

IDEAL LAB EQUIPMENTS

(MANUFACTURER/EXPORTER OF PLASTIC TESTING MACHINE)

WORKS: 9 Shree Krishna Industrial Estate Devicha Pada MIDC Taloja NaviMumbai-410208

Best Quality with Accuracy

About Us

Ideal Lab Equipments, is a company which is leading Manufacturer of Polymer Testing Equipments since its inception, is leading the markets by making customers avail a qualitative range of products, which includes, Dart Impact Tester, Hot Air Circulating Oven, Digital Opacity Tester, etc. We believe in consistently working with perfection because we want to excel in this line of work and envision ourselves to be remarked as one of the most praised manufacturers of this industry. Our first focus is to be a customer oriented firm, which always regulates and adheres to the policies, so as to delight the customers. We strive to make the clients feel that no other company is as reliable as us, and to do this, we take care about their hard earned money and precious time. Experts who are appointed by us, are sincere, and well understands their responsibilities, because they know that the execution of plans is in their hands, and the manner of their work, will reflect the reputation of our company.

Driven by Positive Attitude

They say that the success of a company belongs in the quality of work, but we think that a company's success remains in the dedication towards maintaining perfection in everything. The positivity in the attitude holds the capability to drive each and every individual towards one objective, which is to attain the target, prior to deadlines, without compromising the quality. Personnel working with us are always motivated, and are focused on achieving their goals prior to deadlines. We make sure to keep the morale of our employee as high as we can by giving them awards and recognition whenever they win the objectives.

Why Choose Our Company?

We do not speak of the reasons to prioritize us over any other business entity, rather we prefer to state the facts to our clients that how commendably we have satisfied each customer who came to us. Our policies revolves around the contentment of our clients, and we ensure on giving them advantages of doing business with us. Some of those factors are mentioned by us, on the basis of which we make ourselves a priority in the eyes of our clients:-

We maintain a variety, which fulfills diverse needs of clients.

We always deliver the consignments with safety prior to deadlines. We keep complete transparency in our business deals.

We never compromise with the quality.

MELT FLOW INDEX TESTER(AUTO CUTTER ADVANCED)



Melt Flow Index Tester(Auto Cutter Advanced) is Microcontroller Based High accuracy Preprogramed as per ASTM 1238/ISO1133 Logic with Advance features of Auto Cutter and Manual cutter both function also work in this model. Specification and Accessories same as before and also suitable work in any Industrial Environment.

MELT FLOW INDEX TESTER (AUTO CUTTER)



1.

The Melt Flow Index Tester measures the rate of extrusion of a Thermoplastic Material through orifice of Specific Length and Diameter under prescribed conditions of temperature and pressure.

MFI being a very essential gate way for most of the polymer industry, this models delivers accurate results at economical budget

Specification :

- Temperature controller:

- Micro processor based auto tuned PID controller with temperature range from ambient to 400°C, resolution of 0.1°C and accuracy of $\pm 0.1^\circ\text{C}$.
- Timer : Digital presettable with a range up to 999 seconds.
- Sample cutting : Automatic
- Weights : 1.2 kg, 2.16 kg, 3.8 kg & 5 kg. ,10.0kg ,21.6kg
- Accessories :Standard accessories*
- Paint : Powder coated.
- Power : 230 Volts, 50 Hz, single phase.
- Standard accessories includes Orifice, Piston, Spanner, Spirit Level, Material charger, Tweezer, Orifice cleaner, Barrel cleaner and inbuilt Accessory stand.

Digital Melt flow index tester as per method A of ASTM D 1238 with auto cutting facility. The equipment has accurate PIDcontroller and digital Timer.

CERTIFICATION: NABL TRACEABILITY CALIBRATION CERTIFICATE WITH 1 YEAR VALIDITY WITH INSTRUMENTS.

Warranty: 1 year warranty.

Unique Features

Digital Melt flow index tester as per method A of ASTM D 1238/ISO1133 with auto cutting facility. This model is first choice of industry because of its easy operation and suitable to work in any industrial atmosphere . Polymer Resercher and developer prefer this model due to its high accuracy , zero chance of Human error, very safe and suitable in all electrical condition. Based on this sample collection using a separate weighing scale the results can be calculated

2. MELT FLOW INDEX TESTER (MANUAL CUTTER)



The Melt Flow Index Tester measures the rate of extrusion of a Thermoplastic Material through orifice of Specific Length and Diameter under prescribed conditions of temperature and pressure.

Specification :

- Temperature controller:
- Micro processor based auto tuned PID controller with temperature range from ambient to 400°C, resolution of 0.1°C and accuracy of $\pm 0.1^\circ\text{C}$.
- Timer : Digital Timer with Buzzer indication sound, range up to 999 seconds.
- Sample cutting : Manual
- Weights : 1.2 kg, 2.16 kg, 3.8 kg & 5 kg. ,10.0kg ,21.6kg
- Accessories :Standard accessories
- Paint : Powder coated.
- Power : 230 Volts, 50 Hz, single phase.
- Standard accessories includes Orifice, Piston, Sample Cutting Tool,Spanner, Spirit Level, Material charger, Tweezer, Orifice cleaner, Barrel cleaner and inbuilt Accessory stand.

CERTIFICATION:CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.

Digital Melt flow index tester as per method A of ASTM D 1238/ISO1133 with Manual cutting facility. The equipment has accurate PID controller and digital Timer.

MFI being a very essential gate way for most of the polymer industry, this model since it delivers accurate results.

Unique Features

Digital Melt flow index tester as per method A of ASTM D 1238/ISO1133 with Manual cutting facility. This model is very easy to operation and suitable to work in any industrial atmosphere . this model is very safe and suitable in all electrical condition. sample collection using a separate weighing scale the results can be calculated.

- **3. ASH CONTENT TESTER/FILLER TESTER**



- **ASH CONTENT TESTER/FILLER TESTER:** This is basic Requirement of all polymer industry to find out percentage % of Impurities/ filler mixed in polymer this parameter directly effect the Quality of Polymer and its products.

Specification :

Temperature Controller

DIGITAL MICROPROCESSOR BASED PID CONTROLLER ,

K-TYPE SENSOR .ACCURACY +/- 1 C.

HEATER: A CLASS KANTHAL HEATER.

With radial air circulation and auto shut facility.

- **Size of the working chamber : 4 X 4 X 9 inch , 6x6x12 inch**
- **Material of construction : M.S.**
- **Temperature range : Ambient to 1100°C**
- **Paint : Powder coated.**
- **Power : 230 Volts, 50Hz, single phase.**
- **To determine Percentage of ash in polymers.**
- **Furnace with other sizes can also be offered**

ACCESSORIES WITH MACHINE:

- I) 8 "DESICATOR WITH ½ KG SILICAGEL
- II) 1 TOUNGE AND SAFETY GLOVES 2 NOS.
- III) 1 HIGH TEMP. CRUCIABLE(75ML)
- IV) S O P

CERTIFICATION:CALIBRATION CERTIFICATE WITH NABL TRACEBILITY FOR 1 YEAR .

Warranty: 1 year warranty.

•

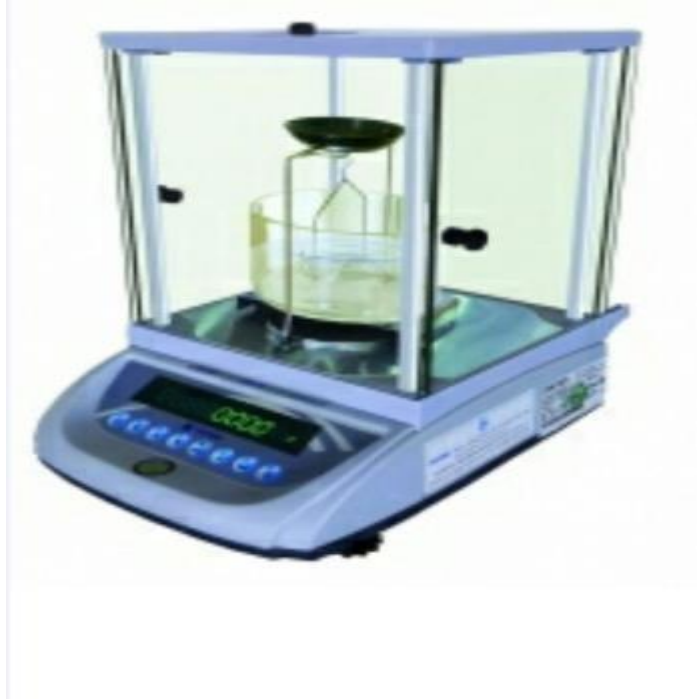
Unique Features

This Machine is designed for accurate and stable temperature inside Heating chamber and provided windows for releasing Smoke from backside . front window to observe sample and

inside chamber. **Temp. Range: ambient To 800 Reach in 30-35 Min.** sample collection using a separate weighing scale the results can be calculated.

4. POLYMER SPECIFIC GRAVITY TESTER/ DENSITY TEST APPARATUS

As per ASTM D792 and Other Standards



This is basic Requirement of all Polymer Industry to find out Material Density. which effect most of Its Parameters and Quality of products. Such as Mixing with Other agent , Flow, shining, straining, Tensile and Modulus Properties etc.

If the density increases, the material becomes less ductile and full pails will crack when dropped. In most polymers, you can improve impact performance by selecting a higher molecular-weight material grade without detracting from the rest of the property

Specification: EMFC TECHNOLOGY BASED HIGH ACCURACY SYSTEM

POWER REQ.: 90-250V,50/60HZ, 10 WATT , 1 Phase

Display : LCD BRIGHT DISPLAY

CAPACITY: 220 GRAM

READABILITY: 0.001g or 1mg

Repeatability: 0.001g

Linearity : 0.001g

PAN SIZE: 100MM

Taring Range: Up to full Capacity

Response Time: 3 seconds

Operating Temperature: 15 to 45 Deg C

CERTIFICATION: CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.

ACCESSORIES WITH MACHINE: Adaptor, weighing pan assembly, stainless steel base for beaker, glass beaker, sinker .

CERTIFICATION: CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR .

Unique Features: IDEAL LAB ENGINEERS High Precision Balances incorporate advanced Electro Magnetic Force Compensation (EMFC) technology for offering unmatched accuracy and reliability, coupled with unique ADC circuit with inbuilt temperature compensation to offer a very high stability upto a resolution of 6 million counts. All adjustment parameters are programmable to take care of any minor mismatch of different sub assemblies & Balances are configured with these parameters.

Density Determination Kit for Raw Material Example. Granules form OR cutting Parts/ Piece of Plastic Products. one to be mounted on the pan and the other type is with attachment for weigh below the balance. Density Determination Kit consists density weighing pan assembly, stainless steel base for beaker, glass beaker, sinker for testing materials having density less than water or more than water ,Remaining work will be done by automatic software (program) for density determination.

Facility for programming density of liquid (other than water) and temperature of water. Incase of multiple samples, storage of all the sample weights in air first and then in water, viewing of density of individual samples one by one on the display.

5. DIGITAL WEIGH BALANCE:

This is supporting and compulsory Tools for all Polymer Laboratories to calculate Results Or checking out exact weight with maximum accuracy .



Specification: EMFC TECHNOLOGY BASED HIGH ACCURACY SYSTEM

POWER REQ.: 90-250V,50/60HZ, 10 WATT , 1 Phase

Display : LCD BRIGHT DISPLAY

CAPACITY: 220 GRAM

READABILITY:0.001g or 1mg

Repeatability:0.001g

Linearity : 0.001g

PAN SIZE: 100MM

Taring Range: Up to full Capacity

Response Time: 3 seconds

Operating Temperature: 15 to 45 Deg C

CERTIFICATION:CALIBRATION CERTIFICATE WITH NABL TRACEBILITY FOR 1 YEAR.

Warranty: 1 year warranty.

ACCESSORIES WITH MACHINE: Adaptor, weighing pan assembly .

CERTIFICATION:CALIBRATION CERTIFICATE WITH NABL TRACEBILITY FOR 1 YEAR .

Unique Features: IDEAL LAB ENGINEERS High Precision Balances incorporate advanced Electro Magnetic Force Compensation (EMFC) technology for offering unmatched accuracy and reliability, coupled with unique ADC circuit with inbuilt temperature compensation to offer a very high stability upto a resolution of 6 million counts. All adjustment parameters are programmable to take care of any minor mismatch of different sub assemblies & Balances are configured with these parameters.

- **6. POLYMER MOISTURE ANALYZER**



•
This instrument find out Moisture absorbing nature of Polymer in form of Granules/powder ,which directly effect Polymers behavior in process and also affect its other parameter.This instrument Help to observed and analysis of Moisture absorbing Capacity/Nature of Polymers.

AUTOMATIC DIGITAL MOISTURE ANALYZER

MODEL:CBB-50

INPUT VOLTAGE:220 VOLT , 50HZ

OPERATING TEMPERATURE: 15 TO 45 DEG C

FULLY AUTOMATIC DIGITAL LCD DISPLAY

RESULT DIRECTLY SHOW ON SCREEN

CAPACITY:50GRAM

ACCURACY:0.001 GRAM.

EASY & FAST MOISTURE DETERMINATION.

3 TYPES OF TESTING METHOD: MANNUAL, TIME PROGRAMMABLE,AUTOMATIC.

WEIGHING BASED ON EMFC TECHINQUE.

HEATING BY INFRARED HALOGEN TUBE HEATER

TEMPERATURE RANGE SETABLE UPTO 200 Cent.

MOISTURE RANGE :0.1% TO 100.0%

MOISTURE MEASUREMENT UNIT : %WET BASE

%DRY BASE

DRY WEIGHT

% DRY TO WET WEIGHT

DISPLAY OF TIME ,TEMPERATURE,WEIGHT& PERCENTAGE MOISTURE.
GRAPHICAL BACKLIGHT LCD FOR DISPLAYING WEIGHT,SETUP PARAMETER,TESTING
PARAMETERS & RESULTS
RS-232 INTERFACE FOR CONNECTING COMPUTER/PRINTER
DATA STORAGE UPTO 50 TESTS.
10 PROGRAMMABLE MEMORY
TIME BASE MOISTURE LOSS ON THE GRAPHICAL DISPLAY.
STUDY OF PATTERN OF MOISTURE LOSS BY PRINTING/DISPLAY ON COMPUTER SCREEN OF
ONLINE DATA–
ELAPSED TIME ,PRESENT SAMPLE WEIGHT AND PERCENTAGE MOISTURE LOSS.ELAPSED TIME
INTERVAL CAN BE
PROGRAMMED -10,20,30,60 &120 SECONDS

Accessories: Adaptor, 25 Nos. pan, Twizzer

MOISTURE CONTENT:

Specification: EMFC TECHNOLOGY BASED HIGH ACCURACY SYSTEM

POWER REQ.: 90-250V,50/60HZ, 10 WATT , 1 Phase

Display : LCD BRIGHT DISPLAY

CAPACITY: 220 GRAM

READABILITY:0.001g or 1mg

Repeatability:0.001g

Linearity : 0.001g

PAN SIZE: 100MM

Taring Range: Up to full Capacity

Response Time: 3 seconds

Operating Temperature: 15 to 45 Deg C

CERTIFICATION:CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.

Unique Features: This is High precision instrument based on ELECTRO MAGNETIC
FORCE COMPENSATION TECHNOLOGY (EMFC). For offering
unmatched accuracy and reliability .Inbuilt Temperature
compensation to offer a very high stability upto a resolution of 3
million counts.

- **7.AIR CIRCULATING OVEN**



This instrument is basic requirement of all polymer industries for heating samples or conditioning in specified Temperature.

Specification :

Temperature Controller

DIGITAL MICROPROCESSOR BASED PID CONTROLLER ,
RTD (PT-100) SENSOR .ACCURACY +/- 1 C.

Inbuilt Blower for circulation air inside chamber to achieve Uniform heating in all its Racks.

- Size of the working chamber : 12 X 12 inch , 14x14 inch , 18x18 inch , 24x24 inch(OPTIONAL)
- Material of construction : OUT SIDE M.S AND INSIDE S.S
- Temperature range : Ambient to 250°C
- Paint : Powder coated.
- Power : 230 Volts, 50Hz, single phase.

CERTIFICATION:CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.

UNIQUE FEATURES: Using High accuracy PID Controller with LED bright display. Air circulation system carefully designed to achieve maximum Temperature stability in all racks. Mains Power indication bulb and Heating Bulb indicating show its working status. MCB Switches for Power ON/OFF.

- **8.CARBON BLACK CONTENT TESTER**
- As per ASTM and Other International standards



This Instruments Help to findout % of carbon available in Polymers. Requirment of % Carbon differs in different differant products and its industries such as Part Manufacturer/ pipe Manufacturer etc.

Specification:

- * **INPUT :** 220 +/- 10 v, 50 HZ, 1 PH. SUPPLY
- * **POWER :** 2KW , Average Heating Time for 800 C : 20 - 25 Minute.
- * **TEMP. CONTROLLER :** Digital Microprocesor Based PID Controller.Bright LED Display , Easy to Reprogrammed By 4 Panel Key on front.
- * **APPARATUS OPERATING TEMP. :** (Room Temp. TO 1100 C).
- * **SENSOR :** K – TYPE Temp. Sensor , Temp.Measuring Accuracy: +/-1 C, Temp. Measuring Range Upto 1500 C.
- * **HEATER:** A CLASS Nichrome Thick Wire Guage Heater with FUSE Protected.
- * **SWITCH :** Panel Mounted MCB for Mains Supply .Separate Swith for Heater.
- * **PAINT:** High Finish Powder Coated Paint.

*** BODY:** Mild Steel Body Structure, separate Heating system and Electrical wiring Panel system for Neutralizing Leakage Voltage and Earth Fault.
Shockproof and Safe System for user.

Accessories: N2 GAS ROTOMETER FOR CONTROLLING NITROGEN GAS IN HEATING CHAMBER FOR TESTING. OPERATING RANGE (0.0 TO 3.0) LPM.

***DUAL GUAGE N2 GAS REGULATOR SUITABLE TO MEASURE NITROGEN GAS CYLINDER PRESSURE AND OUTLET GAS FLOW PRESSURE.**

***400x30 mm QUARTZ GLASS HIGH TEMP. TEST TUBE WITHSTAND UPTO 1400 C AND QUARTZ GLASS BOAT FOR SAMPLE TESTING AND COMPLETE ACCESSORIES.**

***PID CONTROLLER OPERATING USER MANNUAL.**

***APPARATUS USER MANNUAL AND INSTALLATION PROCEDURE.
PANEL WIRING DIAGRAM.**

Certification: 1 YEAR VALID TEMP. CALIBRATION CERTIFICATE WITH NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION LABORATORIES (NABL) TRACIBILITY

Warranty: 1 year warranty.

- **9.CARBON BLACK DISPERSION APPARATUS**



This Instrument help to finout Carbon Dispersion with Polymers and other agent for better products.

Specification: power input 230v , 50 HZ, 1 Phase

MICROSCOPE 100x and 200x , 450X Magnification,

WITH 6 INCH DISPLAY OR DHOOM ,

8 INCH HOT PLATE WITH TEMP. SETABLE THERMOSTAT KNOB (0 – 250) CENTIGRADE.

Accessories: Glass slide , Twizer

Unique Features: This very simple and sophisticated instrument for Polymers.

- 10. UNIVERSAL TENSILE TESTING MACHINE(TENSILE/ FLEXURAL/ELONGATION/COMPRESSION/MODULUS TESTER)





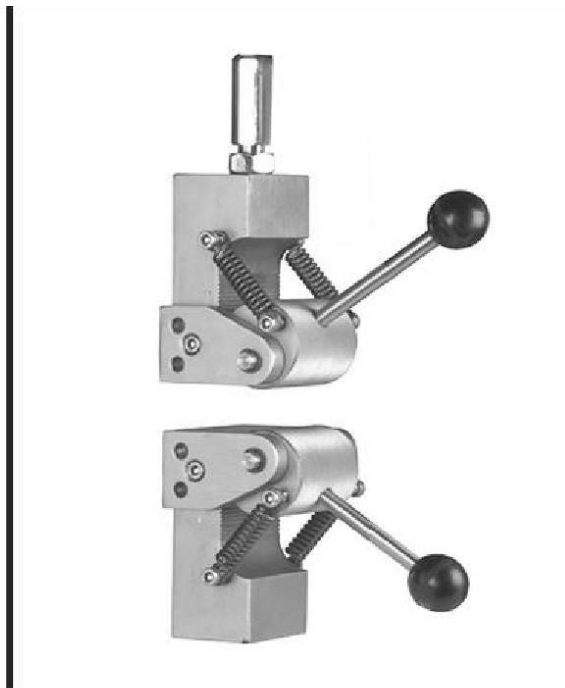
Compression Plates



Flexural Fixtures



Heavy Duty Grip



Roller Grip



Self Tightening Grip



Smaller Wave Grip



Wave Grip



Wire Grip



Yarn Grip

This is basic Instruments for Polymer Manufacturer to findout samples straingth, Elongation , flexibility and its Physical and Mechanical behaiour. All Standards, ASTM D 638, D 882, D 790, D 695 and BS 2782 or so many equivalent standards.

TEST CAN PERFORM : TENSILE , FLEXURAL , COMPRESSION, PEEL , BOND, CYCLIC

Tensile Testing Machine used for getting the accurate Measurement of material with standing force capacity by pull it apart and to determine what extent the materials can be stretched before reaching the breaking point.

IDEAL LAB ENGINEERS LLP UTM Gives Highly Accurate Result with Latest Technology and is available in So many Different Models for testing various types of Materials. Load Measuring Sensor, Sample Holding Grips, Fixtures can be interchange smoothly and easily to perform various test like Compression, Flexural , TENSILE, peel strength, bond strength.

Standards:

MACHINE IS AVAILABLE DIFFERENT DIFFERENT LOAD CAPACITIES RANGE(SINGLE COLUMN AND DOUBLE COULMN): 50KG,100KG, 225KG, 500KG, 1000KG, 2500KG.

UTM MACHINE CONTROLLER AND SOFTWARE

INTRODUCTION

Electronic Hardware Features:

Micro controller based intelligent unit
Both direction compression/ elongation motor movement
Display both load & displacement
Manual operation of Home, Up & Down movement of jaw
Load resolution 0.01% (one count in ten thousand counts)
Length resolution minimum 0.1mm
Auto report generation with all the load related parameters

RS-232 interface (FOR COMPUTER OPERATION)

SOFTWARE Feature:

- PRINTING OF FINAL REPORT ON COMPUTER – WITH GRAPH FOR LOAD VERSUS LENGTH OR GRAPH FOR STRAIN VERSUS STRESS.
 - DISPLAY OF PEAK LOAD, CALCULATION OF PEAK STRENGTH.
 - SELECTION OF SAMPLE – TYPE – FLAT, CIRCULAR, TUBULAR OR ODD FOR AREA CALCULATION.
 - SELECTION OF TEST TYPE – FOR ELONGATION OR COMPRESSION ,FLEXURAL ,TENSILE, PEEL BOND, CYCLIC.
 - USER DEFINED SAMPLE CREATION – WITH USER DEFINED NAME AND BATCH NUMBER FOR THE SAMPLES.
 - ONLINE DISPLAY OF GRAPH – WHEN THE TEST IS ON
 - TABULAR DATA REPORTING OF SAMPLES – WITH CALCULATION FOR MEAN AND STANDARD DEVIATION.
- INPUT POWER 230V , 50 HZ ,1 PHASE

CERTIFICATION:CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

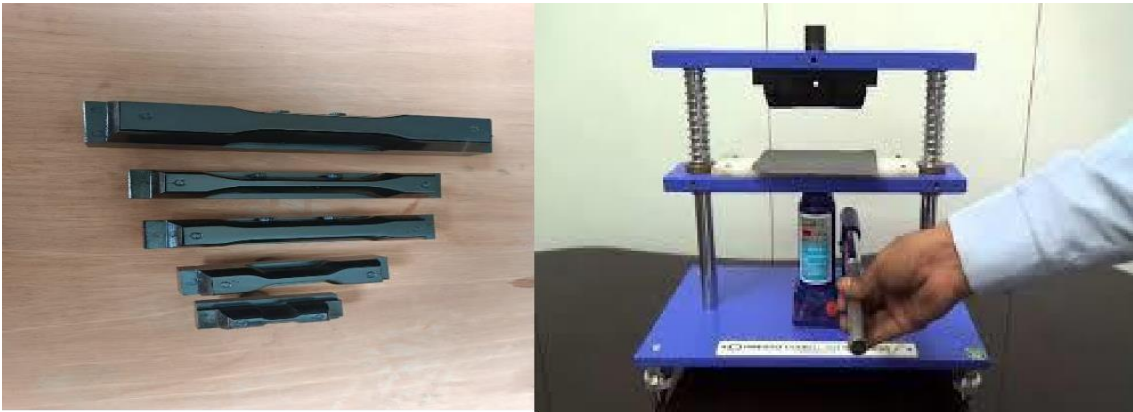
Warranty: 1 year warranty.

11. **Dumbbell Die & Dumbbell press**

- Dumbbell Press offered by us are laboratory sample cutting presses that form an essential parts of laboratory. These are used primarily for cutting dumbbell shaped that are used in various tests like elongation test, tensile test and others.

Further, type press has high impact hardened cutting screws that allows high volume cutting.

- Dumbbell die Available in all standard ASTM D 638, 412 etc.



SINGLE SCREW UTM MACHINE

UNIVERSAL TENSILE MACHINE(TENSILE/ELONGATION/PEAK LOAD/AVERAGE LOAD/PEEL/BOND TESTER) ASTM D882 AND OTHER INTERNATIONAL STANDARD



To express the **maximum force the film can withstand when it is pulled** (tensile strength) and the amount it stretches (tensile elongation).

The peel adhesion test is **used to determine the force required to de-bond two components joined by an adhesive**. The test result, also known as bond strength, is generally represented as N (force to de-bond) / 25mm or 50mm (depending on specimen). Angle 180 degree and 90 Degree.

The seal or **bond** strength **testing** determines the mechanical strength, force, or stress required to break a **bond** /seal.

Specification: Load Frame a) Tabletop model with single test area, max. capacity 5kN

- b) Dual column design with low-backlash Lead screws
- c) Precise AC motor
- d) Adjustable limit switches
- e) Emergency stop on the load frame
- f) In-built digital controller
- g) High frame stiffness preferred (50 KN/mm or better)
- h) Data acquisition at PC: 100 kHz or better
- i) crosshead travel-(no grips): 900mm or better
- j) Horizontal opening: 450 mm or better
- k) Test speed range: 0.5 to 500 mm/min or better
- l) Jog speed range: 0.5 to 500 mm/min or better
- m) Return speed range: 0.5 to 500 mm/min or better
- n) Speed resolution: 0.5mm/min
- o) Speed accuracy: $\pm 0.5\%$ of set speed or better
- p) Automatic motor drive alarm system to monitor over/under voltage, current and temperature
- q) Power requirement: 220-240V/50Hz, single phase

Data Acquisition System and Software: a) Latest control, acquisition and analysis software with

following features:

- i. Compatibility with latest computer technology
- ii. Real-time display of data and curves
- iii. Data regeneration mode to recalculate missing or all Results
- iv. Automatic Report generation for every test
- v. Multiple graphs like Stress Vs. Strain, Force Vs. Time, Stress Vs. Time, Load Vs Time etc. on single screen and single report

- vi. In-built results like tensile strength, tensile strength at Modulus 100% elongation at break etc
- vii. Multi-segment programmable tests
- viii. Recall mode to see historic data
- ix. Auto and manual data backup to secure location
- x. Free software upgrades for 5 years
- xi. Cross-check functionality to setup test methods correctly
- xii. In-built tutorials and user manual

Load and Elongation Measurement: a) Load measurement: interchangeable strain-gage type load cells

of 5kN and 500N capacity — 01 each

- i. Auto identification, scaling and calibration
- ii. Measurement range: 2% to 100% of the capacity
- iii. Accuracy: $\pm 0.5\%$ of applied force
- iv. Resolution: 0.1% of the capacity
- v. Mechanical overload protection: 150% or better
- vi. Digital load tare: 20% or better maintaining full load cell capacity

b) Elongation measurement: Optical encoder

- i. Accuracy: 0.01mm or better
- ii. Resolution: 0.01mm or better

Grips: a) Set of Double Roller grips - 1kN or Higher Capacity(Including Easy changeability of grips 25 mm wide, suitable for 0.1 TO 8.00MM Specimen Thickness)

Accessories: Communication cable 5mter , Software, Grips 1 set, Manual, 4 legs, 25x150MM Template for sample cutting.

CERTIFICATION: CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.

-
-
- **12. IZOD/CHARPY IMPACT TESTER**



As per ASTM D - 256 & ASTM D 6110 as well as ISO 179 and ISO 180 to test impact resistance of plastics by Izod and Charpy method respectively. The test indicates the energy required to break specimen by axial impact.

Specification :

- Capacity : Up to 25.00 Joules.
- Release angle of pendulum: 150 degree.
- Range of four scales : 0-2.71 Joules, 0-5.42 Joules, 0-10.84 Joules, 0-21.68 Joules and 0-25.00 Joules.
- Minimum resolution on scale : 0.02 Joule, 0.05 Joule,

0.1 Joule, 0.2 Joule and 0.2 Joule respectively.

- Paint : Powder coated.
- Power : 230 Volts, 50 Hz, single phase.
- Direct display through microcontroller : Impact strength in joules/meter and kg-cm/cm.

CERTIFICATION: CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.

Features: IZOD/CHARPY Detailed computer software for analysis of behaviour of specimen is very easy to understand with the help of software. Graphical view and energy, angle of hammered struck with sample all information is available in software with .print, share option. (software is optional)

13. NOTCH CUTTER



For making 'V' notch in the Izod/ Charpy samples as per ASTM D- 256 & ASTM D 6110 as well as ISO 179 and ISO 180 standards.

14. **VSP/HDT TEST APPARATUS**

This machine is usefull for testing vicat softening Temreture and Heat diflaction Temprature of Plastics.



AsperASTMD-1525andASTMD-648aswellas ISO306 and ISO75 to determine vicat softening temperature and heat deflection temperature

(heat deflection temperature) of polymers, compounds and engineering plastics.

Specification :

Temperature range : From ambient to 300 °C.

No of stations : With Options Of 2 Stations to 4 Stations Material of construction :Inner bath: S.S

Outer body : M.S

Rate of heating : 120 °C / hour and 50 °C / hour. Sensor : Range upto 10mm with resolution of 0.01mm. Paint : Powder coated.

Power : 230 Volts, 50Hz, single phase.

Weights : A set of weights ranging from 5 grams to 2000 grams would be supplied for incremental loads.

Direct display through microcontroller : VSP and HDT Result

CERTIFICATION:CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.

- 15.ROCKWELL HARDNESS TESTER



Shore A and Shore D for specimen Hardness Testing purpose . Calibration block will be provide with instruments for 25/50/75 .

- [16.CONDITIONING CHAMBER / HUMIDITY CHAMBER](#)

This instrument is required for conditioning of specimen before performing Test on it. Polymer experts know the effect of environment or climate on sample, achieving ideal results is necessary to prepare specimen into controlled Humidity/Temperature environment.



SPECIFICATION: Digital controller to indicate Humidity and Temperature inside chamber.

High accuracy Sensor to measure Temperature and Humidity.

Mode of Humidity and Temperature, Settable as per Requirement

Smart controller to indicate if any error occurs in system.

Automatic water level indicator.

Input power: 230 v, 50HZ, 1 PHASE

CERTIFICATION: CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.

17. ZERO DEGREE CHAMBER



- [Freezer \(Zero Degree Chamber\)](#)
- **IDEAL LAB EQUIPMENTS** is specially used to condition the specimen for different test at 0° C or low temperature as specifications in different national & international standards.
- **IDEAL LAB EQUIPMENTS** conditioning chambers are designed & developed in such a way to obtain the set temperature within short time and it's with puff insulation and microprocessor based controller helps to maintain the set parameter within + 1%.

INPUT POWER: 230V , 50HZ, 1 PHASE.

CERTIFICATION: CALIBRATION CERTIFICATE WITH NABL TRACEABILITY FOR 1 YEAR.

Warranty: 1 year warranty.