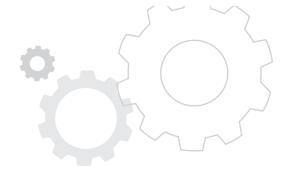






Quality Never Ends...







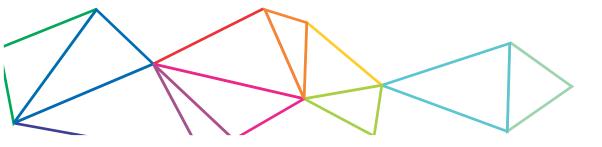
## **Company Profile**

STECH Engineers the company from India established in the year 1998, started Manufacturing Rubber Hardness Tester and gradually grown to manufacturing most of the Rubber Testing equipments. Within a short period the company has achieved a well reputation in the field of Rubber Testing equipments and a front leader in providing high Quality Testing Machines at very affordable price. We have well qualified technical professional and associates in our organization to serve with improving Quality Products, which meet all International Standards and Latest Methods for very convenient and easy Quality Assurance. Our aim is to serve industries an everlasting performance in the field of manufacturing material testing equipments. We also manufacture various testing equipment for Textiles, Paint, Powder coating, Chemical/ Metals etc other than our core product. The company is currently having a good customer background at National and International Level. We also provide Calibration services to our customers with valid Certificate Traceability to NABL that ensure up-to-date perfection of their laboratory. We strictly follow all the standard procedure for manufacturing Testing Equipments and committed to provide all time service and support to our customers after sales of our products. We believe that the customers are the future of every industry and their trust and support is their continual growth. We hope that STECH Engineers will emerge one of the most reputed firm in the field of manufacturing and supplying materials testing equipments with the trust and support of our esteemed customers worldwide.

**STECH** Engineers is committed to total customer satisfaction by delivering of quality products on time. All Levels of the Organization are dedicated to the process of meeting or exceeding customer's Requirements.

"We assure our customers to provide the best ownership experience by delivering the highest quality products, expert support and world-class service at **STECH** Engineers."

The accuracy, reproducibility and reliability of test results produced by our systems is critical to the success of our customers' businesses and to the quality of their products.







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#### UNIVERSAL TESTING MACHINE

<u>The New SE- 5000 Range:</u> New high performance and high speed modular electronic system with improved data acquisition rates up to 1000 Hz.

**Force Measurement:** Universally Calibrated, better than Grade 0.5EN 10002.2, DIN 51221, ASTM E-4, AFNOR A03-501.

<u>Load Cells kN</u>: 0.2, 0.5, 1, 2.5, 3, 5,10, 20, 25, 50, 100, 150, 200, 250, 300, 500, 600, 1000 KN

**Extension Measurement:** Full Frame length to0.00001 mm. Resolution 0.000001 mm. Accuracy 0.00001 mm

**Raspberry Reports:** A report enhancement package for long term statistics & control charts with export in Access date table format.

**Extensometer:** Non-contact Video extensometer suitable to measure both axial and transverse strains for r & n values

- Poissons Ratio. Contact type extensometer also offered.

**RASBERRY** ANALYSIS Software Gives full control of test parameters with autoset-up of the tester. Full test analysis with statistical & graphical print-out.

- Universal Testing Machine or Tensile Tester are used in all industries from exacting research work to routine quality control in laboratories world wide.
- The New S-Series Range is the very latest expression of leadership in design and quality. They bring a new
  ease testing to material and products.
- Touch Screen Model and PC Compatible Model offered in all the capacity.
   With the addition of only a printer, hard copies of the test report including results, statistics and graphs can be generated
- With the addition of a PC and printer full control and testing can be produced using Raspberry Software.
- The testers have a full colour active matrix display with wide viewing angle. The full alpha numeric keypad with tactile buttons is fully sealed for industrial applications.
- The robust straining frames, have high stiffness which can be maximised by using the K factor input facility, this effectively eliminates all deflection errors in the system.
- Ease of testing with digital sample break detection, autoranging, quick tare and auto return facilities. 800% overload protection capability of loadcells in tension and compression mode.
- Automatic identification of loadcells. On-board 32-bit embedded controller technology for data handling.

MODEL	SE-005	SE-010	SE-020	SE-050	SE-100		
Load Capacity (KN)	5	10	20	50	100		
Test Grade	0.5	0.5	0.5	0.5	0.5		
Testing Force Accuracy	±0.02%	±0.02%	±0.02%	±0.02%	±0.02%		
Testing Force Range (FS)	0.02%-100%	0.02%-100%	0.02%-100%	0.02%-100%	0.02%-100%		
Displacment Accuracy	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
Displacement Resolution (mm)							
Speed Range (mm/min)	0.01-1000	0.01-1000	0.01-1000	0.01-1000	0.01-1000		
Control Accuracy	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
Crosshead Travel (mm)	1050	1050	1050	1050	1050		
Max. Tensile Testing Space (mm)	800	800	800	800	800		
Max. Compression Testing Space (mm)	900	900	900	900	900		
Test Width (mm)	400	450	450	450	450		
Load Cell	High precision load cell offers high stiffness, high stability and high linearity over load protection, lateral loading protolong Bi - direction allows tension and compression test						
Position Limit Switch	Upper and Lower Lights						
Power Supply	AC 220 V ±10%, 50Hz / 60HZ						
Net Weight (KG)	265	275	380	375	400		

Note :- Extra wide and/or extra height frames are available, power supply is completely customizable, Tensile space, Test width and speed is completely customizable,



# FULLY AUTOMATIC COMPUTERISED SINGLE SCREW TENSILE TESTING MACHINE

#### Specification:

- Data Processing Facility: Embedded controller inside with external monitor
- · Load cell: with one load cell
- Crosshead speed: 5mm/min to 600mm/m in
- Accuracy of Crosshead speed: 1 mm
- Trip Space for Crosshead: 1000 mm
- · Testing space Width: unrestricted
- Accuracy of force: + 1% of applied force
- Speed setting Method: Steeples speed setting
- Clamp: With one mechanical clamp for tension set
- Power Unit: Electronic Variable frequency drive
- Motor: AC servo controlled motor
- Screw: With single ball screw
- Power Source : AC 230 + 10%, 50/60 + 3Hz
- Test results includes ultimate Tensile Testing Strength at break
- Maximum extension at break
- Percentage of Extension
- Percentage of Compression
- Yield stress, Yield Point, Young Modules
- Flexural stress, Flexural modules
- Graph of stress vs strain
- Specification of specimen ( Data Sheet )
- All operations through computer or control systems
- All electrical and electronic safety features provided
- Self Calibration Software for load and extension provided
- Power Supply: 240V, 50Hz, Single Phase



- Maximum weight of machine : 550kg. (approximate)
- Measure Unit: S. I. metric or Imperial unit Functions of the apparatus: Applied to rubber plastic leather metal nylon code, textile fabric, providing stress, strain & elongation.
- Customized Testing requirements can also done with specified testing method (ie. Bending, Bonding, Flexural, Pulling, Punching, etc.)

#### **APPLICATIONS**

- Adhesives
- Adhesive Label / Tape
- Aerospace
- Automotive
- Box Compression
- Cable & Wire
- Cargo Restraint
- Carpet Testing
- Composite Testing
- Concrete
- Container Testing
- Cord & Rope Testing
- Corrugated Board
- Elastic Testing
- Embellishments Testing
- Fabric Testing

- Fasteners
- Fibre Testing
- Foam Testing
- Food Testing
- Footwear Testing
- Geotextile
- GFRC Testing
- Glass Testing
- Identification / Credit Card
- Insulation Testing
- Marks & Spencer
- Medical Product
- Metals TestingNarrow Fabric
- Netting
- Packaging Testing

- Paper Testing
- Pipe Testing
- Plastic Film Testing
- Plastic Sheet Testing
- Plastics Testing
- Products Testing
- Polypropylene Sack
- Rubber Testing
- Spring Testing
- Switch Operating Force
- Timber Testing
- Tov Testina
- Webbing, Belting
- Wood Based Panel
- Yarn & Thread Testing
- Zip Testing





#### **GRIPS & ACCESSORIES**

#### Test Accessories for UTM :

- Wedge Action Grips
- Pneumatic Grips
- Hydraulic Grips
- Strain Gauges / Extensiometer
- Compression/Bending/Puncture Testing Grips & Fixtures
- Environmetal Weather Conditioning Chamber for high & low temperature.





## FULLY AUTOMATIC ELECTRONIC DIGITAL DISPLAY TENSILE TESTING MACHINE

With inbuilt result calculating software and Printer Readout for testing Tensile & Elongation of Polymer materials as per International Standard, as per ASTM D412. **Model: SE/EDTM/2000.** 

#### **FEATURES:**

- a) Accuracy / Resolution: 0.5%
- **b)** Large LED Display for Load and Elongation.
- c) Peak Value hold and store in memory upto 20 tests.
- d) Auto stop at specimen break and keeping the Cross Head grip at test position
- e) High Strength parallel wave's grips for polymer test specimens.
- f) Microprocessor control panel for easy operations.
- g) Fully powder coated body for long period corrosion and weather hazard protection.
- **h)** Speed of Cross Head : 50mm/min to 500mm/min or as per standard specification for testing materials.
- i) Cross Head Clearance: 350mm
- j) Elongation upto 800mm and 0.1cm Resolution

#### 90° / 180° PEEL ADHESIVE TESTER MACHINE

FULLY AUTOMATIC DIGITAL PEEL ADHESION TESTER Capacity: (50Kgf)

#### Specification:

Least count : 10 gm

Cross head speed: 300mm/min
 Trip Space for Crosshead: 800 mm

Digital Load & Length Indication with High & Low reading

#### **Test Facilities:**

- 90° Peel test with attachment
- 180° Peel test with attachment
- Loop tack test & Tensile test of various materials







#### HYDRAULIC SPECIMEN CUTTING PRESS

Hydraulic type specimen cutting press is suitable for quick and accurate cutting of specimen. It can accommodate various type for cutting die and the pressure can be released quickly to remove the specimen.

Capacity: upto 5 tons.



#### **PNEUMATIC SPECIMEN CUTTING PRESS**

Pneumatic specimen cutting press for cutting flat rubber, plastic, paper and other flexible and rigid polymer material into samples or standard shape specimens.

Pneumatic specimen press is able to coordinate with various cutters to cut them into samples or into standard shape specimen.

Ready for tensile resistant test, tearing test, elongation, aging sample and other test. Pneumatic specimen press takes advantages of pneumatic compressor to provides an automated media force to give a quick and easy cutting environment for specimen preparation. This test product can meet your testing requirement & supply solutions of problems.





# TOGGLE SPECIMEN CUTTING PRESS: (CUTTING STAND)

Toggle Press is very convenient handy equipment for specimen cutting with high leverage & accurate cutting in one quick single stroke. It allows only the required thickness of specimen to cut and keep the die edges from extra deep penetration.

#### Specification:

- Stroke : 25mm.
- Specimen Thickness upto : 20mm.
- Hand Lever Operation.
- Accommodate various types of Punching Dies.
- Cutting Completes in One Single Stroke.

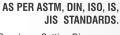




#### **SPECIMEN MOULDS**

#### **SPECIMEN CUTTING DIES**





Specimen Cutting Dies as per International Standard are available in different size and shapes. Made with Hardened TOOL STEEL

















#### **SPARK TESTER**

#### TESTING OF RUBBER LINED VESSELS:

The handle of the spark tester is attached to a brush consisting of very fine brass mesh. This brush is then moved over the lining of the vessel or tank and every fault in the lining is detected by the formation of a bright spark from the brush to the defective spot.

Depending upon the size of the area brushes of various widths are selected. Usually brushes of six inches and twelve inches widths are popularly used. In case, the lining of pipes of small diameters is to be tested, then copper wires bound together in the form of a broom is used, and in the case of pipes having a large diameter circular disc electrodes are passed through them. In case of faulty lining of such pipes a formation of a bright spark will be visible from either of the ends. Defects of lining in the inside of pipes cannot be repaired and the lining should be burnt and replaced by a new one.

- Double switch: 0 to 10 KV & 10 KV to 40 KV (Selectively)
- · Continuous Tests period: 10 min.
- Power Supply: 220 240 V-AC

#### **DIGITAL BOND / PEEL ADHESION TESTER**

#### **DIGITAL BOND / PEEL ADHESION TESTER**

Determining the strength of adhesion by breaking away between the two layers bonded closely at a constant rate provided.

The smaller specimen is wrapped around the sled and the higher specimen is clamped to the top of platform. A load cell type dynamometer is provided for measuring force for moving the sled. Most suitable for checking the co efficient of friction of rubber sheet, fabrics, leather, rexine, paper, thin films etc. Available in different Capacity and Accuracy







#### **CUTTING KNIVES, DIES AND MOULDS**

#### **Universal Sample Cutting Knives and Dies**

**Stech** range of cutting knives and dies are durable and build to last, machined from a solid piece of steel, precision ground and hardened. **Stech** cutting knives guarantee optimal dimensional stability, form accuracy and a long lifetime. All are available with automatic ejectors.

Standard	Туре	Application	l <sub>3</sub> mm	l <sub>1</sub> mm	b <sub>2</sub> mm	b <sub>1</sub> mm	h mm	L <sub>o</sub> mm	L mm	Shape	Part - No
ISO 37	1	Preferred size	>115	33±2	25±1	6+0.4	2±0.2	25±0.5	-	-	MC 1.1010
ISO 37	1A	Smaller size	100	20+2	25±1	5±0.1	2±0.2	20±0.5	-		MC 1.1011
ISO 37	2	Smaller preferred size	>75	25±1	12.5±1	4±0.1	2±0.2	20±0.5	-		MC 1.1012
ISO 37	3	Smaller size	>50	16±1	8.5±0.5	4±0.1	2±0.2	10±0.5	-		MC 1.1013
ISO 37	4	Very small size	>35	12±0.5	6±0.5	2±0.1	1±0.1	10±0.5	-		MC 1.1014
DIN 53504	<b>S1</b>	Larger size	115	33±2	25±1	6+0.4	2±0.2	25	-	-	MC 1.1020
DIN 53504	S2	Preferred size	75	25±1	12.5±1	4±0.1	2±0.2	20	-		MC 1.1021
DIN 53504	S3a	Smaller size	50	16	8.5	4	2±0.2	10	-		MC 1.1022
DIN 53504	\$3	Very small size	35	12±0.5	6±0.5	2±0.05	1±0.1	10	-	-	MC 1.1023
ASTM D412	С	Preferred size	>115	33	25±1	6+0.05	1.33.3	25±0.25	-	<b>—</b>	MC 1.1030
ASTM D412	Α	Possible size	>140	59±2	25±1	12+0.05	1.33.3	50±0.5	-		MC 1.1031
ASTM D412	В	Possible size	>40	59±2	25±1	6+0.05	1.33.3	50±0.5	-		MC 1.1032
ASTM D412	D	Possible size	>100	33±2	16±1	3+0.05	1.33.3	25±0.25	-		MC 1.1033
ASTM D412	Е	Possible size	>125	59±2	16±1	3+0.05	1.33.3	50±0.5	-		MC 1.1034
ASTM D412	F	Possible size	>125	59±2	16±1	6+0.05	1.33.3	50±0.5	-	-	MC 1.1035
ISO 37	A	Normal size	52.6	44.6±0.2	-	-	4±0.2	152.7	-	0	MC 1.1016
ISO 37	В	Small size	10	8±0.1	-	-	1±0.1	28.26	-	0	MC 1.1017
DIN 53504	R1	Preferred size	52.6	44.6	-	-	4±0.2	152.7	-	0	MC 1.1025
DIN 53504	R2	Small size	44.6	36.6	-	-	4±0.2	127.5	-	0	MC 1.1026
ASTM D412	1	Preferred size	17.9	15.9	-	-	13.3	50	-	0	MC 1.1037
ASTM D412	2	Larger size	35.8	31.8	-	-	13.3	100	-	0	MC 1.1038
ISO 34-1	A	Tear test, trouser preferred size	>100	-	15±1	-	2±0.2	-	-	_	MC 1.1050
ISO 34-1 and ASTM D624	B C	Tear test, angle with/ without nick	>100	-	19±0.05	12.7±0.05	2±0.2	-	-	~	MC 1.1055 MC 1.1056
ISO 34-1 and ASTM D624	C B	Tear test, crescent with/ without nick	>110	-	25±0.5	10.5±0.05	2±0.2	-	-		MC 1.1057 MC 1.1058
ASTM D624	_	cutting die A	42	-	-	10.2	-	-	-	^	MC 1.1060

<sup>•</sup> Cutting is only possible for specimen showing a hardness less than 85 Shore A. Harder materials shall be machined by use of milling machines or other convenient machinery acc. to ISO 2818.

<sup>•</sup> This specimen shape is specially designed for moulding. Cut specimens do not correspond to any standard.

<sup>•</sup> Value indicates the upper and lower tolerances.





#### **MOVING DIE RHEOMETER**

#### As per Standard / Test Methods ISO 6502, ASTM D6204 DIN 53529-3

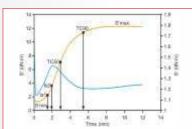
STECH MDR is the easiest to operate and most cost-effective way to determine viscoelastic properties of polymers and rubber compounds before, during and after cure. The acquired data gives exact information about process ability, cure characteristics, cure speed and the behavior of the compound after-cure; The STECH MDR comes as a complete and ready-to-test set consisting of the Rheometer itself, an external Personal Computer with the latest Windows Operating system, keyboard and mouse. The STECH MDR also features an Ethernet Interface and can therefore be directly integrated in any customer's factory network, guaranteeing the most stable data transfer and communication in any laboratory or factory environment, allowing data access at the instrument and from remote and office workstations, creating a digital process chain and integrated workflow based on a digital data repository, eliminating the need of result printing after each test series. Designed as a table top instrument utilizing only minimal benchspace, the STECH MDR is synonymous with a reliable but easy and efficient testing operation. The instrument is equipped with the latest PLC-based control and data acquisition Electronics, ensuring highest data acquisition precision and reliability, along with superior temperature control - improving overall data significance and laboratory efficiency. The instrument comes with the Analysis software for test configuration management, data recording of historical data as well as online statistical process control (SPC)

Moving Die Rheometer - Overview Because of the very high measuring precision of the STECH MDR, the smallest variations of ingredients can be detected in the test result data, which simplifies quality control and the development of new rubber compounds.

#### Important advantages for the user are:

- Lower costs per test
- Faster incoming goods inspection and batch release due to easy usability and efficient operation
- Intuitive, simple operation of the Analysis Software
   No separate sample preparation is necessary

For the best possible determination of all relevant test parameters the STECH MDR is equipped with a universal test configuration Management.



MOVING DIE RHEOMET	ER ( with Computer set) As per Standard
Sample volume	: About 4.5 cm 3
Oscillating Amplitude	: + 0.5°,1°,3°
Oscillating Frequency	: 100 cycles per minute (1.66 HZ)
Temperature	: Microprocessor controlled
Range	: 100° - 200°, PID control
Electrical	: 220 Volts AC60 Hz, Single phase
Air Pressure	: 60 PSI (4.2 kg/cm2, minimum
	( Air compressor to be user own equipment )
Printed Data: Torque	: S'@ML, S"@ML, Tan Delta@MLS'@MH , S"@MH,
	Tan Delta @MH Ts1, Ts2, Ts5, Tc10, Tc50, Tc90
Graphic Output	: Elastic Torque S'Tan Delta Viscous Torque S
Testing Standards	: ASTM D 5289, ISO 6502
Weight	: 275 kg
Panel ( Measurement )	: i ) Main panel 56(H) x 24 (W) x 24 (L) inches
	( 1422mm x 610mm x 610mm )

#### **MOONEY VISCOMETER**

#### **FEATURES:**

#### **COMPUTERIZED TESTING**

- Automatic machine start & stop for each specimen
- Continuous testing of samples depending upon batches, stock
- Each specimen graph is shown with separate color.
- Unlimited number of graph per screen
- The results are marked on the graph during display
- Each user is identified and can be given a Passwords
- Software provides automatic or user defined data backup and compact option.
- User can view, delete specimen for a period
- User can write backup on CD

#### STATISTICAL QUALITY CONTROL:

- 3 quality control gates (3 QC Gates)
- User can define Master graph
- Choices of selecting any parameter as pass fail criteria
- Extensive statistical analytical parameters such as CP, Cpk, Cofi. of Variation, MI, MH, ML, T.MIN, T.MAX, TS2, TS1, TC50, TC90, TP, Opt. Cure Rate, End Temp., Trend, Reversion Time, Value (Bar Graph).
- User can add own comments for future references for each stock
- A graphical report can also be seen on screen while testing to compare the specimen
- · Master graph facilities of single parameter result to study
- The statistical analysis can also help in setting Quality control parameters of stock







#### **RUBBER HARDNESS TESTER** (SHORE HARDNESS)

Various models of Hardness Tester for the accurate measurement of hardness of the Vulcanised rubber, plastic, ebonite, fiber and all other soft and hard elastomers as per latest American standard ASTM D2240 and German Standard DIN 53505. All the below models are available in Digital and Analogue with suitable indentors, master gauge for periodical checking. The Durometer may be manually applied or, for better repeatability and accuracy, mounted on an applicable operating stand. Designed to meet a wide variety of applications, the Shore Durometer is available in scales A, B, C, D, DO, E, O, M, OO, OOO-S and Calibration certificate and Guarantee certificate in a deluxe wooden box.

#### Analogue Models

#### SHORE A Model: DSHT AIII DUROMETER,

as per the latest German Standard DIN 53505

and latest American Standard ASTM D2240.

For soft Rubber, Plastic, Fiber glass and other soft ElasticMaterials.

■ Range : 0 - 100° Shore Unit

Least Count : 1° Shore Unit



### Digital Models

#### **DIGITAL SHORE A DUROMETER**

Most suitable hardness tester for quick and accurate hardness determination, long life and robust electronic hardware for error free testing.

#### Specification:

a. Power Supply: 1.5V LR 44 battery. b. Indenter: as per specified types.

c. Operating Key: ON / OFF & Zero / ReSet

d. Range: 0 to 100 shore unit e. Least Count : 1shore Unit

Available Scales: A, D, O, B C, DO, AO, E, OO, 000, 000S, E & Asker C

#### SHORE D Model: DIII DUROMETER,

as per the latest German Standard DIN 53505

and latest American Standard ASTM D2240.

• Range: 0 - 100° Shore Unit Least Count : 1° Shore Unit



#### EDHT I - Digital Durometer:

Most suitable hardness tester as per the latest German Standard DIN 53505 and latest American Standard ASTM D2240., for quick and accurate hardness determination, long life and robust electronic hardware for error free testing.

#### Specification:

a. Power Supply: 1.5V LR 44 battery.

b. Indenter: as per specified types.c. Operating Key: ON/ OFF& Zero./Re Set

d. Range: 0 to 100 shore unit

e. Least Count: 1shore Unit

#### **SUPER A DUROMETER** ( Model No : DSHT II )

Type Shore A as per Standard ASTM D2240 & DIN 53505 with inbuilt load cartridge for 10N Force.

Most suitable hardness tester for error free hardness determination on various test specimen

Dial Indication: 0 - 100° Shore Unit Indicator Type: Truncated Core Max Spring force: 855gm



#### SUPER DUROMETER ( DSHT II)

Durometer Hardness Tester with extra bottom designed for error free reading and provides limit point for maximum pressing on the specimen.

Most suitable hardness tester for Tyres & Tubes and similar type of varous rubber parts.





#### **LONG PROBE**

It is precision with slim probe, highly accurate and repetitive.

Specially designed foot for testing in narrow areas and irregular shapes specimen.

Available in Digital & Analog models of all types as per International standard



#### SHORE 00 (Model: DSHT 00)

Hardness Tester as per the latest German Standard DIN 53505 and latest American Standard ASTM D2240.

Spherical Radius: 1.20mm
Diameter: 2.40mm
Spring Force: 113.3gf
Dial Reading: 0-100 Shore '00'
Least Count: 1° Shore Unit



#### SHORE 000

Durometer for Ultra soft gels and sponge rubber (Model: DSHT 000) 6.35 Spherical Radius

Diameter: 11.6 mmExtension: 2.54 mmSpring Force: 113.3gf

• Dial Reading: 0-100 Shore '000'



#### **PACKAGE HARDNESS TESTER**

Textile hardness tester (Durometer) to determine winding density of very loosely wound bobbins with thick yarns, such as carpet yarns

Indentor: ball diameter 2.5mm / 5mm ( as per standard )

The measuring force is according to shore A regulations

Durometer with curved working face for bobbins with diameter up to 400 mm



#### Digital Models



#### LONG PROBE

It is precision with slim probe, highly accurate and repetitive. Specially designed foot for testing in narrow areas and irregular shapes specimen as per International standard



#### **DIGITAL SHORE 00**

Most suitable hardness tester for quick and accurate hardness determination, long life and robust electronic hardware for error free testing.

#### Specification:

Power Supply: 1.5V LR 44 battery.
Indenter: as per specified types.
Operating Key: ON / OFF & Zero / ReSet
Range: 0 to 100 shore unit

Range : 0 to 100 shore unit
 Least Count : 1shore Unit



#### SHORE 00 with Stand

Most suitable hardness tester for quick and accurate hardness determination, long life and robust electronic hardware for error free testing.

#### Specification:

Power Supply: 1.5V LR 44 battery.
Indenter: as per specified types.
Operating Key: ON / OFF & Zero / ReSet

Range: 0 to 100 shore unitLeast Count: 1shore Unit



#### PACKAGE HARDNESS TESTER

#### Features

• The spring loaded outer ring assures a constant measuring pressure and eliminates false readings due to difference between operators.

Ball shaped indentor prevents damage to bobbins.

• Working face slightly curved to fit on small bobbins, working face radius 55 mm.

 Adjustable Min./Max. indicator marks to highlight working range of the yarn package hardness tester SE-10.

• For bobbins with diameters over 400 mm use yarn package hardness tester SE-10-F with flat working face e.g warping beams.

• Optionally available: Calibration certificate with calibration report.







#### IRHD -INTERNATIONAL **RUBBER HARDNESS DEGREE METER TESTER** WITH STAND

IRHD [ as per IS 3400 ( Part II) 1980 1 meter is used to determine the hardness components where highly accuracy and reliable determination of the hardness is of extreme important. The principal behind determination of hardness by dead load apparatus is based on the measurement of the difference between the depth of indentation of a standard ball into the rubber under a small conduct force and a large indenting force

#### FIELD OF APPLICATION:

Reception Inspection, Production control, test laboratory for routine test and series test on various rubber parts & standard specimen.

Type: Analogue & Digital

#### DSHT M III -MICRO **HARDNESS TESTER** WITH STAND

( For testing on very thin and small rubber parts ) as per ASTM D2240 (Type M) ISO 7619 (Type M)

#### Specification:

Applied load: 78gf Indentor: 30°Angle

Indentor Diameter: 0.79mm Indentor Extension : 1.25mm Indication : Scale : 0 – 100 Sweep: 180° Resolution: 1 point

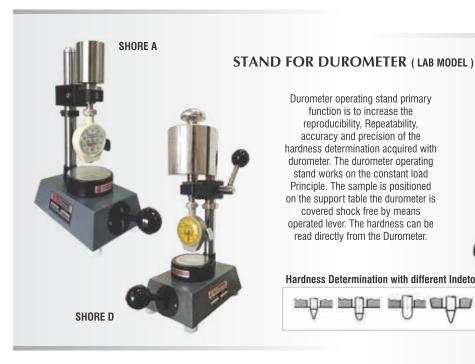
Force on Indentor: 78gm

of sensitivity and added considerable flexibility.

#### **Technical Specification:**

Stech make micro hardness tester was developed in response to the need to test specimens that are small, thin irregularly configured or could not otherwise be accommodated by typical durometer types this instrument would perform durometer tests on such specimens quickly and easily with both precision &accuracy, The micro hardness tester was modeled after the familiar ASTM D2240 Type A durometer. It employs a much lighter mainspring and considerably very smaller indentor. The incorporation of a high quality operating stand overcome the element

The total force necessary to attain a full scale reading is approximately 10% of that of a type A durometer. The lower requirement of force coupled with smaller indentor, allows for the testing of finished products rather than specially prepared test specimen.



Durometer operating stand primary function is to increase the reproducibility, Repeatability, accuracy and precision of the hardness determination acquired with durometer. The durometer operating stand works on the constant load Principle. The sample is positioned on the support table the durometer is covered shock free by means operated lever. The hardness can be read directly from the Durometer.

#### **Hardness Determination with different Indetors**









## **COMPRESSION SET APPARATUS** [as per IS 3400 (Part 10) 1977] **Quick Clamp Type**

For testing under constant strain plate's type with base plate and hand wheel arrangement consists of four steel plates with flat and parallel ground faces.



#### **Plate Type**

The plates are moving in a fixture having a rigid base plates guided on a pair of rods. The spacers are also guided on the same rods with springs in between to increase the space between the plates for inserting the specimen.





Stech manufactures various types of Thickness Gauges to check the thickness of Rubber, Paper, Fabric, Card Board, Films etc. as per IS 3400 (Part I) 1977. Most suitable for checking thickness of Rubber sheet, Fabrics, Leather, Rexine, Paper, Thin Films and all other flexible materials. It provides a maximum compression load on the specimen to get exact reading as per IS specification. Hand held thickness gauges are available in different accuracy, range and throats. It available in Analog and Digital version.



**Range Available - •** 50 - 500gm • 200-2000gm • More than 4000gm

#### YARN / WIRE TENSION METER

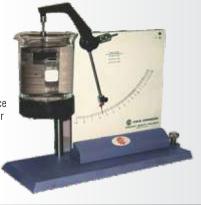
Wire tension meter's are manufactured in an easy to handle, design light weight, highly precision, more accurate, getting direct reading of tension from the dial instead of doig calculations after getting indirect readings as in some other meters.

The instruments are suitable to check the tension of Yarn/Wire high speed spinning and winding are being done

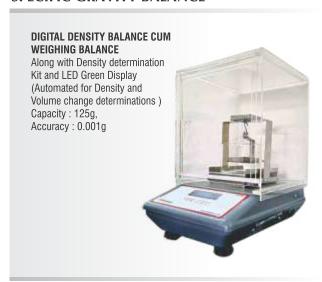
#### SPECIFIC GRAVITY BALANCE

Direct reading type for use on vulcanized rubber or such other elastomers. The balance consists of rigid quadrant scale with figures printed on the scale standing vertically fitted on a heavy base.

The balance is calibrated from 0.9 to 3.0. for most elastomers the Specific Gravity lies between 0.9, 2.0 and test results in this range can be read directly and accurately by two decimal places. The balance is supplied with glass baker and calibration weight for periodical checking



#### **SPECIFIC GRAVITY BALANCE**









#### **RESILIENCE TESTER**

Resilience Tester
( as per ASTM D2632 )
is used to test an important
property of resilience of rubber
and such other elastomer is
defined as the energy returned by
specimen when it suddenly
released from a state of strain or
deformation. The energy returned
is express as the percentage of
original potential energy is a
measure of Resilience.
Range: 0 to 100R

#### **GOODRICH FLEXOMETER**

ASTM D62378 (Method A) heat generation and flexing fatigue due to high frequency cycle compress. Goodrich Flexometer, a definite compressive load is applied to a test specimen through a lever system having high inertia while imposing on the specimen an additional high frequency cyclic compression of definite amplitude the increase in temperature at the base of the test specimen is measure and indicate in the digital display a well as the change in height with the observed permanent set after the





#### **FLEX TESTER**

**DE MATTIA FLEX TESTER** [ as per IS 3400 ( Part 7, 8 ) 1977 IS 7016 ],

electrically operated provides information about the resistance of vulcanized rubber compounds, coated and treated fabrics to cracking when subject to flexing. Crack development in that part of the surface where stresses are set up during flexing, or if that part of the surface initially containing a crack, causes this crack to extend in the direction perpendicular to stress. This test also assesses the durability of material. The machine tests six specimens at a time.



#### Features :

- Temperature Range : 40°C to 300°C
- Digital PID Temperature Controller
- Data logger with software.
- Internal Chamber made of SS
- Outer body made of MS powder coated.
- Chamber size for 12 specimen & 24 specimen
- Suitable for long period testing





#### **ROSS FLEX TESTER**

#### **ROSS Rubber Flexing Machine**

( as per ASTM D1424 & DIN 53862 ) is designed to determine resistance of vulcanized or synthetic elastomers to cut growth. It conforms to ASTM method D1052, as well as ISO 4643. This model can test 12 samples simultaneously. Digital pre settable counter for memory cycles. Most suitable for shoe soles



A cylindrical test specimen of prescribed dimensions is drawn across a test emery paper with corundum of 60 grades at a constant force of application of 10 N and at a constant speed of 0.32 m/s, the abrasion distance being 40m or in special cases 20m. An abrasive powering the range from 170mg to 220mg is allowable. The loss of mass of the test specimen in mg is determined to within 1mg by weighing and its volume loss calculated on the basis of the density determined according to DIN 53479.

The test procedure according to standard DIN 53516, provides a measuring method for assessing the resistance of elastomers to wear by rubbing. The determination of the volume loss by rubbing with a test emery of defined abrasive power by this method is suitable for comparative testing, for checking the uniformity of specified products and for specifications; however, the results of this test gives only limited information on the wearing behavior of elastomers in practice

#### ABRASION TESTER ( DIN 53516 )





#### **HOSE ABRASION TESTER**

Rubber Hose Abrasion Tester is designed to determine the resistance of rubber hose outer cover to abrasion.

The instrument permits to perform standard tests and to customize test conditions. It can be successfully used both for production control and for research and development purposes. The hose under test rotates at a constant speed while the abrasion tool moves back and forth, parallel to the axis of the hose.

During each test cycle the hose performs a complete rotation and the abrasion tool performs a complete back and forth movement.

The instrument automatically stops, when the set number of cycles has been performed. The evaluation of the result is made by checking if the hose has rigid helix exposed and by measuring the quantity of material removed from the abrasion tool.

#### AKRON ABRASION TESTER (BS-903-A9 2020)

The machine is designed as per BS 903 A9 Testing standards. Abrasion Resistance of rubber is an important Technical property but no single abrasion test method can stimulate the various conditions that rubber product can be subjected to in service. This part of BS 903 method A for determining the Abrasion resistant to rubber by comparing the wear of the rubber under test with that of a standard rubber under the same conditions.

#### **Technical Specification:**

1) Rotating Speed of sample : 250  $\pm$  5 RPM 2) Inclined Angle of test Piece : 15°/25°

3) Pressure of test piece by abrasive wheel: 45N(300KPA)

4) Abrasive wheel : A 36 - P5 V (150X25) 5) Cycle Counter : Preset table (6 Digit)

#### **Electrical Connection:**

• Power Supply : 220 – 230VAC

• Motor : 1/4 HP AC geared Motor

• Digital Counter : Electronic Pre-set table

(6 Digits)







#### TABER TYPE ABRASION TESTER

is an Industrial Standard used in the wear and durability. Testing of ceramics plastics, rubber, textiles, metals, leather, flooring and paint/electroplating and other coated materials. It is widely used in Research and Development / Process Control and quality assurance as per International Standard.

#### **RUBPROOFNESS TESTER**

**RUBRESISTANCE & ABRASION TESTER** Is used to measure accurately the Rubproof-ness of prints on paper or board, it is used to measure colour transfer from printed or coated materials during rubbing (rubfastness) and the abrasion resistance of plastic materials and leather. It lends itself as an ideal test-bed for investigating, under carefully controlled conditions, new procedures, which involve a rubbing action to establish rubproof-ness of material paper beard or material.

This machine is intended to measure the Rubproofness of prints on paper, board or metal foil. It can also be used to measure colour transfer from printed or coated materials during rubbing and the Abrasion resistance of some plastic materials and leather.









#### **VELCRO ENDURANCE**

#### Endurame Testing Machine as per IS 8156 (For Velcro Fastner)

Through the apparatus to achieve Velcro (hook & loop) to repeated stripping and peeling after a certain times. Cut the sample into 75mm X 20mm with press it with the wheel to be fitted completely.

#### **Technical Parameter:**

Specimen dimension:

Length: 540±10mm, Testing Speed:  $60 \pm 5r/min$ Width: 20-50mm Reversed time :  $30 \pm 5s$ Diameter of upper circlar drum: Load:  $1 \pm 0.1$ N/mm

162.5±0.5mm

Testing times: 5000r (adjustable) Diameter of lower circular drum: Counter: LED display, 0-9999 random setting

Dimension: 450x540x550mm  $160 \pm 0.5$ mm

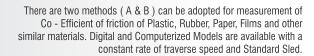
Width of circular drum: 70mm Weight: 75kgs

Power: 220V/110V, 50Hz/60Hz, Single Phrase Slot: length: 55±2mm, width: 4mm



#### CO EFFICIENT OF FRICTION TESTER As per ASTM D1894 -11

The Co – Efficient of friction is the ratio of the frictional resistance to the normal pressure acting on two surfaces in contact. This Co-Efficient of friction is an inverse measure of the relative ease with which the surface of one material will slide over a similar surface or over the surface of another material.







#### **ELECTRONIC DIGITAL SPRING TESTING MACHINE**

#### **ELECTRONIC DIGITAL SPRING TESTING**

MACHINE is designed to test the compression load vs length and tension load vs length. The extension and compression length is monitored in the digital display in mm by 0.1mm and the force is displayed in kgf/N. The machine can also use for tensile and elongation of various materials and other force related test can also done with specified fixtures.

> **COMPUTERIZED** MODEL: SECCF-215







#### **DIGITAL SURFACE TENSION**

SURFACE INTERFACIAL TENSIOMETER (DU NOUY TYPE)
AS PER ASTM D971, ASTM D1331, ASTN D1331
DIGITAL / COMPUTERISED

STECH Surface Tensiometer is used to measure the surface Tension of Liquids, Tensiometer is used in research & Development Laboratories to determine the surface Tension of Liquids Like Coating, Lacquers or adhesives SE-DS-108 uses a Platinum ring of specified diameter which is submersed in the liquid and the ring is pulled out of liquid very precisely. The Force required is measured in order to determine the Surface Tension.



#### **Technical Specification**

Method of Testing : As per

ASTM D971

• Force Indicator : Digital force Indicator

Unit of Force : DyneAccuracy : + 1%

Power: 220-230 V-AC

Safety Wind Shield Provided

 IQ / OQ / PQ documents will be provided as per our manufacturing

standard.

Essential Accessories

Platinum Ring of 4 cm.



#### INDENTATION HARDNESS TESTER

#### FOR POLYURETHANE

FOAM / COIR
The feel of softness
of any flexible foam is
quantitatively defined
by its indentation
hardness.

Indentation hardness is determined by pressing a circular indentor at a specified speed against a block of foam and finding the force needed to compress it to a specified percentage of its initial thickness.

## FOAM POUNDING MACHINE

As per ISO 3385: 1989 (Type B) (Flexible Cellular polymeric materials determination of fatigue by constant Load pounding)

#### Principal:

Repeated indentation of a test piece by an indentor smaller in area than the test piece,

the maximum load reached during each cycle being kept within specified limits.



#### **Technical Specification:**

Diameter of indenter :  $250 \pm 1$ mm

• Radius at edge of indenter : 25±1mm

Movement of indenter : Adjustable between 20 and 50 mm

Mass of indenter assembly : 76.48±2 kg.

(Peak force applied - 750 ± 20 N)

Pounding frequency : 70±5cp
 Maximum Load Capacity : 100kg
 Digital indicator displaying force

Presetable cycle counter up to 99999

Electrical with gauge motor power supply 3 phase 415 Volts

# COIR / MATTRESS FLEXING MACHINE

( FOR RUBBERIZED COIR SHEETS & SLABS )

as per IS 8391 - 1977



is used in determination

of change in - indentation of rubberized coir sheets and slabs due to repeated pressing encountered in their day to day use is of great importance in determining their quality. This change indicates the likely behavior of the material after prolonged use.







#### **MUFFLE FURNACE**

for Ash Content test with Digital Indicator cum Controller. Sizes: 4"x4"x9" 5"x5"x10" / 6"x6"x12"

Maximum Temperature: 600°C / 900°C / 1200°C



are designed for laboratory purpose. These ovens are highly accurate in temperature stability and circulating Hot Air throughout the chamber with the help of an air blower. The outer body is fabricated with mild steel sheet and inner chamber is fabricated with stainless steel. It is available in different size and temperature





#### **LOW TEMPERATURE CABINET** ( COLD CHAMBER )

#### Specification:

PID Control Timer Alarm

Insulation: 100mm P.U.F. Insulation between two walls

Cooling: Fitted with "Emerson" Compressor Ozone friendly Hermetically sealed compressor charged with CFC / HCFC Free Refrigerant; complete with air cooled condenser, Condenser, fan motor, drier, capillary, etc.

Indication: Digital indication for temperature.

Temperature range : - 40°C

Accuracy: +/- 3°C.

Construction: Double wall ( Outer Body will be M. S powder coated and Inner will be of S.S 304) Main door will be of MS Powder coated with

Magnetic lock and Gasket.



#### **COMPRESSION STRESS RELAXATION TESTER**

The stress decay of polymer components under constant compressive strain is known as Compression Stress Relaxation. This test measures the sealing force exerted by a seal or O-ring under compression between two plates. It provides definitive information for the prediction of the service life of materials by measuring the sealing force decay of a sample as a function of time, temperature and environment.

#### **Applications**

Automotive engine, under hood and other seals, fittings and couplings Thermoplastic and Thermoset molded rubber goods, gaskets and O-rings in sealing applications

Hose and tube compounds exposed to severe environments Aerospace, nuclear, oil field, medical, marine and other sealing applications





#### **COMPRESSION STRESS RELAXATION TESTER**

Insulation: 100mm P.U.F. Insulation between two walls

Cooling: Fitted with "Emerson" Compressor Ozone friendly Hermetically sealed compressor charged with CFC/HCFC Free Refrigerant; complete with air cooled condenser, Condenser, fan motor, drier, capillary, etc.

Indication: Digital indication for temperature.

Temperature range: -40°C

Accuracy: +/- 3°C.

Construction: Double wall ( Outer Body will be M. S powder coated and Inner will be of S.S 304) Main door will be of MS Powder coated with Magnetic lock and Gasket.







#### **TUBULAR IMPACT TESTER**

#### As per BS 3900-E13 / ISO 6272,

with Ball indentor size of 20mm, falling ball weight 1 kg. The basic instrument has been designed as per ASTM D2794 with Ball indentor size of 16mm, falling ball weight 2lbs.

Surface coatings are regularly subjected to damage by impact. This instrument provides proper evaluation of the coating resistance to impact by falling weight method.

The instrument consists of a graduated (in both cms. and Inches) vertical seamless light weight aluminium tube, mounted on a heavy solid base. This tube acts as a guide for a predetermined weight with indenter & handle, and an adjustable weight holding ring.

The height of fall means the force of impact can be altered by adjusting the ring guide from variable heights up to 1 meter onto the sample panel firmly placed on the base plate. The force of impact can be increased or decreased by replacing the falling weights.

All clamping arrangements are so designed to hold the guide tube firmly, without scratching the guide tube.

APPLICATIONS: It is used in various fields like Paints, Plating, Plastics, Varnishes, Plastic coatings, Resins composites Coil coatings Laminations etc.

**STANDARD MODEL**: 40" tube length and 2lbs 1Kg. weight (approx.)

#### **ACCESSORIES**

10027-01 : 2lb/1Kg. weight 10027-02: 4lb/2Kg. weight 10027-03 : 6lb/3Kg. Weight

10027-04: With die sets and weights for use as DUPONT impact tester



#### "COVERALL" BEND & IMPACT TESTER

The Coverall Bend and Impact Tester is designed to test the flexibility and impact resistance of coatings.

- Graduated guide tube up to 160 inch-pounds of force
- Redesigned guide tube to easily hold the weight during sample change-over
- Indenter built into the weight

By simply reversing the impact, the instrument can be used in dual capacity to evaluate, for example, the flexibility of can-stock coating during double-seaming, and to test its impact resistance handling.









#### **DU-PONT IMPACT TESTER**

Dupont's Impact Tester is used to measure the resistance of specimen (painted plate, hard plastic sheet, etc.) against impact force by observing the appearance of crack and peeling. The impact force is given to the specimen which is inserted between a spherical impactor with specified radius and an anvil with the same hollow, by falling down the weight from specified altitude.

#### Features:

- Impactor and anvil can be selected from five different spherical sizes, and the weight can be selected from three weights, enabling tests under wide range of conditions
- Compact shape, easy operation and high repeatability of test results
- Single parts like impactor, anvil and weight are available, supporting long term use of the Equipment Model: IM-4520
- Applicable Standard JIS K 5600-5-3 (JIS K 5400) ISO-6272(Testing methods for paints)
- Altitude Weight: a) 5 to 100 cm (in 5 cm steps)
- Impactor: Spherical radius of the tip: 1/16, 1/8, 3/16, 1/4, 1/2 inches
- Anvil: Dimple radius: A(1/4, 1/8 inches), B(1/16, 3/16 inches), C(Plain, 1/2 inches)
- Weight: 300g, 500g, 1000g (option: 2000g)
- Other Accessories : Pin for weight, level, wooden box

## **DART IMPACT TESTER**

AS PER IS - 2508 - 1984 / ASTM D1709.

The Dart Impact Tester is used to determine the energy that causes plastic films to fail under specified conditions of impact. The Test is carried out by dropping a free falling dart with a diameter suitable to the type of film. The dart having hemispherical head is dripped from varying heights depending upon the range of applications for the dart missiles heights for the particular type of the film. The Dart is dropped automatically by an Electromagnetic Device which is controlled by push button. The tester is also fitted with one Electric Counter for the no. of trials taken during the test.

Application Standard: ASTM D1709 / ISO 7765







STECH Automatic Applicator is an economical film applicator that improves the consistency of draw downs. When more than one operator is drawing down the same coating or ink, the dry film appearance will vary because of different drawdown techniques. Drawdown speed and pressure on the applicator tool will impact the result. Film thickness, gloss, opacity, and color can vary with differing drawdown techniques and available with a vacuum plate or glass plate with clamp.

#### Technical Specification for STECH - VFD Automatic Film Applicator:

Voltage: 220-240V / 50-60 Hz Traverse Speed: 10-200MM/S Traverse Speed Accuracy: ± 5%

Wire Bar Diameter: 0.25 - 0.75 in (6 - 19 mm) Wire Bar Test Length Maximum: 16.0 in (406 mm) Stroke Length: 1 - 9.25 in (25 - 235 mm)

Test Panel Size Maximum: 9 x 12 in (229 x 305 mm)

Dimensions: 450x320x250 mm

accuracy: ± 2 ° Weight: 32Kg

wire bar coater available in different microns and length

suitable for all type of bar coater

#### AUTOMATIC FILM APPLICATOR



Optional Accessories: Vaccum & Heating Bed, Wire Bars



#### MEK RUB TESTER

As per ASTM D7835, EN 13523 -11, Reference: ASTM D4752, ASTM D2486, ASTM D5402; ISO 50230. The MEK Rub Test machine has been developed to combat the problem of inconsistent test results. This semi automated machine gives the line operator and quality control personnel the ability to duplicate results from the laboratory to the production line.

#### Specification:

- MEK Reservoir Capacity: 325 cc Mass of Rubbing Block (1kg) EU Standard
- Stroke Length: 8 inches (203 mm)/Maximum Number of strokes/min (Double Rub) : 70 or as per requirement • Operational Air Pressure : 550 KPa (80 psi) • Max Air Supply Pressure: 965 KPa (140 psi) • Air Consumption @ Operational Pressure: 2.35 SCFM @ 550 KPa (80 psi) ● Air Inlet Connection at Filter NPT ● Cotton Pad Size : 1 X 1, 2 ply ■ Counter Min/Max Number of Strokes: 1 - 9999 ■ Air Supply: 550 kpa (80 psi) Clean and dry (non condensing) ● Electrical Requirements: Electro pneumatic (No Electrical Motor) ● Panel Thickness Max:\*\* : 1/8 inch to 1/2 inch \*\*thicker panels can be run with an adjustment

Features: • Hands off testing, Repeatable test results • Intrinsically safe - No Flammable Electrical parts involved 

Constant pressure, Dead Weight Rubbing Block • Simple operation

• Can be easily used for test to failure • Hand contact with MEK minimized, solvent added by means of direct dropping to contact point only

- Controlled Stroke count. Can be set 1 9999 strokes Flow Controlled 325cc MEK reservoir capacity Weight of Machine : 54 Kg
- Dimensions (WxDxH) : 18 x 19 x 19 inches(457 x 483 x 483mm) Test Panel Size : 5 x 12 inches(127 x 305mm)

#### WET ABRASION TESTER

#### WET SCRUB ABRASION TESTER (WASHABILITY TESTER), As per ASTM. D, ASTM. D - 2486, ASTM. D - 3450.

The Scrub Abrasion and Washability Tester is used to test the resistance of paint, varnish or coatings to scratching, wearing, and color loss due to wet or dry abrasion, by simulating everyday wear from cleaning actions or general use

- Industries: Industries: Inks & Coatings
- Materials: Aluminium, Glass, Metals, Paper, Steel, Textile.
- Standards: ASTM D2486, ASTM D3450, ASTM D4213, ASTM D4828, ASTM F1319, ISO 11998

#### Features:

- With four-digit counter (0 9,999)
- Quickly and easily to load and unload testing samples and replacing abrasion head.
- Two brush holders for side by side testing.
- Micro-Dosing Pump for Water circulation system.
- Specification of brush: Imported Nylon brush bristles As per ASTM D2486
- Weight of holder + brush :  $454 \pm 10$  g (ASTM D2486)
- Stroke Length: 300 mm







#### **AUTOMATIC PIGMENT MULLER**

Pigment Muller is to test pigment for its properties like strength and tone. In this equipment, pigment wetted with linseed oil of proper viscosity is given measured grinding between two roughened glass plates.

#### **TECHNICAL DATA:-**

Dimension Of Whole Body: 16" x 16" x 24"

Dimensions Of Glass Plates: 20cm Diameter x 12 mm Thick Load on Glass Plates: With the Help of Load Cartridge

Having Marking of 0 to 90Kg

Motor: 1/2 Hp

RPM of Lower Plate: 65 RPM

Pre Set-table 6 digit Digital counter for No. of Cycles.

#### **HYDRALIC LAB MOULDING PRESS**

Hydraulic lab moulding press is suitable for quick and accurate cutting of specimen. It can accommodate various type for cutting die and the pressure can be released quickly to remove the specimen.

#### **TECHNICAL DATA:-**

Capacity up to 1500 PSI

Platern size: 10" x 10" or as per requirement

Daylight: Single

Maximum Mould Thickness : 75mm Operation : Single after hydraulic pump

Temperature up to 300° C Temperature Sensor: PT 100

Temperature Indicator : Digital PLC based Heater : Plate type 6 KW

Pressure Gauge: 2000 PSI





#### **CUT AND CHIP TESTER**

The Cut and Chip Tester was originally invented by BF Goodrich Co. It was designed to measure the relative service life of off-the-road, farm and heavy duty treads that are subjected to the rigors of traveling on rocky surfaces.

#### **Applications**

- Off-the-road tread stocks
- Farm tread stocks Heavy duty tread stocks







#### **ROLLING BALL TRACK TESTER**

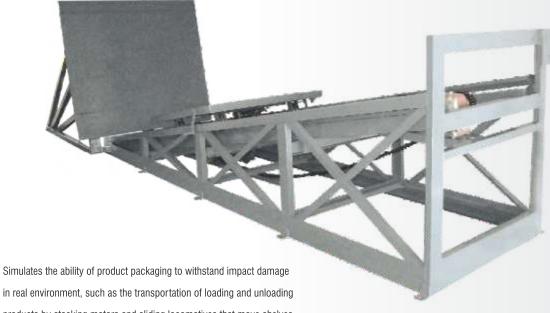
As per ASTM D3121

This is an equipment to measure the tackiness of adhesive coated substrates such as Tapes and Labels, using the rolling ball method.

Tackiness is the ability of an adhesive to adhere quickly to another surface.

The Rolling Ball Tack tester provides an easy method of testing the tack of an adhesive

## INCLINE IMPACT TESTER MACHINE TESTING FOR PAPER PACKAGING TEST



in real environment, such as the transportation of loading and unloading products by stacking motors and sliding locomotives that move shelves. The incline impact tester can also be used as common test equipment for bevel impact in packaging material manufacturers and foreign trade transportation departments. The purpose of the incline impact test is to determine whether various properties fail under normal and extreme collision conditions when the product is subjected to a series of shocks. Using the principle of transforming the potential energy of the object into kinetic energy, when the package slides to the end according to the predetermined position, a certain impact velocity is obtained to collide with an impact plate perpendicular to the velocity direction, so as to achieve the predetermined test purpose.

The inclined impact testing machine is a semi-automatic control testing machine, simple operation and high efficiency, especially suitable for continuous impact test laboratories and a large number of impact test of packaging and transportation machinery and equipment manufacturing industries.





#### **SHEAR FATIGUE TESTER MACHINE**

The Apparatus consists of a perforated moving platform made as per the above standard and attached to a mechanical reciprocating system driven by A.C. single phase induction motor and reduction gear box. The platform is resting and moving through a guide path by friction free bearing at its for ends.

#### **SHEAR ADHESION MACHINE**

as per ASTM D3654 - 88.

Digital model with LCD display and battery backup system, with 1 Float Glass Test Plate for each station

**Timer Range:** 999.9 hrs Standard test weight : 1kg Standard Test panel

**Dimension**: 127(L) x 35(W) x 60(H) cm Power supply: 220 V-AC Supplied complete with one 4.5 lbs rubberized roller (1No.)

Shear Adhesion to a standard sled panel. A strip of tape is applied to a standard sled panel under controlled roll down, the panel is mounted vertically and standard mass is attached to the free end the tape and the time to failure is determined.

#### Accessories :

1) Standard sled panel

2) Standard mass

3) Digital pre-setable timer

4) Mass hook

5) Available in 3, 4, 6 & 12 station





## Our Valued Clients















**MRIDGESTONE** 















































































#### Manufacturers of Material Testing Machines

- G3, Bldg. No : 6, Meghdoot Indl. Estate, HDIL Indl. Park, Chandansar Road, Virar (East), Dist : Palghar 401305. Mumbai Sub. Maharashtra, INDIA.
- +91 85549 02452 / +91 77700 27539 / +91 93739 38438.
- sales@stechengineers.com | stechs@rediffmail.com | office.stech@gmail.com
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