

# Metallurgical Sample Preparation Systems



## *Master - Abrasive Cutter*

Sturdy table model cutter for sectioning metals, ceramics etc.,

Aluminium alloy single piece cast base

Auto stop – safety systems – machine stops if cover opened

Totally enclosed for full operator safety by FRP body

Splash proof cover with see through hood

Cutting capacity up to 50mm, cut-off wheel 8"/10"

Twin vice system (LH & RH) for burr free cutting—job held from both side.



3HP, 3phase, 2800 RPM Motor, with CE certified Relay & Contactor

Full FRP Cover for corrosion resistance and easy maintenance

Coolant System - High flow water jets & 20 lts re-circulation coolant tank.

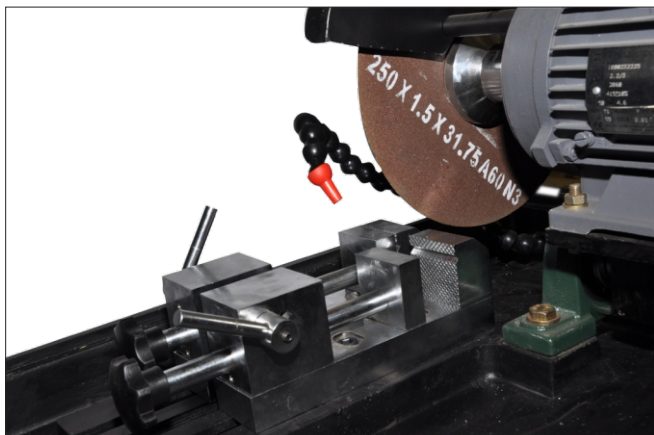
Water proof fluorescent light in working area.

## *Master - Abrasive Cutter XL*

Increased cutting capacity for bigger samples

Cut-off wheel 10"/12"(300mm)

Bigger vice opening upto 90mm



## ***Master -Hydraulic Specimen Mounting Press***

One key start of the mounting process

Base unit containing hydraulic pressure system & pressure indicator

Digital temperature control & indicator

Automated process control by electronic timer with auto change from heating cycle to cooling cycle

1000W pre cast heater, 1.25" mould chamber, water cooling system

Fabricated and powder coated body

Manual pressure – by quick ram for speedy reloading and release valve

Provided with sample bakelite powder.

## ***Master -Automatic Electro Hydraulic Press***

One key start of the mounting process

No air supply needed

Powerpack load application & control

Digital temperature control & indicator

Quicker faster and effortless sample mounting

Quality mould even for epoxy high strength and edge retention mounting compounds

### **Optional Accessories**

Mould Chamber 1 Inch

Mould Chamber 1.5 Inch

Spacer for Double Mould

### **Consumables**

Phenolic Powder 4kgs Pack

Transparent Moulding Granules 1 Kg Pack



## ***Master - Belt Grinder***

For coarse grinding of metallographic samples – used with coarse grit endless emery belt

80, 120, 220 etc after cutting or moulding process. Removes burrs, slight cutting burns and other small metallurgical sample defects from previous cutting operations

½ HP AC motor

150 x 1220 mm belt with simplified belt releasing mechanism

Rigid large flat bed for solid support

Model – heavy duty rough for shop floor and use before hardness inspection

### **Lab Model**

Totally enclosed model for laboratory use with 100 x 915 mm belt

### **Consumables-**

Abrasive Alumina Oxide Belt- Grit 120 or Grit 220



# ***Master Double Disc Grinder/Polisher – Variable Speed***

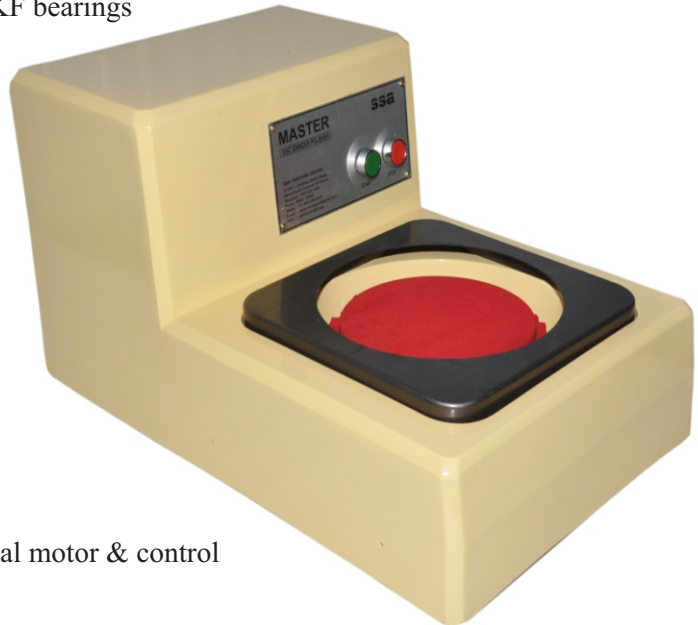
Variable speed electronic control – Digital RPM display  
Full range control for speed range 0 to 1000RPM  
200mm or 8" diameter, table top model, dynamically balanced  
FRP corrosion resistant cabinet & wash bowl  
0.5 HP high torque Dynaflux PMDC motor with best in class Std V belts  
Aluminium V grooved pulley mounted with NBC/SKF bearings  
Flexible water jet with control valve.

## **Standard Accessories**

Aluminium 200mm dia top disc – 2nos  
Cloth holding spring – 2 nos  
Emery holding Al cast ring – 1 no  
Flexible water hose – 1 no  
Power cord, Users manual  
Inspection and Warranty certificate  
Spares fuse - 1No, O-ring – 5nos

## **Optional features / facility**

Individual motor and control for each disc – additional motor & control



## ***Other Models***

### **Master Double Disc Grinder/Polisher – ECO**

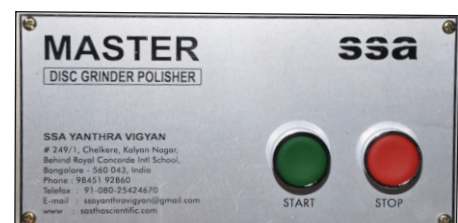
AC Motor 0.5 HP 3 phase 415V Single Speed ON / OFF

## ***Single Disc Polisher***

### **Master Single Disc Grinder/Polisher with RPM Meter**

### **Master Single Disc Grinder/Polisher – ECO**

AC Motor 0.5 HP 3 phase 415V Single Speed ON / OFF



**Optional** - Additional 200mm Aluminium Disc for Stick ON emery



## ***Specimen Levelling Press***

For levelling polished metallographic samples

with modelling clay and glass slides for use with upright Met microscope

Aluminium rugged casting with fine machined & electroplated steel

moving shaft with spring.

Electroplated – parallel steel block for leveling.

with 1 packet of modeling clay



## ***'Master Mag' - Illuminated Magnifier***

State of art - Ergonomic design

Magnification lens - large 120mm diameter

4X for distortion free image

Optional - pre mounted 50mm - 10X lens

Fluorescent ring lamp - 22W - eye strain free long use

Strong body construction - Aluminium sturdy cast base

Steel tube horizontal and vertical columns (electro plated)

Highly flexible 360 degree rotation

Input power 220V, 50Hz

Compact packing 450 x 450 x 150mm



## ***Metallurgical Consumables***

### **Abrasive Cutting**

Metallurgical Grade A60 N3 Alumina Oxide

Non reinforced Cutoff wheels - 200mm,

250mm, 300mm & 350mm Dia

### **Mounting Compound**

Hot - Phenolic Resin - Black, Green

Hot - Transparent - Acrylic Crystals

Cold Mounting - Acrylic - Powder and Liquid - Pink or White

Mould release spray

### **Polishing**

Silicon Carbide Water Proof Emery

Round - Plain or PSA Backed - 200mm, 250mm and 305mm Diameter

Plain 9 x 11 Inch Regular Size

Lavigated Alumina Paste and Powder

Diamond Paste & Lubricant

Polishing Cloth - Pre Cut Round - Plain and PSA Backed.

**Spectro Polishing** - 350mm x 40 Bore - Alumina Oxide Disc

**Belt Emery** -100x 915mm or 150x 1220 mm - Grits 120, 220 etc.

**Dye Penetrant Kit**

**Hardness Testers** – NABL / UKAS – Std Blocks, Indentors, Dial Gauges, Anvils, Poldi Testers & Accessories



**Manufactured By**

**SSA Yanthra Vigyan**

249/1, Chelkere, Off Outer Ring Road,

Behind Royal Concorde International School,

Kalyan Nagar PO, Bangalore - 560 043.

Tel /Fax +91 80 - 25424670 / 9845192860

ssayanthravigyan@gmail.com.

**www.ssayv.com**

**Authorised Agent**