



FOOTWEAR'S TESTING FOR INDUSTRIES



A LIST OF FOOTWEAR TESTING EQUIPMENT PRODUCTS WITH INDIAN SPECIFICATIONS

WATER VAPOUR PERMEABILITY APPARATUS



DESCRIPTION:
Compact lab testing instrument with digital display, designed for precise and reliable material/sample testing.

- | SPECIFICATION | STANDARD |
|---|-----------------|
| | IS:15298 |
| ➤ TESTING BOTTLE NUMBER: 6 Pcs | |
| ➤ BOTTLE MOUTH DIAMETER: 30mm | |
| ➤ BOTTLES HOLDER SPEED: 75±5cpm | |
| ➤ FAN BLADES: 90 x 75 mm, 3 FLAT BLADES IN PLANES | |
| ➤ INCLINED AT 120° TO EACH OTHER | |
| ➤ FAN ROTATE SPEED: 1400±100rpm | |
| ➤ SPECIMEN SIZE: ϕ 34mm | |
| ➤ AUXILLARY POWER SUPPLY: 220V AC, 50Hz, SINGLE PHASE | |

ROSS FLEX TESTER



DESCRIPTION: Multi-station lab testing machine for simultaneous, accurate material testing.

- | SPECIFICATION | STANDARD |
|----------------------------------|-----------------|
| | IS:3400 P-16 |
| ➤ FIXTURE: 6 Sets | |
| ➤ BENDING ANGLE: 90°±2° | |
| ➤ BENDING SPEED: 100 ±3 cpm | |
| ➤ WINDING SHAFT RADIUS: 5 ±0.3mm | |
| ➤ SPECIMEN DIMENSION: 152 × 25mm | |
| ➤ COUNTER: 0~99,999,999 | |

HEEL IMPACT TESTING



DESCRIPTION:
Compact lab testing machine for accurate material abrasion and wear resistance testing

- | SPECIFICATION | STANDARD |
|--|-----------------|
| | IS:15298 |
| ➤ CAPACITY: 0 ~ 18.3 J | |
| ➤ MIN. SCLAE: 0.86J | |
| ➤ STRIKER HEAD: (35 ± 2) × 25 × 6mm | |
| ➤ STRIKER HEAD CORNER RADIUS: R3mm | |
| ➤ PENDULLUM: Dia 108, thickness 49mm | |
| ➤ PENDULUM SHAFT: 25mm | |
| ➤ PENDULUM MOMENT HORIZONTALLY: 17.3N.m | |
| ➤ ADJUSTABLE RANGE OF BASE CLAMP: (H) ~ 25mm, angle 0 ~ 25mm | |

WATER VAPOUR ABSORPTION TESTER

DESCRIPTION: Multi-position laboratory test apparatus with stainless steel holders for

- | SPECIFICATION | STANDARD |
|---------------------------------|-----------------|
| | IS:15298 P-1 |
| ➤ POSITIONS: 6 SETS | |
| ➤ 2VOLUME OF TESTING CUP: 100ml | |



simultaneous sample testing.

- INNER DIAMETER OF HOLE: 35mm
- SAMPLE SIZE: 43mm

THICKNESS MEASUREMENT APPARATUS



DESCRIPTION: Digital thickness measurement apparatus for precise, quick, and repeatable material thickness testing.

SPECIFICATION STANDARD

IS:5914

- RANGE OF MEASUREMENT: 0 – 12.5 MM
- LEAST COUNT: 0.001 MM
- DIA. OF ANVIL: 60 MM
- DIA. OF PRESSURE FOOT (INTERCHANGEABLE): 9.5 MM & 28.7 MM
- APPLIED PRESSURE: 4.14 KPA OR 23.4 KPA
- OVERALL DIMENSION: 220 (H) X 100 (B) MM X (L) 170MM
- NET WEIGHT OF THE INSTRUMENT: APPROX. 1.9 KG (4.18LBS)

DUMB-BELL TEST PIECE CUTTING APPARATUS FOR DIFFERENT SIZE (CUTTING TOOLS) RING + STRIP SIZE



DESCRIPTION: Precision cutting tools for preparing dumb-bell, ring, and strip test specimens in multiple sizes.

SPECIFICATION STANDARD

IS:3400 P-1

TYPE: 2 OVERALL LENGTH (MINIMUM) (MM) : 75 WIDTH OF ENDS (MM) : 12.5+/-1 LENGTH OF NARROW PORTION (MM) : 25+/- 1 WIDTH OF NARROW PORTION (MM) : 4+/- 0.1 TRANSITION RADIUS OUTSIDE (MM) : 8+/-0.5 TRANSITION RADIUS INSIDE (MM): 12.5+/-1

WHOLE SOLE FLEXING TESTER

DESCRIPTION: Whole sole flexing tester

SPECIFICATION STANDARD

IS 8085 P-16



designed to evaluate footwear sole durability and flex resistance under repeated bending.

- TEST POSITION: 6
- CLAMP INTERVAL: 110 ± 1 mm, width 155mm
- FLEXING SHAFT DIAMETER: 30 ± 0.1 mm
- MOVABLE GRIPS DISPLACEMENT: 41.5 ± 0.5 mm
- SPEED: 140r/min
- BENDING ANGLE: $90 \pm 2^\circ$
- COUNTER: 0~99,999,999

INSULATED COLD BOX



DESCRIPTION: Insulated cold box used to condition and test footwear at low temperatures under controlled conditions.

- | SPECIFICATION | STANDARD |
|--|-----------------|
| | IS:15298 P-1 |
| ➤ AUXILIARY INPUT SUPPLY: 220V AC, 50Hz, SINGLE PHASE | |
| ➤ PROBES MEASURING INNER AND OUTER TEMPERATURE OF SHOES | |
| ➤ IN – CLOSET TEMPERATURE DISPLAY | |
| ➤ IN – SHOES TEMPERATURE DISPLAY | |
| ➤ TEST TEMPERATURES DOWN TO -20°C | |
| ➤ COPPER PLATE: of length (350 \pm 5) mm, width (150 \pm 1) mm and thickness (5 \pm 0,1) mm, positioned as illustrated | |

IMPACT TESTER



DESCRIPTION: Impact tester used to measure material resistance and performance under sudden impact force.

- | SPECIFICATION | STANDARD |
|---|-----------------|
| | IS:1989 P-2 |
| | IS:3976 |
| | IS:15298 P-1 |
| ➤ IMPACT HEIGHT: 0 – 1500 mm | |
| ➤ IMPACT ENERGY: 0 ~ 200J | |
| ➤ STRIKER: LENGTH 75 mm, angle 90° | |
| ➤ STRIKER SIZE: CORNER RADIUS R3 mm | |
| ➤ STRIKER MASS: 20 ± 0.2 KG | |

INSOLE AND INSOCK WATER ABSORPTION AND DESORPTION APPARATUS

DESCRIPTION: Apparatus for measuring water absorption and

- | SPECIFICATION | STANDARD |
|----------------------|-----------------|
| | IS:15298 |

desorption properties of insoles and insocks.

- ROLLER: DIAMETER (120 ± 1) mm, WIDTH (50 ± 1)mm
- 2SAMPLE SIZE: (110 ± 11)mm × (40 ± 1)mm
- FORCE: 80 ± 5 N
- WATER FLOW SPEED: 7.5 ± 2.5ml/min
- COUNTER:
- AUXILLARY INPUT SUPPLY: 220V AC, 50Hz, SINGLE PHASE



RESISTANCE TO HOT CONTACT APPARATUS

DESCRIPTION:

Resistance to hot contact apparatus for evaluating material behavior when exposed to high-temperature surfaces.

SPECIFICATION STANDARD

IS:15298 P-1

- INPUT AUXILARY SUPPLY: 220V AC, 50Hz, SINGLE PHASE
- DISPLAY: DIGITAL
- MATERIAL: SS
- DIMENSION OF FACE HEATING BEAT: SQUARE WITH SIDES OF 25.5 ± 0.1mm
- TEST SPECIMEN PRESSURE: 20 ± 2kPa
- MAXIMUM TEMPERATURE OF HEATING BEAT: 400°C
- BENDING MANDREL DIAMETER: 10 ± 1mm



RESISTANCE TO CRACKING APPARATUS

DESCRIPTION:

Resistance to cracking apparatus used to assess material durability and crack formation under repeated stress.

SPECIFICATION STANDARD

IS : 5914

- ANGLE OF FLEXING: UP TO 90°



WATER RESISTANCE TESTER

DESCRIPTION: Water resistance tester used to

SPECIFICATION STANDARD

IS:15298

evaluate material or footwear resistance to water penetration.



- BRUSH ROTATING SPEED: 85 ± 5 rpm
- HORIZONTAL SPEED: 20 ± 2 rpm
- WATER FLOW RATE: (0.50 ± 0.1) L/min
- COUNTER: 0 ~ 999 sec
- AUXILIARY INPUT SUPPLY: 220V AC, 50Hz, SINGLE
- PHASE

SLIP RESISTANT TESTER

DESCRIPTION: Slip resistance tester used to measure surface traction and anti-slip performance.



- LOAD: 100kg
- | SPECIFICATION | STANDARD |
|---|-----------------|
| | ISO:13287 |
| ➤ Vertical load: Max 1000N | |
| ➤ Horizontal load: Max 1000N | |
| ➤ Sliding velocity: Up to (1.3±0.03)m/s | |
| ➤ Period time: Preset 0-5s | |
| ➤ Vertical sensor: 1.25KN | |
| ➤ Horizontal sensor: 0.8KN×2 | |
| ➤ Testing rate: 50-500mm/s | |
| ➤ Testing surface: Ceramic, wood, PVC, stainless steel or other specified materials | |
| ➤ Power supply: 220V 50Hz | |
| ➤ Dimension: 1910mm×670mm×1050mm | |
| ➤ 75.2inch×26.38inch×41.34inch | |
| ➤ Net weight: 295kg | |
| ➤ 650.36lb | |

SHOES BENDING STIFFNESS TESTER

DESCRIPTION: Shoe bending stiffness tester used to measure footwear flexibility and resistance to bending



- | SPECIFICATION | STANDARD |
|---|-----------------|
| | ISO:20344 |
| ➤ CAPACITY: 200 N | |
| ➤ BENDING SPEED: 100MM/MIN (ADJUSTABLE) | |
| ➤ SAMPLE SIZE FRENCH STANDARD: SIZE 39, 42 ; BRITISH STANDARD : SIZE 6, 8 | |
| ➤ TEST LOAD: 30 N | |
| ➤ BENDING POSITION: 1/3 OF SHOES | |
| ➤ ANGLE RESOLUTION: 0.1° | |
| ➤ FORCE RESOLUTION: 1/50000 | |
| ➤ POWER: 1φAC 220V 50/60HZ 3A | |
| ➤ DIMENSION (W×D×H): 50×45×53 CM | |
| ➤ WEIGHTS: 40KG | |



APPARATUS FOR SHRINKAGE TEMPERATURE MEASUREMENT



DESCRIPTION:

Apparatus used to determine the shrinkage temperature of leather and footwear materials.

SPECIFICATION STANDARD

IS:5914

- TEST TEMPERATURE RANGE: NORMAL TEMP TO 150 DEGREE
- RATE OF TEMPERATURE RISING: 2 DEGREE / MIN
- TEMPERATURE DIFFERENCE : 0.5°C
- SPECIMEN : (50±2)MM×(3±0.2)MM; OR (2±0.2)M M 4 PIECES
- GLASS BREAKER : 500ML;
- INTERIOR DIAMETER:70±2MM; DEPTH: > 110MM ; SUITABLE FOR TEMPERATURE BEYOND 100 DEGREE
- HOOK FOR TEST : REMOVEABLE
- THERMOMETER: ACCURACY 0.5°C; SCALE VALUE 1°C
- HEATER: 2±0.2)°C/MIN
- POWER: AC220V, 50HZ, 7.5A

APPARATUS FOR DETERMINATION OF RESISTANCE TO FLEXING



DESCRIPTION:

This apparatus is designed to evaluate the resistance of materials, particularly footwear soles, leather, rubber, and similar flexible materials, to repeated bending or flexing. It simulates the flexing action experienced during actual usage, helping to assess the material's durability, fatigue life, and structural integrity.

SPECIFICATION STANDARD

IS:16645

- BENDING ANGLE: 30°, 45°, 50°, 60°, 90° (ADJUSTABLE)
- TEST SPEED: 50~150/ min
- DISPLAY: DIGITAL

Zipper Fatigue Tester

DESCRIPTION:

The Zipper Fatigue Tester is designed to evaluate the durability and

SPECIFICATION STANDARD

DIN 3419-1
ASTM D2061
BS 3084



performance of zippers by simulating repeated opening and closing cycles. It helps determine the resistance of zippers to wear and mechanical fatigue, ensuring reliable functionality over the product's lifetime.

CONTROL MODE: TOUCH SCREEN
HORIZONTAL FIXTURE WIDTH:
25MM
TEST SPEED : 30CPM
RECIPROCATING STROKE: 75MM
ANGLE: OPEN: 30DEGREE.
CLOSE: 60DEGREE
COUNTER: LCD, 0-999999
POWER SUPPLY: AC 220V 50/60HZ
DIMENSIONS : 480 X 370 X60 0MM
WEIGHT: 61KG

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