION TESTER 🔥
- No. 148-HDA HEAT DISTORTION TESTER (FULLY AUTOMATIC) 🔥
- No. 148-HD500 HIGH TEMPERATURE HEAT DISTORTION TESTER 🔥

PLASTIC - RUBBER

ELECTRIC WIRE - CORD

LEATHER - VINYL LEATHER CLOTH

PAPER - PULP

TEXTILE - DYEING

PAINT - PIGMENT - INK



JIS-K7191-1, K7206, ASTM-D648, D1525, IEC-335-1, ISO-75-1, 306

FEATURE

■ No.148-HD HEAT DISTORTION TESTER
 This tester is used to evaluate the heat resistance of plastic. By applying specified bending stress to the test specimen while increasing the temperature of the oil bath at a certain rate, the operator is to measure the temperature at which the test specimen reaches standard deflection. The tester can also conduct VICAT softening temperature tests and ball pressure tests.

■ No.148-HDA HEAT DISTORTION TESTER (FULLY AUTOMATIC)
 This tester is the fully automatic version of the HEAT DISTORTION TESTER. The robotic mechanism enables the operator to conduct heat distortion tests and VICAT softening temperature tests automatically. By setting the test specimen to the specimen feeder, the computer software will continuously conduct tests for a maximum of 120 samples.

■ No.148-HD500 HIGH TEMPERATURE HEAT DISTORTION TESTER
 This tester adapts the air circulating heating system to test the heat resistance of plastic (usually super engineering plastic) up to 500 °C. The specimen racks are made by glass quartz to prevent measuring disturbances caused by deflections of the racks themselves.

SPECIFICATION

Model	No.148-HD	No.148-HDA	No.148-HD500
Hangings	3 Hangings, 4 Hangings, 6 Hangings (3 kinds)	3 Hangings, 6 Hangings (2 kinds)	3 Hangings
Temperature Range	Max. 300 °C (Oil Bath)		Max. 500 °C (Air Chamber, Nitrogen Gas Filling Device Attached)
Heat-Up Speed	120 ± 10 °C/hr, 50 ± 5 °C/hr		
Bending Stress	1.80 MPa, 0.45 MPa		1.80 MPa, 0.45 MPa
Test Load	DTUL: Choose 2 type from Initial 76.5 gf to Max. 3,210 gf Option: VICAT 10 ± 0.2 N, 50 ± 1 N Option: Ball Pressure: 0.4 to 2.0 N		
Displacement Measurement	Differential Transformer: 0.001 mm, Stroke 0 to ± 2 mm		
Pressure Foot	DTUL: R3.0 ± 0.2 mm Option: VICAT 1.000 ± 0.015 mm ² Option: Ball Pressure φ5 mm		
Support Length	64 ± 1 mm, 100 ± 2 mm (Universal)		
Refrigerating Device	Water Circulating System Option: Self Contained Refrigerator *For cooling of High Temperature or when Test Start Temperature is 20 to 23 °C		Fan type (Air Fan Cooling), 3 Fans, Carbon Gas Injection Cooling System
Churning Device	Propeller type 3 and 4 Stations: 2 Propellers 6 Stations: 3 Propellers		Propeller type, 3 propellers
Test Specimens	-	40 pcs × 3 Cassettes (Total 120 pcs) *When T10 mm	-
Software	Windows Compatible		
Accessories	Pressure Foot Adjustment, Specimen Holder		
Option	Silicon Oil, Safety Cover, Simultaneous Loading Device (Standard for No.148-HDA), Borosilicate Glass		Safety Cover, Simultaneous Loading Device, Borosilicate Glass
Power Source	AC 200 V, 1-Phase, 30 to 40 A, 50/60 Hz	AC 200 V, 3-Phase, 40 A, 50/60 Hz	AC 200 V, 1-Phase, 30 A, 50/60 Hz
Air Source	-	0.5 MPa or More	-
Dimensions/ Weight (Approx.)	W700 to 1,000 × D500 × H1,300 mm/ 170 to 220 kg	W930 to 1,150 × D600 × H1,300 mm/ 350 to 400 kg	W1,100 × D650 × H1,500 mm/ 250 kg

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