

Micro Hardness

Model and Make - MMTX7-JAPAN

Power Supply
240 volts/ single phase

Purpose - Microhardness Study

Specifications

Micro Hardness key features
Matsuzawa make Digital Micro Vickers hardness Tester with loads from 1 g to 2 Kgs with manual turret

Testing Charges - Rs.250/Sample



Optical Microscopy



Model and Make - Leica DM750 M

Power Supply - 240 volts/ single phase

Purpose - Microstructural analysis for Metals and alloys
Specifications

Optical Microscope

Objective HI PLAN EPI 5x/0.12 Free working distance: 11.7 mm
Objective HI PLAN EPI 10x/0.25 Free working distance: 12.0 mm
Objective HI PLAN EPI 20x/0.40 Free working distance: 1.15 mm
Objective N PLAN EPI 50x/0.75 Free working distance: 0.37 mm
Objective N PLAN EPI 50x/0.75 Free working distance: 0.37 mm

Testing Charges - Rs.250/ Sample

Planetary Ball Mill

Model and Make
P6 classical line- Fritsch,
Germany

Power Supply
230-240 V/ 50-60 Hz

Specifications
Material for milling
ZrO₂ - 250 ml bowl and 5, 10 mm Balls

RPM 300
Purpose Milling

Testing Charges - Rs.500/hr



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Electro Chemical Workstation



Power Supply - 240 volts/ single phase

Specifications

Electrodes Electrode Polishing Kit
Silver/Silver Chloride Reference Electrode
Gold Milli-electrode (2 mm) and Glassy Carbon Milli-electrode (2 mm)

Thermocouple R-Type

Purpose-Electrochemical Corrosion Studies (Tafel, PDP and EIS) and cyclic voltammetry study

Testing Charges - Rs.500/Sample

VISION & MISSION

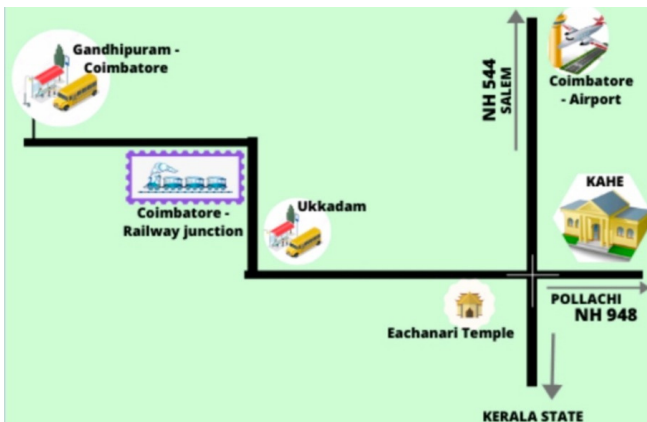
VISION

- To be a centre of excellence in Advanced Materials and Processing

MISSION

- To grow empowering students and professionals with state-of-art knowledge and technological skills.
- To enabling Industries to adopt effective solutions in Advanced Materials and Processing areas through research and consultancy.
- Evolving appropriate sustainable technologies for rural needs.
- To undertake collaborative projects with academia and industries.

REACH US :



Universal Testing Machine



Model and Make
MTE40HGFL

Power Supply
400-440 / 3 phase

Purpose Universal Testing Machine is designed for testing metals and other materials under tension, compression, bending, transverse and shear load.

Specifications

UTM Machine key features

incorporates design features to enable high accuracy testing with economy, speed and versatility. Loading accuracy as high $\pm 1\%$. Straining at variable speed to suit a wide range of materials. Graphs for display on PC/print to enable study the behavior of the material. RS 232 serial port to transfer data to computer for analysis/storage evaluation etc. Manual control & release value open.

Testing Charges - Rs.250/Sample

Tubular Vacuum Furnace

Model and Make -Compact

Power Supply
230-240 V/ 50-60 Hz

Specifications
Max Temperature 1400 C

External dimensions
700 mm X 600 mm X 550 mm

Thermocouple R-Type

Purpose- Phase Transformation
Ex. Annealing, Sintering

Testing Charges - Rs.500/hr



Uni-Axial Hot Press

Model and Make
Table Top

Power Supply
230-240 V/ 50-60 Hz

Specifications
Temperature 500 C

Capacity 10 Ton

Die Size 8 mm

Purpose Pellet preparation,
Powder Compaction

Testing Charges - Rs.500/hr



Tubular Hot Corrosion Furnace

Model and Make -Compact

Power Supply
230-240 V/ 50-60 Hz

Specifications
Max Temperature 1200 C

External dimensions
400 mm X 400 mm X 400 mm

Thermocouple R-Type

Purpose- Hot corrosion studies
for High Temperature strength
Materials

Testing Charges - Rs.500/hr



Density Measurement

Micro Weighing Balance Density Kit

Model and Make Model: AS220.R2
Model: DK 85

Power Supply
240 volts/ single phase

Specifications
Temperature 500 C

Capacity 10 Ton

ANALYTICAL BALANCE Max: 220 g
Readability : 0.1 mg Repeatability : 0.1 mg
Linearity: +/- 0.3 mg
Pan size: 100 mm Dia

Purpose Weighing and Density Measurement Specifications

Testing Charges - Rs.250/Sample



Belt Grinding Machine.



Model and Make - METALINE - 1

Power Supply - 220 Volts/Single phase

Purpose - Coarse grinding for metallographic samples.

Specifications
key features
0.5HP Single phase motor, 1440 rpm.
100mm x 225mm grinding table with improved safety with 100 X 915mm size Endless Belt.

Testing Charges - Rs.50/Sample

Hot Mounting Machine.

Model and Make -METAMOUNT - 3

Power Supply - 220 volts/ Single phase

Purpose - Sample mounting for metallographic studies.

Specifications
key features
1500 watt Mold Heater with water cooling unit supplied as standard accessory. Machine size: W410 x D700 x H525mm. Weight: 70Kgs.

Testing Charges - Rs 250/Sample



Double Disc Polisher



Model and Make - METAPOL-2

Power Supply - 220 volts/Single phase

Purpose - Fine polishing of sample for Metallography, Hardness and Corrosion studies.

Specifications
key features 200mm Diameter Double Disc Polisher with speed range of 100 - 750 RPM. Flexible water jet with control valve.

Testing charges - Rs.50/Sample

Tubular Oxidation Furnace

Model and Make - Compact

Power Supply
230-240 V/ 50-60 Hz

Specifications
Max Temperature 1400 C

External dimensions
400 mm X 400 mm X 400 mm

Thermocouple R-Type

Purpose- Phase Oxidation and corrosion studies for High Temperature strength Materials

Testing Charges - Rs.500/Sample



Abrasive Cutting Machine



Model and Make - METACUT - 1E

Power Supply - 220 volts/ 3- phase

Purpose - Cutting metals, alloys and polymers. Sample preparation for mechanical and corrosion studies. Specifications

Specifications
key features
3HP, 3 phase motor with 2880 rpm with overload protection.
T - Slotted bed for fixing different types of clamps.
Cutting capacity up to 50 mm Dia.
Cut-off wheel diameter 8"/10"

Testing Charges - Rs.250/Sample