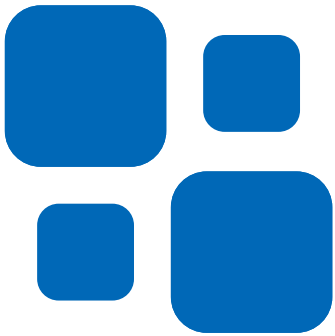
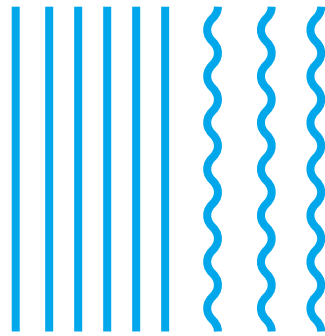


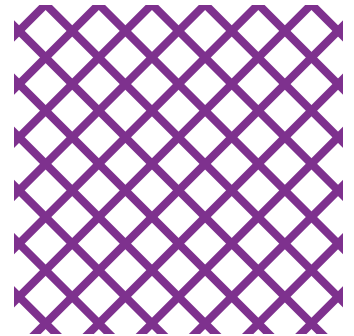
Materials Testing Machine



PLASTIC-  
RUBBER  
TESTING  
MACHINE



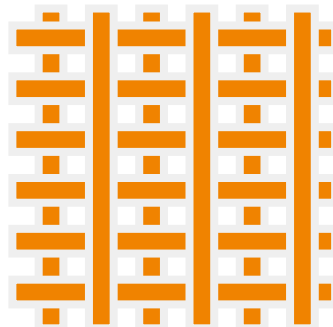
ELECTRIC  
WIRE-  
CORD  
TESTING  
MACHINE



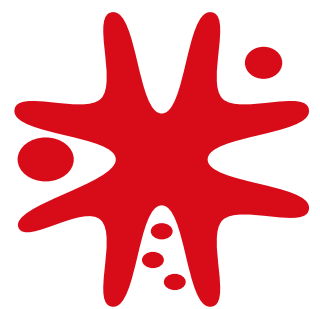
LEATHER-  
VINYL  
LEATHER  
CLOTH  
TESTING  
MACHINE



PAPER-  
PULP  
TESTING  
MACHINE



TEXTILE-  
DYEING  
TESTING  
MACHINE



PAINT-  
PIGMENT-  
INK  
TESTING  
MACHINE

Untuk Informasi dan Pemesanan dapat hubungi kami di :

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No. **120-SAS-2000** AUTOMATIC MELT FLOW INDEX TESTER

No. **120-LABOT-MI** FULLY AUTOMATIC MELT FLOW INDEX TESTER



No.120-SAS-2000



No.120-LABOT-MI

JIS-K6719-1/2, K6921-2, K6922-2, K6923-1, K6924-1, K6926-2, K7210, ASTM-D1238, ISO-1133

> FEATURE

■No.120-SAS-2000

This tester is used to measure the melt flow index of thermo-plastic. The melt flow index is acquired from the weight or the volume of the extruded specimen at a specified cylinder temperature and with a specified load of piston through the die. The tester is assorted with an automatic cleaning system which enables to perform 1 test cycle without discontinuation (option of 3 test cycles).

■No.120-LABOT-MI

This tester is equipped with robotic mechanism which enables fully automatic melt flow index tests up to a maximum of 50 samples (standard of 12 samples). The test conditions and the outputs can be set and observed through the computer software.

> SPECIFICATION

Model	No.120-SAS-2000	No.120-LABOT-MI
Hangings	1 or 3 Hangings (2 kinds)	12, 24 or 50 Hangings (3 kinds)
Die	φ2.095±0.005mm, L8.000±0.025mm	
Piston	φ9.475±0.010mm, L6.35±0.10mm	
Cylinder	Inner φ9.550±0.025mm, L160mm	
Temperature Range	Max. 300°C (Option: Max. 400°C)	
Test Load	Choose the Largest Load from 0.325, 1.20, 2.16, 3.80, 5.00, 10.00kgf, and 21.60kgf	
Test Method	Method A: Manual (Option: Automatic) Method B: Automatic	
Specimen Feeding	Automatic	
Weight Loading	Automatic	
Weight Change	Manual (Option: Automatic)	
Cylinder Cleaning	Automatic (Solvent Cleaning can also be Automatic)	
Die Cleaning	Automatic	
Piston Cleaning	Manual (Option: Automatic)	Automatic
Die Cleaning Rod Cleaning	Manual (Option: Automatic)	Automatic
Cleaning Gauze Feeding	Manual	Automatic
Data Processing	Method A: Manual (Option: Automatic) Method B: Automatic	
Method B Measuring	Rotary Encoder	
Software	Suitable for Windows	
Accessories	Cleaning Rod (Die & Cylinder), Solvent Cleaning Device, Specimen Cup, Cup Holder, Infundibulum, Die Gauge, Spirit Level, Dust Box, Gauze, Air Gun	
Option	Hastelloy Spec, Specimen Purging Device, Specimen Drying Device, Air Compressor, Temperature Calibration Device, Exhaust Fan (Standard for No.120-LABOT), Smoke-Detection Sensor (Standard for No.120-LABOT)	
Power Source	200V 1-Phase 8A 50/60Hz	
Air Source	0.5MPa or More	
Dimensions/ Weight (Approx.)	[1 Hanging] W625xD600xH1,150mm/100kg [3 Hangings] W625xD680xH1,150mm/120kg	[12, 24 Hangings] W950xD700xH1,750mm/300kg [50 Hangings] W1,100xD700xH1,750mm/350kg

**No. 226 HANDLE-O-METER**



No.226-PC

JIS-L1096, TAPPI-(T498), J.TAPPI-No.34

**> FEATURE**

This tester is used to evaluate the stiffness of paper, plastic film, and textile according to the Handle-O-Meter method. The operator is to place the test specimen on the specimen base which has a clearance.

**> SPECIFICATION**

<b>Specimen</b>	Max. W235mm
<b>Clearance</b>	5mm, 6.35mm, 10mm, and 20mm
<b>Pressing Board</b>	Curvature R1mm, L240mm, Material: Aluminium
<b>Folding Stroke</b>	12mm
<b>Measuring Range</b>	Full Scale 245mN (25gf), 490mN (50gf), and 981mN (100gf)
<b>Measuring Time</b>	15sec
<b>Accessories</b>	Inspection Weight
<b>Option</b>	Software, Chart Recorder
<b>Power Source</b>	AC100V 1-Phase 3A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	W550xD330xH300mm/30kg

**No. 304-YPH MULLEN HIGH-PRESSURE TYPE BURSTING STRENGTH TESTER**

**No. 305-YPL MULLEN LOW-PRESSURE TYPE BURSTING STRENGTH TESTER**



No.304, 305-YPO(Pneumatic Clamp Spec)

JIS-K6404-11, P8112, P8131, TAPPI-T403, T807, T810, ISO-2758, 2759

**> FEATURE**

This tester is used to evaluate the bursting strength of paper, paper board, liner film, cardboard, rubber, and plastic film. The operator is to tighten the test specimen to the tightening board and pressurize it with a rubber membrane mediator. The maximum pressure when the test specimen bursts will be the bursting strength of the test specimen. The user is to choose the high pressure type or the low pressure type according to the thickness and the bursting strength of the test specimen.

**> SPECIFICATION**

Model	No.304-YPH(High Pressure Model)	No.305-YPL(Low Pressure Model)
<b>Specimen</b>	100x100mm or More	60x60mm or More, T0.64mm or Less
<b>Clamp</b>	Upper φ31.50±0.1mm, Lower φ31.50±0.1mm, Upper and Lower both with 60°V Groove	Upper φ30.5±0.1mm, Lower φ33.1±0.1mm, Upper and Lower both with 60°V Groove
<b>Pressing Speed</b>	170±15ml/min	95±5ml/min
<b>Pressure Gauge</b>	Choose 2 kinds (2.0, 4.5, and 7.0MPa)	Choose 2 kinds (0.3, 0.6, and 1.4MPa)
<b>Accessories</b>	Rubber Membrane...10pcs, Membrane Gauge, Fixing Tool	
<b>Option</b>	Digital Pressure Gauge, Pneumatic Clamp Spec (YPO)	
<b>Power Source</b>	100V 1-Phase 10A 50/60Hz	
<b>Dimensions/Weight (Approx.)</b>	W400xD400xH850mm/80kg, W400xD500xH560mm/85kg (YPO)	



No. **306** FPC FLEXING TESTER

No. **306-L** FPC FLEXING TESTER WITH LOW TEMP. OVEN



JIS-C5016

#### > FEATURE

This test is used to evaluate the folding endurance of plastic film and flexible print circuit board. The operator is to attach the test specimen to a fixed board and a movable board so that the test specimen is attached at a prescribed radius. The movable board will bend left and right to flex the test specimen.

#### > SPECIFICATION

Model	No.306	No.306-L
Hangings	1 Hangings	4 Hangings(2 Hangings Simultaneous Drive×2)
Flexing Radius	Max.10mm	
Flexing Speed	Max.60cpm	
Flexing Length	Reciprocate 20(±10)mm, 40(±20)mm, 60(±30)mm	
Counter	6 Digits Preset Counter	
Temperature Range	-	-35-60°C(Refrigerator)
Option	Conduction Device(for FPC)	
Power Source	100V 1-Phase 5A 50/60Hz	AC200V 3-Phase 30A 50/60Hz
Dimensions/Weight(Approx.)	W360×D500×H620mm/35kg	W1,160×D730×H1,200mm/250kg



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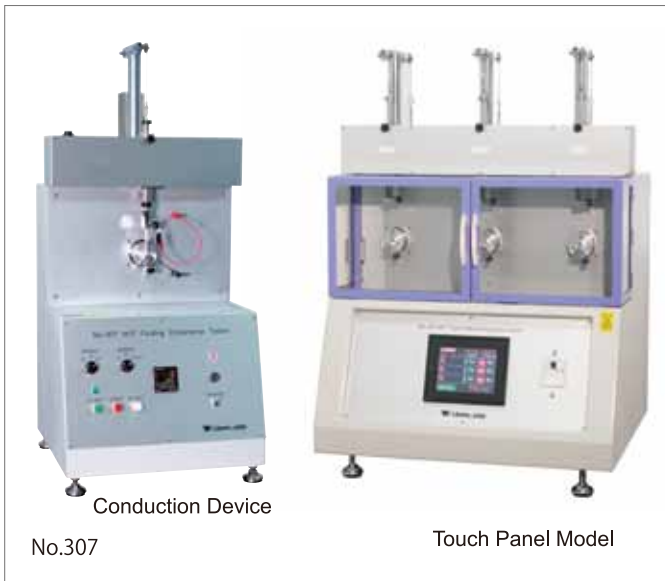
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**No. 307 MIT TYPE FOLDING ENDURANCE TESTER**

**No. 307-L MIT TYPE FOLDING ENDURANCE TESTER WITH LOW TEMP. OVEN**



JIS-C5016, P8115, R3420, ASTM-D2176, TAPPI-T511, ISO-5626

**FEATURE**

This tester is used to evaluate the folding endurance of paper, paper board, plastic film, and flexible print circuit boards. Applying prescript load when folding the test specimen left and right at an angle of 135° with a prescript speed, the operator is to count the number of times the test specimen was folded until it fractures. The user can choose the spring method or the deadweight method type of loading according to the extension of the test specimen. This tester is also used the folding indurance of metallic foil such as aluminum foil used in condensers.

**SPECIFICATION**

Model	No.307	No.307-L
Hangings	1, 3or 5 Hangings (3kinds)	
Specimen	W15.0±0.1mm, L110±5mm	
Test Load	4.9-14.7N (0.5-1.5kgf) (Spring Loaded or Dead Weight) (Standard:9.8N)	
	135°±2° (Option : 45°,90°,3 Stage Change-Over)	
Folding Angle	175±10times/min (Option:45times/min, 90times/min, 3 Stage Change-Over)	
Folding Speed	Curvature R0.38±0.02mm,L19.0±0.5mm, Spacing 0.25mm	
Folding Top	6 Digits Preset Counter	
Counter	-	-35-60°C (Refrigerator)
Option	Conduction Device(for FPC)	
Power Source	Depends on Specifications	
Dimensions/Weight(Approx.)	Depends on Specifications	



**No. 308 SCHOPPER TYPE FOLDING ENDURANCE TESTER**



JIS-P8114, TAPPI-T423, ISO-5626

**FEATURE**

This tester is used to evaluate the folding endurance of paper, paper board, and plastic film according to the Schopper type testing method. Folding the test specimen that is applied with tensile force to the long side direction vertically with the folding blade, the operator is to calculate the folding endurance from the number of times the test specimen required to fracture.

**SPECIFICATION**

Specimen	W15.0±0.1mm, L100mm, T0.25mm or Less
Folding Blade	T0.5±0.0125mm, Slit Spacing 0.5mm
Folding Roller	φ6mm, L18mm
Test Load	Initial 7.6±0.1N, Max. 9.8±0.2N
Folding Distance	20mm (Front-Back 10mm)
Folding Speed	115±10rpm
Counter	6 Digits Preset Counter
Option	Safety Cover
Power Source	100V 1-Phase 10A 50/60Hz
Dimensions/Weight (Approx.)	W450xD480xH430mm/60kg



## No. 309 FENCHEL EXPANSION AND CONTRACTION TESTER



J.TAPPI-No.27, ISO-5635

### > FEATURE

This tester is used to measure the stretching properties of paper and paper board when it is submerged in water. Attaching the test specimen to the upper and lower grips and applying tensile force, the test specimen is to be submerged into water with the above condition for a certain amount of time. The stretching properties of the test specimen will be read by the transducer and will be shown digitally.

### > SPECIFICATION

<b>Specimen</b>	W15mm, L150mm
<b>Grip Distance</b>	Max. 100mm (Pitch 5mm)
<b>Weight</b>	5g, 10g, 20g, 50g—1pc each.
<b>Displacement Measuring</b>	Differential Transducer: Scale 0.01mm, Stroke 0 - ±10mm, 4 Digits Digital Display
<b>Accessory</b>	Glass Beaker
<b>Option</b>	Chart Recorder
<b>Power Source</b>	100V 1-Phase 3A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	[Main Body] W250xD300xH1,050mm/30kg [Control Box] W400xD300xH150mm/6kg

## No. 310 KLEMM CAPILLARY RISE TESTER



JIS-L1907, P8141

### > FEATURE

This tester is used to evaluate the water absorbing capacity of paper and paper board with large water absorbability according to the Klemm method. Immersing the lower end of the test specimen vertically into water, the operator is to keep the test specimen in the water for 10 minutes and read the height that the water elevated due to capillary effect.

### > SPECIFICATION

<b>Hangings</b>	8 Hangings
<b>Specimen</b>	W15mm, L200mm or More
<b>Scale</b>	0 - 200mm (Scale 1mm)
<b>Dimensions/Weight (Approx.)</b>	W450xD150xH410mm/6kg

## No. 311 GURLEY TYPE STIFFNESS TESTER



JIS-(L1018), L1085, L1096, TAPPI-T543

### > FEATURE

This tester is used to evaluate the stiffness of firm paper, plastic film, and textile according to the Gurley method. Attaching the test specimen to the movable arm and rotating it left and right at a prescript speed, the operator is to read the scale when the lower end of the test specimen separates from the pendulum to calculate the stiffness of the test specimen.

### > SPECIFICATION

<b>Specimen</b>	W1/2", 1", 2", L1", 1-1/2", 2-1/2", 3-1/2", and 4-1/2"
<b>Grip Position</b>	1/2", 1", 1-1/2", 2", 2-1/2", 3", 3-1/2" or 4" from Pendulum Top
<b>Arm Rotation Speed</b>	2rpm
<b>Weight</b>	5g, 25g, 50g, and 200g
<b>Load Position</b>	1", 2" or 4" from Pivot
<b>Scale RG</b>	Left-Right 0 - 8 (Scale 0.2)
<b>Power Source</b>	100V 1-Phase 1A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	W350xD200xH500mm/13kg

**No. 312 TABER TYPE STIFFNESS TESTER**

**No. 312-D DIGITAL TABER TYPE STIFFNESS TESTER**



JIS-P8125, TAPPI-T489, ISO-2493

**> FEATURE**

■No.312  
This tester is used to evaluate the stiffness of paper board according to the load bending method. Fixing one end of the test specimen and bending it 7.5° or 15° at a constant speed. The operator is to acquire the bending moment when the loading length reaches 50mm.

■No.312-D  
This is the digital model of the TABER STIFFNESS TESTER where the stiffness of paper board can be directly read. The stiffness level will be indicated in mN-m terms. The tester can also calculate the resistance to bending (mN).

**> SPECIFICATION**

<b>Moment</b>	Max. 490mN-m (5,000gf-cm)
<b>Load Scale</b>	Left-Right 0 - 100
<b>Test Load</b>	100gf, 200gf, and 500gf
<b>Load Position</b>	100mm from the Pivot
<b>Bending Angle</b>	Left-Right 15° or 7.5°
<b>Bending Speed</b>	180±40°/min
<b>Specimen</b>	W30 - 40mm (Standard: 38.0±0.2mm), L70mm, T3.2mm or Less
<b>Roller</b>	φ8.60±0.05mm for Test, φ8.93±0.05mm for Positioning
<b>Power Source</b>	100V 1-Phase 3A 50/60Hz / 100V 1-Phase 3A 50/60Hz (Digital Type)
<b>Dimensions/Weight (Approx.)</b>	W300xD350xH500mm/25kg

**No. 315 ELMENDORF TYPE TEARING RESISTANCE TESTER**

**No. 315-D DIGITAL ELMENDORF TYPE TEARING RESISTANCE TESTER**



JIS-K7128-2, P8116, TAPPI-T414, ISO-1974, 6383-2

**> FEATURE**

■No.315  
This tester is used to evaluate tearing resistance of paper, paper board and plastic film according to the Elmendorf type tearing method. Swinging the fan shaped pendulum from a prescript height to tear the test specimen that has been cut beforehand. The operator is to read the workload to calculate the tearing resistance.

■No.315-D  
The digital type helps the operator to read the tearing resistance directly without having to calculate. Insert the number of the amount of test specimen to the touch panel and the device will automatically calculate the average tearing resistance from that amount. Also, the digital panel is equipped with loss energy calibration function so that pure tearing resistance of the test sample can be measured.

**> SPECIFICATION**

<b>Specimen Sheet</b>	Standard 16 sheets (Scale 20 - 80% sheets)
<b>Capacity</b>	0 - 1,000mN (Scale 1sheet/16sheets)
<b>Specimen</b>	W63±0.2mm, L76mm
<b>Slit Length</b>	20mm (Rest L43.0±0.5mm)
<b>Grip</b>	W36mm, D15.0±0.1mm, Spacing 2.8±0.3mm
<b>Option</b>	Digital Display Spec, Air Grip
<b>Power Source</b>	100V 1-Phase 3A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	W400xD260xH500mm/20kg W580xD380xH600mm/40kg (Digital Type)





## No. 316 RING CRUSH TESTER



JIS-P8126, ISO-12192 (Option : Z0402, Z0403-1, Z0403-2)

### FEATURE

This tester is used to evaluate the compressive strength of ring shaped paper board according to the ring crush method. By changing the jig (option), the tester enables to conduct adhesive power test of cardboard, flat surface compression test, and vertical compression test.

### SPECIFICATION

<b>Specimen</b>	W12.7±0.1mm, L152.4-2.5mm, T580µm or Less
<b>Specimen Holder</b>	Outer Frame: Inner φ49.30±0.05mm, D6.35±0.25mm, Inner Frame: Guide—9 kinds (To be Specified)
<b>Load Measuring</b>	Load Cell: Max. 1,999N
<b>Compression Plate</b>	100x100mm
<b>Compression Speed</b>	12.5±2.5mm/min
<b>Option</b>	Pin Attachment, Vertical Compression Jig
<b>Power Source</b>	100V 1-Phase 10A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	[Main Body] W350xD400xH540mm/60kg [Control Box] W135xD350xH250mm/10kg

## No. 318 WATER VAPOUR PERMEABILITY CUP



JIS-(K5400), K6549, Z0208, TAPPI-T448, T464, ISO-2528

### FEATURE

This tester is used to evaluate the permeability of plastic film and moisture-proof packaging material for processed paper and coating according to the cup method. The permeability obtained by this method will be the mass of vapour that went through the unit area of membranal material during a specific amount of time and prescript temperature and humidity conditions.

### SPECIFICATION

<b>Specimen</b>	φ70mm
<b>Vapour Transmission Area</b>	28cm <sup>2</sup> (Inner Diameter of Cup φ60mm)
<b>Accessories</b>	Cup, Ring, Glass dish—10pcs each Guide, Base, Weight, Cutter—1pc each
<b>Test Methods</b>	A Method: Temperature 25±0.5°C, Humidity 90±2% B Method: Temperature 40±0.5°C, Humidity 90±2%, Air Velocity 0.5 - 2.5m/s
<b>Dimensions/Weight (Approx.)</b>	W450xD250xH230mm/8kg (Including Case)

## No. 321 AUTOMATIC BEKK SMOOTHNESS TESTER



JIS-P8119, TAPPI-T479, ISO-5627

### FEATURE

This tester is used to evaluate the smoothness of paper and paper board according to the Bekk method. Pressure bonding the test specimen to the glass surface at a prescript pressure, the operator is to measure the time it required for a prescript amount of air under atmospheric pressure flowed through the contact surface.

### SPECIFICATION

<b>Specimen</b>	50mm Square or More, A4 size or Less Less than T0.5mm
<b>Glass Plate</b>	Ring shape, Outer 37.4±0.05mm, Inner 11.3±0.05mm (Effective Area 10±0.05cm <sup>2</sup> )
<b>Load Pressure</b>	100kPa
<b>Vacuum Range</b>	50.7 - 48.0kPa, Digital Display
<b>Air Volume</b>	1ml and 10ml (2 Stage Charge-Over)
<b>Timer</b>	Max. 999999 sec
<b>Power Source</b>	100V 1-Phase 3A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	W450xD400xH600mm/50kg

**No. 323 GURLEY TYPE DENSOMETER**

**No. 323-AUTO AUTOMATIC GURLEY TYPE DENSOMETER**



JIS-L1096, P8117, ASTM-D726, TAPPI-T460, ISO-5636-5

> FEATURE

This tester is used to evaluate the air permeability of paper, paper board, and textile. The operator is to measure the time that certain amount of compressed air passed through the tightly attached test specimen. The user is able to choose between the manual type which the time is measured by a stop-watch and an automatic type which the time is measured by a digital timer.

> SPECIFICATION

Model	No.323	No.323-AUTO
Specimen	50x50mm	
Clamp	φ28.6±0.1mm (Permeation Area 642mm <sup>2</sup> )	
Outer Cylinder	Inner φ82.6mm, H254mm, Marker 120mm from Bottom	
Inner Cylinder	Outer φ76.2mm, Inner φ74mm, H254mm, Mass 567±0.5g	
Air Volume	0 -100ml(Scale 25ml), 100 - 350ml(Scale 50ml)	
Time Measuring	Manual (Stopwatch)	Automatic Max. 99999.9 sec Detection: Micro Optical Sensor
Accessory	Machine Oil	
Option	Attachment (φ10mm)	
Power Source	-	100V 1-Phase 3A 50/60Hz
Dimensions/Weight (Approx.)	W150xD230xH580mm/13kg	[Main Body] W150xD230xH420mm/20kg [Control Box] W250xD360xH250mm/5kg

**No. 324 CANADIAN STANDARD FREENESS TESTER**



JIS-P8121, TAPPI-T227, ISO-5267-2

> FEATURE

This tester is used to evaluate the freeness of pulp. By filtrating a certain amount of test specimen, the operator is to read the amount of discharged test specimen that flew out from the side tube. The operator is to use the correction table so that the test data is calibrated to the Canadian standard freeness conditions of a standard density of 0.3% and standard temperature of 20°C.

> SPECIFICATION

<b>Specimen</b>	1,000ml (Bone-Dried 3g, Concentration 0.3%)
<b>Drainage Chamber</b>	Inner Hole φ101.5±0.4mm H127mm(Wire Screen to Rim) Air Cock Hole φ4.7mm or More
<b>Wire Screen</b>	φ111.0±0.5mm, 80mesh
<b>Measuring Funnel</b>	Opening φ204mm Overall L280mm Bottom Orifice φ3.05±0.01mm Side Orifice Inner φ13mm
<b>Accessories</b>	Measuring Cylinder, Jug
<b>Option</b>	Stand
<b>Dimensions/Weight (Approx.)</b>	W300xD270xH720mm/22kg

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## No. 325 SCHOPPER-RIEGLER TYPE FREENESS TESTER



JIS-P8121, ISO-5267-1

### > FEATURE

This tester is used to evaluate the freeness of pulp. By filtrating a certain amount of test specimen, the operator is to read the amount of discharged test specimen that flew out from the side tube to calculate the Schopper freeness. The down flow of the test specimen will be done by pulling up the circular coned valve upwards.

### > SPECIFICATION

<b>Specimen</b>	1,000ml (Bone-Dried 2g, Concentration 0.2%)
<b>Drainage Chamber</b>	Inner $\phi$ 137mm H150mm (Wire Screen to Rim)
<b>Wire Screen</b>	$\phi$ 112.9 $\pm$ 0.1mm, 100mesh
<b>Measuring Funnel</b>	Opening $\phi$ 115mm H150mm Bottom Orifice $\phi$ 2.4mm
<b>Accessories</b>	Measuring Cylinder, Jug
<b>Dimensions/Weight (Approx.)</b>	W250xD460xH1,100mm/18kg

## No. 330 PULP SCREENING TESTER



JIS-P8207

### > FEATURE

This tester is used to evaluate the fiber length distribution of paper making pulp. The 4 tanks which have different size of metal mesh, screens the test specimen. The operator is to measure the absolute dry mass of pulp in each tank to calculate the screening degree.

### > SPECIFICATION

<b>Specimen</b>	1,000ml (Bone-Dried 10g, Concentration 1%)
<b>Test Bath</b>	191x191x290mm
<b>Stirrer Rotation Speed</b>	800rpm
<b>Water Feed</b>	8.3L/min
<b>Wire Screen Diameter</b>	$\phi$ 102mm
<b>Screen Combination</b>	710, 355, 180, 106 $\mu$ m / 1,180, 600, 300, 150 $\mu$ m / 1,400, 850, 600, 300 $\mu$ m
<b>Option</b>	Flow Meter, Timer
<b>Power Source</b>	100V 1-Phase 15A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	W1,350xD300xH1,400mm/120kg

## No. 338 AUTOMATIC K.B.B. SIZING TESTER



JAPAN TAPPI-No.13/1, JIS-K8122

### > FEATURE

This tester is used to measure the K.B.B. size (water resistance) of paper and paperboard. The operator is to clamp the test specimen into one pair of dissimilar metal and soak the surface of the test specimen with an electrolyte liquid that is at a constant density. The tester will automatically measure the time it took to flow electricity due to the penetration of the electrolyte liquid.

### > SPECIFICATION

<b>Specimen</b>	90x90mm
<b>Moveable Electrode</b>	Zinc Made, For One Side Penetration, For Both Side Penetration
<b>Fixed Electrode</b>	Bronze Made
<b>Micro Current Meter</b>	0 - 100 $\mu$ m
<b>Power Source</b>	AC100V, 1-Phase, 3A, 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	W400xD350xH500mm/20kg

## No. 342 CLARK TYPE STIFFNESS TESTER



JIS-(L1018), L1096, P8143, TAPPI-(T451)

### > FEATURE

This tester is used to evaluate the stiffness of paper, plastic film, and textile according to the Clark's method. The operator is to clip the test specimen between the 2 rolls and rotate it left and right until the test specimen falls over 90°. When the test specimen falls over 90° the operator is to measure the brattish length to calculate the stiffness.

### > SPECIFICATION

<b>Specimen</b>	Paper: W15 - 50mm (Standard: 30mm), L75mm or More Textile: W20mm, L150 - 200mm
<b>Roller</b>	φ29.0±1.0mm
<b>Angle Scale</b>	Left-Right 0 - 90°(Scale 1°)
<b>Grip Rotation Speed</b>	1.0±0.1rpm (Manual)
<b>Dimensions/Weight(Approx.)</b>	W250xD200xH260mm/3kg

## No. 349 TAPE ADHESION ROLLER



Motorized

Manual

JIS-C2107, Z0237

### > FEATURE

This tester is to evaluate the tack strength of adhesive tape and adhesive sheet by pressure bonding the test specimen to the testing board. The tester is designed so that the mass of only the roller applies to the test specimen when the operator pressure bonds.

### > SPECIFICATION

<b>Specimen</b>	W25mm, L250mm
<b>Test Plate</b>	W50mm, L125mm, T1.1mm or More
<b>Roller</b>	φ85±2.5mm (Rubber T6mm), W45mm, Mass 2,000±100g or 1,000±50g
<b>Bonding Speed</b>	10mm/s (Manual or Motorized)
<b>Power Source</b>	100V 1-Phase 5
<b>Dimensions/Weight(Approx.)</b>	A 50/60Hz (Motorized)

## No. 352 GURLEY TYPE WATER ABSORPTIVENESS TESTER (COBB METHOD)



JIS-P8140, TAPPI-T441, ISO-535

### > FEATURE

This tester is used to evaluate the absorbability of non-water-absorbing paper and paper board according to the Coob's method. The mass of water that a unit area of one side of the test specimen absorbs in a certain amount of time will be recorded as the absorbability of the test specimen.

### > SPECIFICATION

<b>Metal Cylinder</b>	Inner φ112.8±0.1mm (Test Area 100cm <sup>2</sup> ), H25mm, T6mm
<b>Water</b>	100±5ml
<b>Option</b>	Metal Roller
<b>Dimensions/Weight(Approx.)</b>	W150xD150xH60mm/1kg





## No. 353 STANDARD SAMPLE CUTTER



### > FEATURE

This device enables the operator to exactly extract paper, paper board, and plastic film test specimens for the tensile test. The operator is to cut the test specimen by placing the cutter knife in the grooves of the device.

### > SPECIFICATION

**Specimen Size** W15mm, L250mm  
**Cutting Number** 5pcs  
**Dimensions/Weight (Approx.)** W310xD100xH35mm/5kg  
 \*Models with Other Dimensions can also be Specially Manufactured.

## No. 355 DOUBLE BLADE SAMPLE CUTTER FOR RING CRUSH TESTER



### > FEATURE

This device is used to extract paper board test specimens for the ring crush test. The operator can easily obtain test specimens by just lowering the lever.

### > SPECIFICATION

**Specimen Size** W12.7mm, L152.4mm  
**Dimensions/Weight (Approx.)** W550xD400xH650mm/32kg

## No. 360 CURL-SIZE TESTER



TAPPI- (T466), J.TAPPI-No.14

### > FEATURE

This tester is used to measure the curl size and the degree of curl of paper. The operator is to damp one side of the paper and measure the time it curled to its maximum size. The tester is usually used on test specimens that are applied for printing papers.

### > SPECIFICATION

**Specimen** W 38mm, L38~70mm  
**Float** W 0~25.4mm (Adjustable Type), D50.8mm  
**Angle Scale** 30~60° (Scale 1°)  
**Accessories** Specimen Mold  
**Dimensions/Weight(Approx.)** W210xD160xH110mm/2kg



## No. 367 WATER VAPOUR PERMEABILITY CHAMBER



JIS-(K5400), K6549, L1099, Z0208, TAPPI-T448, T464, ISO-2528

### > FEATURE

This device is a constant temperature and moisture oven when conducting vapour permeability test on plastic film, moisture-proof packaging material for processed paper, leather, coating, and textile.

### > SPECIFICATION

<b>Oven Dimensions</b>	W450xD450xH500mm
<b>Range</b>	Temperature 10 - 80°C, Humidity 30 - 95%
<b>Air Velocity</b>	0.5 - 2.5m/s
<b>Table Rotation Speed</b>	5rpm
<b>Power Source</b>	200V 3-Phase 30A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	W1,200xD700xH700mm/400kg

## No. 368 INTERNAL BOND TESTER



TAPPI-T569, UM403

### > FEATURE

This tester is used to evaluate the internal bonding strength of paper and paper board. The operator is to measure the workload it took for the hammer to peel the L-shaped clasp which is attached to test specimen on the test specimen adhesion board.

### > SPECIFICATION

<b>Capacity</b>	0 - 0.4J (Scale 0.005J) / 0 - 0.8J (Scale 0.02J) (2 ranges)
<b>Lift-Up Angle</b>	90°
<b>Bonding Area</b>	25.4x25.4mm (1x1")...5pcs
<b>Bonding Pressure</b>	50 - 200psi (20 - 90kgf/in <sup>2</sup> )
<b>Accessories</b>	L-shape Mounting Jig...10pcs, Bonding Plate...5pcs
<b>Option</b>	Digital Display Spec
<b>Dimensions/Weight (Approx.)</b>	W320xD450xH630mm/50kg

## No. 371-S CONTAINER COMPRESSION TESTER



JIS-Z0212, TAPPI-T804

### > FEATURE

This tester is used to conduct compression test to packaged cargo and container. The tester is especially suitable to evaluate compression strength of packaged cargo when it is lower loaded during its logistic process.

### > SPECIFICATION

<b>Maximum Load</b>	Max. 30kN
<b>Compression Plate</b>	1,000x1,000mm
<b>Plate Opening</b>	Max. 1,100mm
<b>Compression Speed</b>	10±3mm/min
<b>Accessory</b>	Chart Recorder
<b>Power Source</b>	200V 3-Phase 10A 50/60Hz
<b>Dimensions/Weight (Approx.)</b>	[Main Body] W1,500xD1,000xH2,300mm/1,200kg [Control Box] W520xD400xH1,200mm/70kg