



METKORP EQUIPMENTS PVT. LTD., is a Leading Metallurgical Equipment Manufacturer & Suppliers in Delhi We are engaged in manufacturing, supplying & exporting in all type of Scientific Lab Equipment in Delhi & Metallographic Equipment Like Metallurgical Laboratory Equipment, Salt Spray Chamber, Micro Hardness Tester, Metallurgical Microscope, Vibro Finishing Machines, Universal Testing Machine (UTM), Profile Projector, Material Testing Equipment, Micro Hardness Testers, Weld Penetration System, Automatic Polishing Machine, Material Testing Equipments, Chemical Testing Equipment, NDT Equipments etc.

We are having collection of scientific equipment which provided by us we manufactured & designed best products using high-quality material which is acquired from renowned vendor of the specified markets. Besides, all Metkorp Equipments offered products strictly comply with the global quality standard & which are examined on specified parameters to ensure that the flawlessness of our product range under the observation of our quality checking specialist. Our product range comprises of Hardness Tester, High-Temperature Furnace & Metallography Cutting Machine.

Metkorp Equipments offered equipment is appreciated by our clients in all over India & abroad for their best performance & longer functional life's, that's our customer refer us to different companies because of our services and for our product quality, we are working we many big names in India who buying products from us.



# **Our Products**

- Metallography Cutting Machines
- Metallography Polishing Machines
- Metallography Mounting Press
- Universal Testing Machines
- Weld Penetration System
- Profile Projectors
- Salt Spray Chamber
- Tensile Testing Machines
- Micro Hardness Tester
- Rockwell Hardness Tester
- Brinell Hardness Tester
- Portable And Ultrasonic Hardness Tester
- Chemical Composition Spectrometer
- Spectro Grinder
- 3 In 1 Spectro Polisher
- Vacuum Porosity Machine
- Millipore Filteration Assembly
- Flushing Machines
- Compression Testing Machine
- Load Testing Machines
- Ndt Equipments
- Vibro Finishing Machines



















































































































# METALLOGRAPHY SPECIMEN CUTTING MACHINE





# Low Speed Saw Cutting Machine (LSSC-2)

- Cutting capacity upto 50 mm dia
- Door Interlock limit switch (option)
- Re-circulating coolant system
- Automatic Y-Movement(Longitudinal)
- Variable speed system 100-3000 rpm
- · Variable feed rates and cutting length
- Precision serial cutting (option)
- Power single phase 1HP: 220V/50Hz or 110V/60Hz
- Diamond / Abrasive wheel upto 200 mm dia (8")
- Machine Size: 600 X 600 X 500 mm

# **Cutting Machine (ACO-50)**

Metallography Specimen Cutting Machine can obtain metallography specimen and it can be widely used to cut various metal materials in metallography laboratories. Taking advantage of rolling sheet wheel with high speed. The provision for cooling system can clear up the heat produced during cutting so that it will avoid the metallography structure deforming of specimen because of heating influence (optional).

- Max cutting diameter 60mm/80mm
- Sand wheel specification 200 X 2.5 X 32mm
- Sand wheel rotating speed 2800 rpm\1440Rpm
- Motor 2/3Hp, 440v, 3 Phase
- Dimension 63 X 50 X 65cm
- Net weight 130kg





# Cutting Machine (ACO-100/120/150)

- Cutting speed manual & automatic
- Revolution of abrasive wheel 1440 / 2800rpm
- Specification of abrasive wheel 300 X 1.5 X 31.5mm
- Cutting capacity Ø100mm / 120mm / 150mm
- Self centering 360° rotation vice 4 / 6 / 8inch
- Overall dimensions (WxDxH) 650 X 800 X 1450mm
- Weigth (approx) 200kg

# (Consumables)

- Abrasive cutters 8inch, 10inch, 12 inch,14inch,16inch
- Diamond cutter
- Exclusive coolant
- Various provision for griping vice
- Cam vice
- 360° rotatable vice

# METALLOGRAPHY SPECIMEN CUTTING MACHINE





# **Metallurgy Cutting Machine (ACO-200)**

- Cutting capacity upto 200mm/ 300mm/ 500mm dia
- Powered by 10/15/20 HP (22.5kw), 3 Phase Motor
- Cut-off wheel dia 20" (500mm)
- Variablr speed 1000 3000rpm
- 3 Axis user friendly movement
- 'Y' Movement and "Z" Movement automactic with servo system
- Advanced PLC based graphical touch screen system with pre set programs
- High flow coolant jet system with bed wash and auto wash for a clean machine
- Magnetic separator
- Paper band filter system (option)
- Serial cutting (Option)
- Fume digester
- Door safety interlock system
- Table 500 X 500 or 600 X 600mm with 12 mm T-Slot
- Power: 415v / 50 Hz or 480v / 60 Hz
- Machine Size: 2100 X 2150 X 2400mm

# Metallurgy Cutting Machine (SDM-80/SDM-100)

- Cutting capacity upto 80mm/100mm dia
- Powered by 3 HP (2.2kw), 3 Phase Motor
- Rust proof steel construction
- Inbuilt movable re circulation coolant tank
- Z axis movement manual
- Wheel dia 8"/10"/12" (200mm/250mm/300mm)
- Spindle speed 2800 rpm
- T-slot bed: 240 X 200mm with 10mm "T" slot
- Door Limit switch / emergency stopper





# Metallurgy Cutting Machine (DM-80B/DM-100B)

- Cutting capacity upto 150mm/200mm/250mm dia
- Powered by 5HP/ 7.5HP/ 10HP, 3 Phase Motor
- Z, Y and X movement
- Inbuilt movable re-circulation coolant tank
- Cut-off wheel dia 12"/14"/16" (300mm/350mm/400mm)
- Safety emergency stop with door limit switch
- Easy operator panel
- Table size: 310 X 260mm with 8mm T-Slot
- Door safety interlock (option)
- Side opening for longer components
- Power: 415v / 50Hz or 220v / 60Hz
- Machine Size: 1100 X 1000 X 1650mm
- Optional accessories 20" Wheel

# METALLOGRAPHIC SPECIMEN MOUNTING PRESS





# **Mounting Press (AUTO-50)**

- Pneumatic operating system
- $\bullet$  inter changeable moulds1  $1/\!\!/_4$  1  $1/\!\!/_2$  and 2" dia
- Optional: Metric mould dimensions: 30, 40 & 50mm
- Heater 1600 watts, single phase
- Automatic water cooling system
- User friendly feather touch button
- Machine size: 450 X 620 X 590mm
- Optional: Water cooling Re-circulation sysytem
- Buzzer on completion of cycle

# Vaccum Mounting Press (VIM-1)

• Vacuum Chamber Diameter : Dia 260mm

• Transposition Speed : 5r/min

• Sample Diameter : Dia 25~50mm

• Voltage : 220V or 110V



# **Mounting Press (SA-50)**

- $\bullet$  Inter changeable moulds1  $1/\!\!/_4$  1  $1/\!\!/_2$  and 2" dia
- Optional: Metric mould dimensions: 30, 40 & 50mm
- Heater 1600 watts, single phase
- Digital temperature indicator & digital timer
- Timer-Buzzer for heating and cooling cycles
- Manual water cooling system
- User friendly feather touch button
- Machine size: 450 X 620 X 590mm
- Optional: Water cooling Re-circulation sysytem

# (Consumables)

- Black phenolic powder
- Transparent molding powder
- Mould realease spray
- Inter changeable moulds1 1/4 1 1/2 and 2" dia

# METALLOGRAPHY SPECIMEN GRINDING & POLISHING MACHINE





# Metallographic Mounting Press (METKORP 2B)

• Sample diameter : 22mm, 30mm, 45mm dia

Heating Range : Max190°C
 Holding time Range : 0-30min
 Machine Power : ≦800w

Input voltage : 220V/50HZ

Dimension : 260mm×360mm×450mm

Net weight : 35kg

# (Consumables)

• Black phenolic powder

• Transparent molding powder

• Mould realease spray

 $\bullet$  Inter changeable moulds1  $\frac{1}{4}$  1  $\frac{1}{2}$  and 2" dia

# Metallographic Mounting Press (METKORP 2)

• Sample diameter : 22mm, 30mm, 45mm dia

Heating power : 450~1000w
Heating Range : 100-200°C
Cooling Range : 20°C~90°C

• Holding time Range : 0-999(s)

Input Voltage : Single-phase 220V 50HZ

• Cooling mode : Water /slow Cooling

• Dimension : 350mm×400mm×465mm

Net weight : 48kg





# Metallographic Mounting Press (METKORP 5)

• Sample Diameter : 25mm, 30mm, 40mm, 50mm dia

1inch, 1.25inch, 1.5inch, 2inch

• System Pressure : 0-20MPa

• Cooling Range : 40~90°C

• Heating Temp : 90~200°C

• Heating Power : 2400W for 25,30mm 3000W for 40,50mm

3000 \*\* 101 40,50

• Power : 4500W

• Voltage : 220V, 50Hz

• Dimensions : 530\*485\*463mm

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# METALLOGRAPHY SPECIMEN GRINDING & POLISHING MACHINE





# Digital Double Disk Polishing Machine (METKORP 2B)

Wheel diameter : Dia 203mmRotational speed : 0-1400r/min

• Rotational direction : Clockwise or anticlockwise

• Emergency stop : YES

• Input voltage : AC220V 50Hz

• Wheel quantity : 2

• Input power : 0.75KW

• Dimension : 758\*785\*310mm

• Net weight : 40kg

# **Automatic Double Disk Polisher (METKORP 2)**

• Wheel diameter : Dia 203mm

• Constant speed : 450 r/min (left),600 r/min (right)

• Rotational direction : Anticlockwise

• Emergency stop : YES

• Input voltage : AC220V 50Hz

Wheel quantity : 2PCInput power : 370W

• Dimension : 755mm x780mm x310mm

• Net weight : 56kg



# **Automatic Double Disk Polisher (METKORP 2S)**

• wheel diameter : Dia 250mm

• wheel quantity : 2

Rotational speed
 So-1000RPM&150/300RPM
 Clockwise or anticlockwise

Power head speed : 50-150rpm
Loading range : 5-60N
Sample preparation time : 0-995S
Preparation sample quantity : 4 PCS

• Sample diameter : dia 30mm(22mm or 45mm)

• Lighting : LED

Air pressure : 0.6-0.9MPa
Input voltage : 220V/50HZ
Input power : 1.1kw

• Dimension : 758mm x785mm x680mm

• Net weight : 98kg



# (Consumables)

Cold setting compound

• Polishing papers - Polishing clothes

• Diamond paste

• High polishing alumina powder

• Polishing suspension 1 - 3 - 6 - 0.25 - 0.5 micron

# METALLOGRAPHY SPECIMEN GRINDING & POLISHING MACHINE



Metallography specimen grinding & polishing machines are equipped with double disks or single disk and features stepless speed changing grinding and polishing. It can finish the whole process of rough grinding, fine grinding, rough polishing and finishing polishing for specimen preparing.



# Single Disk Polishing Machine (DM-1A)

- 0.5HP high torque AC motor
- Single Phase input 220v/50Hz or 110v/60Hz
- Imported AC drive
- 8" disc dia standard
- 10" & 12" dia options
- LCD display
- Feather touch control
- 50 to 1000RPM or 50 to 600RPM
- Machine size: 360 X 660 X 310mm



# **Double Disk Polishing Machine (DM-2T)**

- 0.5HP high torque AC motor
- Single Phase input 220v/50Hz or 110v/60Hz
- Imported AC drive
- 8" disc dia standard
- 10" & 12" dia options
- LCD display
- Feather touch control
- 50 to 1000RPM or 50 to 600RPM
- Machine size: 710 X 660 X 310mm



# **Automatic Grinding Polishing Machine (METKORP 2)**

• wheel diameter : Dia 250mm

• wheel quantity : 1

Rotational speed
 S0-1000RPM&150/300RPM
 Rotational direction
 Clockwise or anticlockwise

Power head speed : 50-150rpm
Loading range : 5-60N
Sample preparation time : 0-995S
Preparation sample quantity : 4 PCS
Sample diameter : dia 30mm
Lighting : LED

• Input voltage : Single-phase voltageAC220V/50HZ

: 0.6-0.9MPa

• Input power : 1.1kw

Air pressure

• Dimension : 594mm x795mm x687mm

• Net weight : 93kg

# **Consumables for Polishing**

Polishing Paper
Grinding Emery Paper
Alumina Paste
Diamond Paste
Black Phenolic Powder
Cold Setting Compound



# DIGITAL DISPLAY MICROHARDNESS TESTER





# Metkorp Fully Automatic with touchscreen (METKORP1000)

MICRO HARDNESS TESTER can be used to determine the Vickers hardness of steel, non-ferrous metals, ceramics, treated layers of metal surface, and the hardness grades of carburized, nitrided and hardened layers of metals. It is also suitable to determine the Vickers hardness of micro and super thin parts.

# Feature & Use

- Automatic reading Manual turret Touch screen 7inch.
- Automatic reading Auto turret Touch screen 7inch.
- Precision conforms to GB/T 4340.2, ISO 6507-2 and ASTM E384.
- Frictionless loading shaft, high precision testing force.
- RS232 data interface, built-in printer.
- Effective case depth specialist

# **Metkorp Automatic Microhardness**

MICRO HARDNESS TESTER can be used to determine the Vickers hardness of steel, non-ferrous metals, ceramics, treated layers of metal surface, and the hardness grades of carburized, nitrided and hardened layers of metals. It is also suitable to determine the Vickers hardness of micro and super thin parts.

# Feature & Use

- Automatic reading Manual turret Software based.
- Automatic reading Auto turret Software based.
- Hardness conversion between different hardness scales.
- Precision conforms to GB/T 4340.2, ISO 6507-2 and ASTM E384.
- Frictionless loading shaft, high precision testing force.
- RS232 data interface, built-in printer.



# 721HV1 d1:0.051mm d2:0.050mm 721HV1 d1:0.051mm d2:0.050mm 721HV1 72

# Microhardness tester with software

The software provides simplest, accurate and user-friendly platform to all Geometrical Measurements. Creates customized rports with images, date and text in MS word and MS excle format.

# Feature & Use

- Calibration: This tool is used for calibrating through calibration scale.
- Hardness indentation measurement.
- Micro hardness profile with ECD identification.
- Create custom made formatted reports of live and stored images.
- Display results on the computer & you may take multicolor prints out

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# DIGITAL DISPLAY MICROHARDNESS TESTER





# Metkorp Digital Microhardness Tester with software (MHT1000)

MICRO HARDNESS TESER can be used to determine the Vickers hardness of steel, non-ferrous metals, ceramics, treated layers of metal surface, and the hardness grades of carburized, nitrided and hardened layers of metals. It is also suitable to determine the Vickers hardness of micro and super thin parts.

# Feature & Use

- Automatic reading Manual turret.
- Automatic reading Automatic turret.
- Hardness conversion between different hardness scales.
- Precision conforms to GB/T 4340.2, ISO 6507-2 and ASTM E384.
- Frictionless loading shaft, high precision testing force.
- RS232 data interface, built-in printer.

# Metkorp Automatic Microhardness (AHT 1000)

MICRO HARDNESS TESER can be used to determine the Vickers hardness of steel, non-ferrous metals, ceramics, treated layers of metal surface, and the hardness grades of carburized, nitrided and hardened layers of metals. It is also suitable to determine the Vickers hardness of micro and super thin parts.

# Feature & Use

- Automatic reading Manual turret Automatic software
- Automatic reading Automatic turret Automatic software
- Hardness conversion between different hardness scales.
- Precision conforms to GB/T 4340.2, ISO 6507-2 and ASTM E384.
- Frictionless loading shaft, high precision testing force.
- RS232 data interface, built-in printer.





# Metkorp Microhardness With Software (AHT 1000)

MICRO HARDNESS TESER can be used to determine the Vickers hardness of steel, non-ferrous metals, ceramics, treated layers of metal surface, and the hardness grades of carburized, nitrided and hardened layers of metals. It is also suitable to determine the Vickers hardness of micro and super thin parts.

# Feature & Use

- · Automatic reading Manual turret
- Automatic reading Automatic turret
- Hardness conversion between different hardness scales.
- Precision conforms to GB/T 4340.2, ISO 6507-2 and ASTM E384.
- Frictionless loading shaft, high precision testing force.
- RS232 data interface, built-in printer.



# DIGITAL DISPLAY MICROHARDNESS TESTER









# Multifunctional Portable Hardness Tester (METKORP11A)

• Power supply: 6.0V DC

Working temperature: 1-40 °CDimensions: 268\*86\*47mm

• Weight: approx. 0.67kg

# Hardness Tester (METKOPR160)

1.Measuring range :150HLD~960HLD

2.Test direction :360 temperature

3.10 materials testing

4. Hardness Conversion: HL HRC HRB HRA HB HV HS

5.Display: Large screen dot matrix LCD 6.Data Storage:500set (Impact times1-26)

7. Upper and lower setting range: With measuring range

8.Software calibration range:+/-15HLD 9.Hardware calibration range:+/-30HLD

10.Voltage :4.7~6.0v 11.Size :240\*86\*47mm 12.Weight :0.3kg

# **Hardness Tester (METKOPR200)**

1.Measuring range :(150-960)HLD

2. Measuring direction: 360 temperature

3.Testing material:10 kinds

4.Hardness conversion :HL (HRC HRB HRA) HB HV HS 5.Display : Large screen dot matrix LCD (320×240)

6.Data Storage: 250 set (Impact times1~26)

7. Upper and lower setting range: With measuring range

8.Software calibration range: +/-15HLD 9.Hardware calibration range: +/-30HLD

10.Working voltage :3.3v 11.Charging time :6~8h 12.Working time : 40h

13. Communication interface: RS232

14.Size: (160\*80\*42)mm

15.Weight : 0.3kg

# X-Y Stage

# **Test Block**

# **Digital Micrometer**

# **Objective-Eyepiece**







# BRINELL HARDNESS TESTER



It's suitable to determine the Rockwell hardness of ferrous, non-ferrous metals. It can be widely applied in the Rockwell hardness testing for heat treatment materials, such as quenching, hardening and tempering, etc.



# **Brinell Hardness (BM-3000)**

- Measuring range 3-3000HBW.
- Steps of test load 312, 980, 1226, 1838.8, 2415.8, 4903 7355.3, 9807, 14710, 29421N (62.5, 100, 125, 187.5 250, 500, 750, 1000, 1500, 3000kgf).
- Max. height of test piece 280mm.
- Depth of throat 150mm.
- Unit for desplay  $0.005\mu m$ .

# **Brinell Hardness (BSA-3000)**

- Measuring range 3-3000HBW.
- Steps of test load 312, 980, 1226, 1838.8, 2415.8, 4903 7355.3, 9807, 14710, 29421N (62.5, 100, 125, 187.5 250, 500, 750, 1000, 1500, 3000kgf).
- Max. height of test piece 280mm.
- Depth of throat 150mm.
- Unit for desplay  $0.005\mu m$ .
- Software built in printer.



# **Brinell Hardness (BFA-3000)**

- Measuring range 3-3000HBW.
- Steps of test load 312, 980, 1226, 1838.8, 2415.8, 4903 7355.3, 9807, 14710, 29421N (62.5, 100, 125, 187.5 250, 500, 750, 1000, 1500, 3000kgf).
- Max. height of test piece 280mm.
- Depth of throat 150mm.
- Unit for desplay  $0.005 \mu m$ .
- Fully automatic with software.

# **Portable Hardness**

# **Portable Hardness**

# **V Block-Anvil**

# **Indentors**









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# VICKERS HARDNESS TESTER





# Vickers Hardness Tester (DIGI 1-50kg)

- Automatic reading Manual turret.
- Automatic reading Automatic turret.
- Measuring range 1-4000HV
- Test force 1.961, 2.942, 4.903, 9.807, 19.61, 24.52, 92.42, 49.03N (0.2, 0.3, 0.5, 1, 2, 2.5, 3, 5kgf)
- Magnifications of the measuring microscope 100X, 200X
   Extended upto 400X
- Min. scale value of the measuring microscope  $0.25\mu m$
- Max. height of test piece 130mm
- Dimensions 410 X 200 X 620mm
- Weight approx. 50kg

# Vickers Hardness Tester (500gm-10kg)

- Measuring range 1-4000HV
- Test force 1.961, 2.942, 4.903, 9.807, 19.61, 24.52, 92.42, 49.03N (0.2, 0.3, 0.5, 1, 2, 2.5, 3, 5kgf)
- Magnifications of the measuring microscope 100X, 200X
   Extended upto 400X
- Min. scale value of the measuring microscope 0.25  $\mu$ m
- Max. height of test piece 130mm
- Depth of throat 100mm
- Power supply 220V AC, 50Hz
- Automatic reading Manual turret.
- Automatic reading Automatic turret.





# Vickers Hardness Tester (500kg-3000kg)

- Measuring range 1-4000HV
- 500 3000kg
- Magnifications of the measuring microscope 100X, 200X
   Extended upto 400X
- Min. scale value of the measuring microscope 0.25 µm
- Max. height of test piece 130mm
- Depth of throat 100mm
- Power supply 220V AC, 50Hz
- Dimensions 410 X 200 X 620mm
- Weight approx. 50kg

# ROCKWELL CUM BRINELL HARDNESS TESTER



It's suitable to determine the Rockwell hardness of ferrous, non-ferrous metals. It can be widely applied in the Rockwell hardness testing for heat treatment materials, such as quenching, hardening and tempering, etc.



# Digital / Manual Rockwell (MR-150)

- Measuring range 20-88HRA, 20-100HRB, 20-70HRC
- Test force 588.4, 980.7, 1471 N (60, 100, 150Kgf)
- Max. height of test piece 400mm
- Dept of throat 160mm



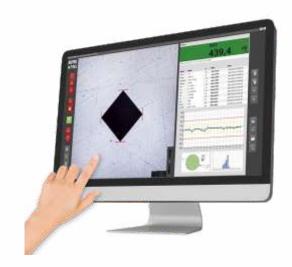
# Digital Rockwell (R-150)

- Measuring range 20-88HRA, 20-100HRB, 20-70HRC
- Test force 588.4, 980.7, 1471 N (60, 100, 150Kgf)
- Max. height of test piece 170mm
- Dept of throat 135mm



# **Automatic Rockwell Hardness Tester With Software**

- Measuring range 20-88HRA, 20-100HRB, 20-70HRC
- Test force 588.4, 980.7, 1471 N (60, 100, 150Kgf)
- Max. height of test piece 210mm
- Dept of throat 165mm



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# MET-1



MET-2



MET-3

# **METALLURGICAL MICROSCOPE UPRIGHT SERIES**

# **Binocular Observation Head**

- Siedentopf observation head inclined at 45°
- Diopter adjustment ring on ocular tube.
- Interpupillary distance from 50mm to 75mm.

# **Eyepiece**

• Wide field eyepiece 10X (paired) F.O.V. 18mm.

# Magnification

- 50X, 100X, 200X, 400X, 500X, 800X, 1000X
- 1200X, 1500X, 2000X (Optional)

# **Mechanical Body**

- Co-axial focusing system with large knobs, pre-focusing lever & tension adjustment ring.
- Quadruple nosepiece on ball bearing.
- Mechanical stage is 182mm X 195mm.
- The Mechanical stage has low positioned co-axial controls on ball bearing guide ways.

# Illuminator

• The Epi illuminator has 3V LED lamp with variable brightness control.

# **Standard Accessories**

• Blue, green & yellow filters, operating manual, dust cover, styrofoam molded pack.

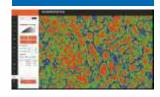
# **Trinocular Observation Head**

- Siedentopf observation head inclined at 45°
- Vertical phototube for micro photography.

# **Objectives (Infinity corrected)**

- M Long working distance plan 5X
- M Long working distance plan 10X
- M Long working distance plan 20X
- M Long working distance plan 50X (S.L.)
- M Long working distance plan 100X (DRY)

# PEARLITE/FERRITE



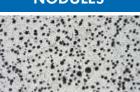
# **GRAIN SIZE**



# FLAKES



# NODULES



# **METALLURGICAL MICROSCOPE**

# **INVERTED SERIES TRINOCULAR**

# **Binocular Observation Head**

- Siedentopf observation head inclined at 45°
- Diopter adjustment ring on ocular tube.
- Interpupillary distance from 50mm to 75mm.

# Eyepiece

• Wide field eyepiece 10X (paired) F.O.V. 18mm.

# Magnification

- 50X, 100X, 200X, 400X, 500X, 800X, 1000X
- 1200X, 1500X, 2000X (Optional)

# **Mechanical Body**

- Co-axial focusing system with large knobs, pre-focusing lever & tension adjustment ring.
- Quadruple nosepiece on ball bearing.
- Mechanical stage is 182mm X 195mm.
- The Mechanical stage has low positioned co-axial controls on ball bearing guide ways.

# Illuminator

• The Epi illuminator has 3V LED lamp with variable brightness control.

# **Standard Accessories**

• Blue, green & yellow filters, operating manual, dust cover, styrofoam molded pack.

# **Trinocular Observation Head**

- Siedentopf observation head inclined at 45°
- Vertical phototube for micro photography.

# **Objectives (Infinity corrected)**

- M Long working distance plan 5X
- M Long working distance plan 10X
- M Long working distance plan 20X
- M Long working distance plan 50X (S.L.)
- M Long working distance plan 100X (DRY) Optional



MET-4



MET-5



MET-6



**USB Camera** 

**WIFI Camera** 

**HDMI Camera** 

MET-7



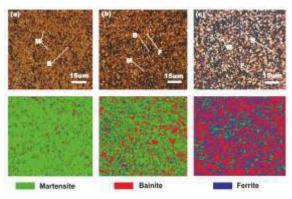


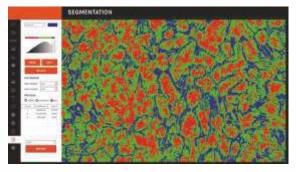


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**Calibration Scale** 



Eyepiece

# METALURGICAL SOFTWARE/WELD PENETRATION

Image Analysis software can be used in Steel plants, Metal forging industry, Oil & gas industry, Material Science, Mineralogy - metal and metal strength analysis Cement (Klincker) quality control and where ever Metallurgical microscope are used in. This Package is very useful Educational Institutions and All Material Science Technocrats And Metallurgists.

It Has two Main tool bars-

## Measurement Tools. **Metallographic Tools**

- Calibration:

- Length:

- Angle: - Perimeter:

- Width:

- Radius:

- Area:

- Color:

- Counting:

- Flakes:

- Draw Free Circle:

- Grain Size:

- Phase: ASTM E 566 1245 - Decarburization: ASTM E 1077

- Coating Thickness: ASTM B 487

- Nodularity: ASTM A 247

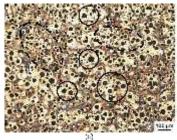
- Porosity: ASTM 276

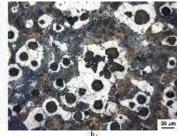
- Inclusion: ASTM E 454 - E 1245

- Particle Measurement:

- Density:

- Filters:





# Camera 5.0 MP - 8.0 MP - 12 MP

- Aptina C Mos Sensor
- 1/2.5 Inch Optical Secsor
- 1920 X 1080 @30FPS
- 1280 X 720 @30FPS
- Snapshots In All Formats
- Temprature -10 to 60 Degree Celcius

**Objective** 

# **Motorised X-Y Stage**







# WPT-1000A (Automatic)

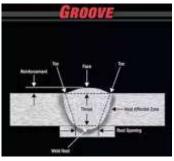


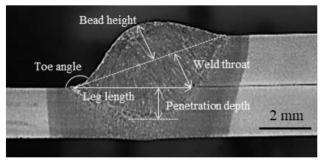
# **WPT-1000M**



# Applied Standards (IS822-1970, ASTME273-20) With Multi Reporting Software





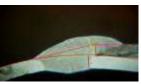


# **Multi-Reporting Weld Sofware**

REINF. WITH PIPE RR THICKNESS (t)= 1.2 x 1.2 mm

NON MARU-A





Leg 1	1.200	3.480	Pass
Leg 2	1.200	1.267	Pass
Weld Penetration 1	0.180	1.175	Pass
Weld Penetration 2	0.180	1.498	Pass
Throat	0.840	1.861	Pass

REINF WITH PIPE RR THICKNESS (t)= 1.2 x 1.2 mm NON MARU-A





Leg 1	1.200	2.318	Pass
Leg 2	1.200	1.360	Pass
Weld Penetration 1	0.180	1.130	Pass
Weld Penetration 2	0.180	1.347	Pass
Throat	0.840	2.542	Pass

# **USB Camera**

**Weld Software** 

**Auxiliary Lens** 

**Led Ring Light** 











# TRINOCULAR STREOZOOM MICROSCOPE

# **Binocular Observation Head**

- Observation head inclined at 45° rotatable at 360°.
- Diopter adjustment ring on ocular tube.
- Interpupillary distance from 55mm to 75mm.

# **Eyepiece**

• Wide field 10X (paired) F.O.V. 22mm.

# **Mechanical Body**

- Lateral zoom control movement.
- Track stand with incident & transmitted LED lamps.
- Clip for holding specimen.
- Base size is 198mm X 250mm.

# **Zooming Range & Ratio**

• Zoom 0.7X to 4.5X with magnification ratio of 1:6.5.

# **Magnification Range**

- 7X-45X.
- 8X-50X.

# **Working Distance**

• 100 mm.

# **Trinocular Observation Head**

- Observation head inclined at 45° rotatable at 360°.
- Vertical phototube for micro photography.
- Diopter adjustment ring on ocular tube.
- Interpupillary distance from 54mm to 76mm.



Zoom-1



Zoom-2



LCD Zoom-3



**Dinolite USB** 



# **USB Microscope With Measurement Sofware**

- 100X 400X
- 50X 200X
- 200X 500X
- 400X 1000X
- Measurement of length, angle, radius







# PROFILE PROJECTOR





# Metkorp 300mm / Metkorp 400mm

- Scree size (dia.) 300mm / 400mm
- Magnification 10X (Standard) or 20x or 50x or 100x
- Rotating range 0-360°
- Resolution liner: 0.001mm, angular: 1 sec
- Measuring system digital data processor (Optional pc based software)
- X,Y coordinate accuracy (3+L/100) μm
- Cross travel stage table size 340 X 152mm Travel up to 150 X 150mm
- Focusing travel Z coordinate 80mm
- Dimensions/Weight 450 X 700 X 1150mm / 80kgs
- Software system with DRO
- Stage 150 X 100mm
- Stage 250 X 150mm optional
- Digital angle
- Digital Radius
- Digital encoder
- Distance between two circle, line

# **VISION MEASUREMENT MACHINES**

# VMM Manual & CNC Based

- Software MSU-3DPro IK 5000 M3
- Measuring Range- Standard 150mm X 100mm X 100mm
- Measuring Range OptionalX-Axis upto 500mm, Y-Axis upto 400mm, Z-Axis upto 300mm
- Resolution 0.005 / 0.001 / 0.0005 / 0.0001mm
- Linear Accuracy(3+L/200) micron
- Repeatability+/- (0.002mm)
- Vision1/3" High Resolution Camera
- MagnificationOptical Magnification 0.7X 4.5X & Magnification on Monitor 35X - 225X

# **VMM SOFTWARE**

- Area of an object, i.e., the number of pixels representing the object,
- Angle between objects or segments of objects,
- Dimension of an object, i.e., its diameter, width, height, or the distance between objects or parts of objects,
- Number of objects.
- One click measurement with QUICK GO / NG decision
- Single mouse-click edge-detection tools; very easy to use.
- Stage navigation function gives improved measurement cycles.
- Image stitching provides wide area measurement.







# RELATED STANDARDS: JIS Z 2371, ASTM B117 – 11

The D.M. series Salt Spray (Fog) Tester has been elegantly designed strictly as per the relevant standard to evaluate the facility of rust proofed components to withstand corrosion due to atmospheric conditions. Double Walled. (Stainless Steel 316 inside & Outside Mild Steel) with duly powder coated paint. Stainless Steel open type lid with large viewing window facility to observe samples under testing.

# **CONTROL SYSTEM**

- 1. DIGITAL INDICATORS CUM CONTROLLER
- 2. DIGITAL TIMER (999 hours) WITH CUTT-OFF FACILITY
- 3. HEATING SYSTEM
- 4. POWER SWITCH
- 5. MIST DISPERSION AUTOMIZER
- 6. FOG COLLECTION UNIT
- 7. DRAINAGE SYSTEM
- 8. HANGING PROVISION
- 9. FRL Unit











# **STANDARD SIZES**

S.NO.	SIZE IN MM	CAPACITY IN LTR
1	600 X 450 X 400	108
2	600 X 500 X 500	150
3	900 X 600 X 500	270
4	1000 X 800 X 500	350
5	1200 X 1000 X 500	600
6	1600 X 1000 X 500	800
7	2000 X 1000 X 600	1200









# Tensile Test Machine(1/5/10kg)



# UTM (20/40/60/100Ton)



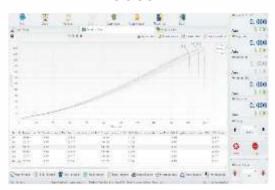
**Impact Testing Machine** 

# 5Ton/50KN, 10Ton/100KN, 20Ton/200KN, 40Ton/400KN,60Ton/600KN, 100Ton/1000KN

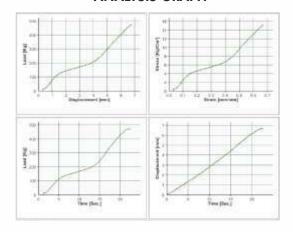
# **Salient Features:**

- Peak load along with on line load.
- Maximum elongation with online elongation.
- Ultimate tensile strength
- Graphical display of load vs time.
- Graphical display of elongation vs time
- Graphic display of load vs elongation.
- Graphic display of stress vs strain
- Load-kn-min.
- Displacement: mm/min.
- Complete statistical analysis
- Data report management.
- PC connectivity RS 232 / USB
- 5Tonf/50KN, 10Tonf/100KN, 20/ton, 40/ton, 60/ton, 100ton
- Reports & printouts Graphical-data type reports can be printed through software.
- Resolution of display 0.01mm.
- peed 50 to 500mm/minute.
- Ball screw based/Normal screw
- 7" LCD screen

# **ANALYSIS SOFTWARE**



# **ANALYSIS GRAPH**



# **SPECTROMETER**



Offered in the market at the most reasonable rate possible, the range of OES Spectrometer made available by us in the market is widely acclaimed and asked for. Making of this range is done in compliance with the set industry norms and guidelines, utilizing the finest raw materials and modern machines. This ensures the product's performance, precision and longer service life.



# **BELT GRINDER**

# BG 100

# Features:

- For pre-Grinding of metallographic specimens table top model
- Motor: ½ | 1.0 HP single phase, 1440 | 2800rpm 100mm X 915mm Endless belt constant belt release mechanism
- Size: 500 X 360 X 300mm
- Stand : Optional



# Spectro Sample Polisher With Collector/without Collector

# **Technical Specification:-**

- Abrasive disc 350mm dia.
- Disc motor 2hp or better, 2800rpm (minimum approx), 3ph, 50hz, 415vac supply
- Suction motor 1hp minimum, 1400rpm, 415v ac , 50hz, tefc type











# CHEMICAL DUTY PUMP & PRESSURE PUMP

GLASS FILTER HOLDERS ASSEMBLY WITH FUNNEL, STOPPER CLAMP 47MM

**VACUUM FILTRATION FLASK** 

**DISPENSING PRESSURE VESSEL 5LTR** 

**SPRAY GUN FOR SOLUTION** 

**SAMPLE TRAY** 

**FILTER PAPERS** 

**SILICONE LATEX TUBING** 

**HOT AIR OVEN** 

**BALANCE** 

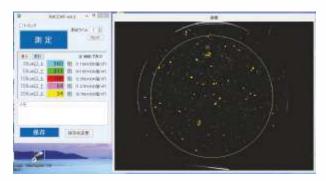
**PARTICLE ANALYSIS SYSTEM** 

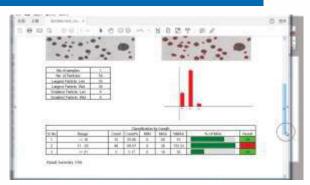
**DISPENSING VESSEL** 

**WASHING GUN** 



# Cleanliness Testing Report As Per VDA19.1-2015/ ISO16232/ISO4406





# **VIBRO FINISHING MACHINE**



# Introduction

Vibratory Finishing Machines are mass finishing machines, used for deburring, polishing, descaling, and surface improvement on metal and plastic components.

# Introduction

Vibratory Finishing Machines are mass finishing machines, used for deburring, polishing, descaling, and surface improvement on metal and plastic components.

Model	Machine Capacity	Machine Dia. (M.M.)	Motor Hp
METKORP 50	50 Lit.	810	1
METKORP 75	75 Lit.	950	1
METKORP 120	120 Lit.	1020	2
METKORP 150	150 Lit.	1080	2
METKORP 200	200 Lit.	1150	2
METKORP 300	300 Lit.	1300	3
METKORP 430	400 Lit.	1460	5
METKORP 600	600 Lit.	1600	5
METKORP 800	800 Lit.	1750	7.5

# **Application:**

- Deburring
- Brightening
- Polishing
- Fine Finishing
- Surface Smoothness
- Mirror Polishing
- Degreasing
- Delining
- DerustingDescaling

METKORP 240

C ( E, .

- Edge Radiusing
- Heavy Cutting
- Pre Plating Finish
- Surface Improvement
- Drying

3970 x 2230 x 2750

- Deoiling
- Burnishing

Surface Finishing			
Model	No.of Barrels	Floor Spacing (mm) (lxwxh)	
METKORP 30	7.5 Litres x 4	1050 x 1120 x 1500	
METKORP 50	12.5 Litres x 4	2900 x 1290 x 1875	
METKORP 80	20 Litres x 4	3170 x 1280 x 1850	
METKORP 100	25 litres x 4	3300 x 1580 x 2200	
METKORP 160	40 litres x 4	3900 x 2050 x 2450	

60 litres x 4







# **OUR CLIENTS**



























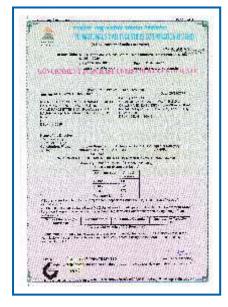






# **CERTIFICATE**









# WE WORK HARD FOR BETTER SOLUTION.





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