



BPS INSTRUMENT CO.,LTD.

Contents

CUTTING

- 01 QCUT SERIES
- 01 MANUAL &AUTOMATIC CUTTING MACHINE
- 02 LSQ|QGCUT SERIES
- 02 LDQGCUT SERIES
- 03 GTQ PRECISION CUT SERIES
- 03 ACCESORIES

MOUNTING

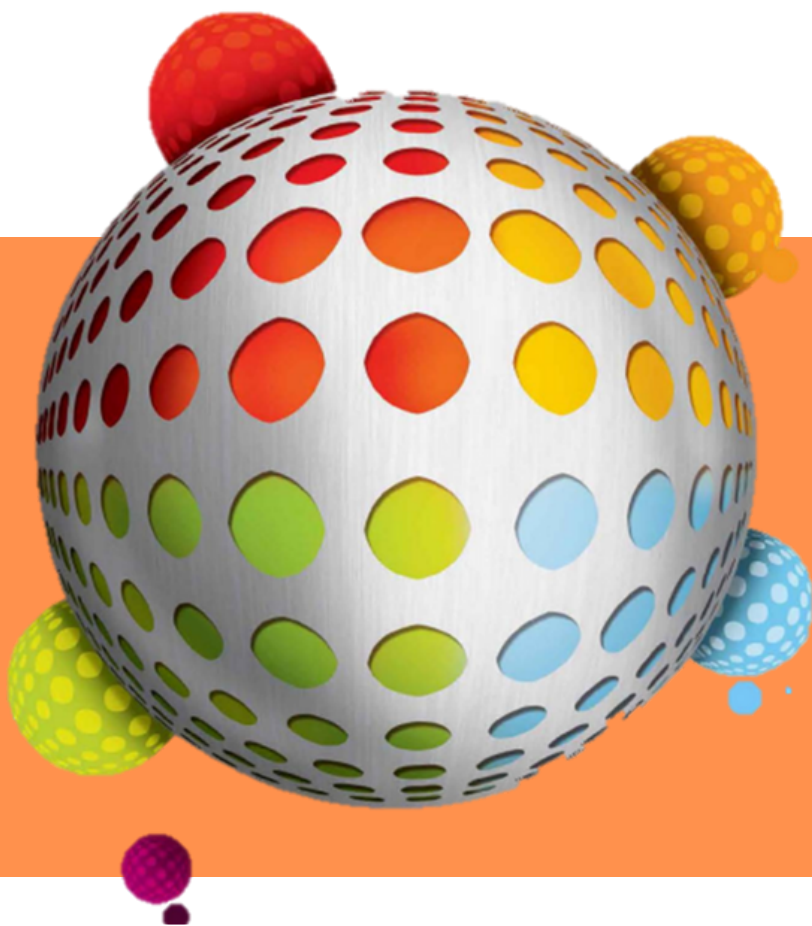
- 04 VACUUM
- 04 ACCESSORIES

GRINDING & POLISHIG

- 05 MOPAO SERIES
- 06 MP SERIES
- 07 MP SERIES
- 08 P SERIES
- 08 BELT GRINDING

MICROSCOPE

- 09 METALLURGICAL MICROSCOPE
- 09 IMAGE ANALYSIS



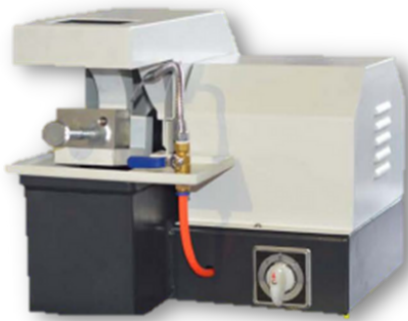


BPS INSTRUMENT CO.,LTD.



CUTTING

QCUT SERIES



Q-2 Sample Cutting Machine



Q-2A Sample Cutting Machine

This series is an advanced universal metallographic cutting machine mused to cut a very wide range of materials. equipped cooling system

Max cutting dia.: 30×30mm
Cut-off wheel dia.:250×2×32mm
Rotating speed : 2800rpm
3-phase 380V 50Hz

Max cutting dia.: 50×50mm
Cut-off wheel dia.: 300×2×32mm
Rotating speed : 2800rpm
3-phase 380V 50Hz

MANUAL &AUTOMATIC CUTTING MACHINE



Q-80Z/100B Cutting Machine



SQ-60/80/100 Cutting Machine

- Manual or Fully automatic can be switched at will
- LCD display (Touch screen control Optional)
- Large cutting chamber
- Automatic withdraw function after cutting is finished
- Max cutting dia.:
- Q-80Z: 80mm Q-100B:100mm
- Rotating wheel dia.: 350×2.5×32mm
- Rotating speed: 2100rpm
- 3-phase 380V 50Hz

- Manual
- _____
- Large cutting chamber
- _____
- _____
- Max. cutting dia.:
- SQ-80: 80mm SQ-100: 100mm
- Cut-off wheel dia.: 250×1.2×32mm
- Rotating speed : 2800rpm
- 3-phase 380V 50Hz



CUTTING

LSQ|QCUT SERIES



LSQ-100/120

QG-4/4A

This series is an advanced universal metallographic cutting machine mused to cut a vary wide range of materials.

- Powerful, with specious cutting chamber
- Large cutting chamber, tempered glass observing window Low noise, fully enclosed waterproof motors
- Built-in cooling system
- Equipped cooling system
- Double cover fully enclosed structure
- Rotary clamping jaw (QG-4)
- Fast clamping jaw (QG-4A)

Max. cutting dia.: LSQ-100: 100mm
LSQ-120: 120mm
Cut-off wheel : $350 \times 2.5 \times 32\text{mm}$
Rotate speed : 2800rpm
3-phase 380V 50Hz

Max. cutting dia.: 35mm
Cut-off wheel : $250 \times 1.5 \times 32\text{mm}$
Rotate speed : 2800rpm
3-phase 380V 50Hz

CUTTING

LSQCUT SERIES



LDQ-350/350A

- Programmable with coloured HMI touch screen controls
- Three cutting type: Abrasive chop cutting, to-and-fro cutting, layer-to-layer cutting
- Automatic control of cutting parameters

Max. cutting dia.: LDQ-350/350A: 110mm
 Cut-off wheel: 350×3.2×32mm
 Z-axis:/ Y-axis: Auto. X-axis:/
 The largest travel:
 Y-axis 200mm
 Cooling method: water cooling
 Cutting speed: 0.005-10 mm/s adjustable
 Rotate Speed: 0-2800rpm



LDQ-450 Full Auto

- Wide T-slot Bed, special clamping for large samples
- Water-jet type cleaning system
- Isolated lighting system

Max. cutting dia.: 65mm LDQ-450: 160mm
 Cut-off wheel: 350×3.2×32mm
 Z-axis: Auto. Y-axis: Auto. X-axis: Auto.
 The largest travel:
 Z-axis 240mm Y-axis 200mm X-axis 245m
 Cooling method: water cooling
 Cutting speed: 0.005-10 mm/s adjustable
 Rotate Speed: 0-2300rpm



CUTTING

GTQ PRECISION CUT SERIES



GTQ-5000B



GTQ-5000A

GTQ Series Precision Cutting Machine is suitable for metal, electronic components, crystal, hard alloy, rock, ore, concrete, organic material, biological material (tooth, bone) and other materials.

- Driven by powerful servo motor
- Built-in circulating cooling system.
- Menu operation, LCD display of various data with backlighting.

Max. cutting dia.: 60mm
Cut-off wheel : 100, 150, 200mm
The largest : 100, 150, 200mm
The largest travel:
Y-axis 200mm
Feed Speed: 0-30 mm/min
(0.1mm increments)
Cutting disc specification : 200×1×32mm
Rotate Speed: 300-5000rpm
3-phase 220V 50Hz

- High position accuracy up to 2um
- Wide speed adjusting range.

Max. cutting dia.: 65mm
Cut-off wheel : 100, 150, 200mm
The largest travel:
Z-axis 50mm, Y-axis 200mm, X-axis
(manual) 50mm
Feed Speed: 0-30 mm/min
(0.1mm increments)
Cutting disc specification : 200×1×32mm
Rotate Speed: 300-500rpm
3-phase 380V 50Hz



CUTTING

ACCESORIES



DTQ-5

Movable stand travel: 25mm
Positioning accuracy: 0.01mm
Rotating speed of main shaft: 10-600rpm adjustable
Blade diameter: 100×0.5×20mm
Power supply: single phase, 220V, 50Hz
Motor: 0.8kw
Weight: 18.5kg
Dimensions: 350×305×205mm



Quick Acting Clamping Vise Assembly,
Left (Stainless Steel)



Quick Acting Clamping Vise
Assembly, Left (Stainless Steel)



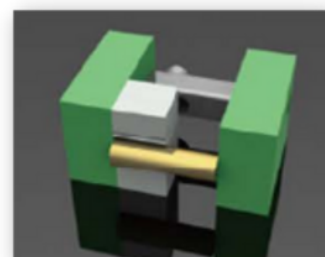
Compact Vise Assembly
Spring Loaded (Stainless Steel)



Fume Condenser

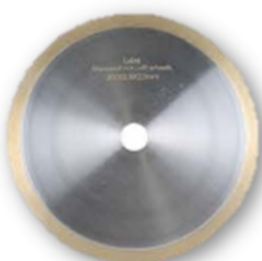


Vertical Clamp



Vertical Clamp

Diamond Slicing Disk



Flange set with larger diameter





MOUNTING



XQ-2B Manual

Mold dia.: $\phi 25/\phi 30/\phi 45\text{mm}$
 Heater specifications : $\leq 800\text{W}$
 Temperature setting range:
 100-180°C
 Single phase 220V 50Hz
 Dimensions : 380×350×420mm



ZXQ-1/2 Auto Touch Screen

Mold dia.: $\phi 22/\phi 30/\phi 45\text{mm}$
 Cooling method:
 ZXQ-1 Non
 ZXQ-2 Water cooling
 Temperature adjusting: 0-180°C
 Single phase 220V 50Hz



ZXQ-5 Auto Touch Screen

Mold dia.: $\phi 22/\phi 30/\phi 50\text{mm}$
 Can mounting two sample at the same time
 Cooling method: water cooling
 Temperature adjusting: 0-180°C
 Single phase 220V 50Hz



ZXQ-1G Auto Touch Screen

Mold dia.: $\phi 22/\phi 30/\phi 45\text{mm}$
 Cooling method:
 ZXQ-1 Non
 ZXQ-2 Water cooling
 Temperature adjusting : 0-180°C
 Single phase 220V 50Hz



ZXQ-2G Auto Touch Screen

Mold dia.: $\phi 22/\phi 30/\phi 45\text{mm}$
 Cooling method:
 ZXQ-1 Non
 ZXQ-2 Water cooling
 Temperature adjusting : 0-180°C
 Single phase 220V 50Hz

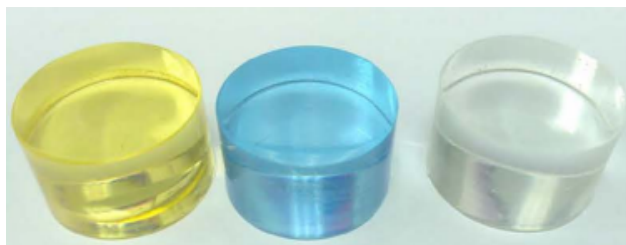


ZXQ-5S Auto Touch Screen

Mold dia.: $\phi 22/\phi 30/\phi 45\text{mm}$
 (choose two)
 Heater: 220V, 2KW($\phi 45\text{mm}$);
 220V, 1.2KW($\phi 22/\phi 30\text{mm}$)
 System pressure: 13MPa
 Temperature setting range: 0~180°C
 Dwell time: 30s
 Cooling method: Water cooling
 Power: 220V, 50Hz



Overall Dimension:
290×240×220mm
The vacuum chamber size:
diameter 100mm Height 50mm
Vacuum : -0.08Mpa
Power supply: 220V, 50W



GRINDIN&POLISHING

MOPAO SERIES



MoPao 160

Rotate speed:
300/600rpm (two steps constant speed)
Grinding/Polishing disc diameter:
200/250mm
Grinding/polishing disc control:
Single
3-phases 380V 50Hz



MoPao 160E

Rotate speed: 50-600rpm
stepless speed or 150/300rpm
(two-step constant speed)
Grinding/Polishing disc control:
Single
Single phase 220V 50Hz



MoPao 1T Touch Screen

Rotate speed: 50-1000rpm stepless
speed or 150/300/600/800rpm
(Four-step constant speed)
Grinding/Polishing disc
diameter: 200/250mm
Grinding/polishing disc control:
Single
Single phase 220V 50Hz



MoPao260

Rotate speed:
300/600rpm (two steps
stationary speed)
Grinding/Polishing disc
diameter: 200/250mm
Grinding/polishing disc
control: Single
3-phases 380V 50Hz



MoPao260E

Rotate speed:
50-600rpm stepless or
150/300rpm (two-step
constant speed) Grinding/
Polishing disc
diameter:200/250mm
control: Single
Single phase 220V 50Hz



MoPao2T Touch Screen

Rotate speed:
50-1000rpm stepless speed or
150/300/600/800rpm
(Four-step constant speed)
Grinding/Polishing disc
diameter: 200/250mm
Grinding/polishing disc
control: Single
Single Phase 220V 50Hz

GRINDIN&POLISHING

MP SERIES



M-1 Pre-grinding Machine

Grinding Disc Dia.: 200mm
Rotating Speed : 450rpm
Motor: 370W
Power: AC220V, 50Hz
Weight: 30Kg



M-2 Pre-grinding Machine

Grinding Disc Dia.: 200mm
Rotating Speed: 450rpm
Motor: 370W
Power: AC220V, 50Hz
Weight: 45Kg



**M-2 Grinding and
Polishing Machine**

Grinding/Polishing Disc Dia.: 200mm
Rotating Speed:
450rpm left;600rpm right
Motor: 370W
Power: AC220V, 50Hz
Weight: 45Kg



MP-1B Grinding and Polishing Machine

Grinding/Polishing Disc Dia.: 200mm
 Rotating Speed: 50-1000rpm stepless speed
 Grinding/Polishing Disc Number:1
 Motor:250W
 Power: AC220, 50Hz
 Weight: 25Kg



MP-1C Grinding and Polishing Machine

Grinding/Polishing Disc Dia.: 200mm
 Rotating Speed: 50-100rpm stepless speed
 Grinding/Polishing Disc Number:1
 Motor:250W
 Power: AC220V, 50Hz
 Weight: 25Kg



MP-2B Grinding and Polishing Machine

Grinding/Polishing Disc Dia.: 200mm
 Rotating Speed: 450rpm left;600rpm right
 Grinding/Polishing Disc Number:2
 Motor:550W
 Power: AC220V, 50Hz
 Weight: 50Kg

GRINDIN&POLISHING

MP SERIES



MoPao2D

Rotate speed: 300/600rpm
 (two steps station speed)
 Grinding/polishing disc Diameter: 200/250mm
 Grinding/polishing disc Control: Single
 3-Phases 380V 50Hz



MoPao2DE

Rotate speed: 50-600rpm stepless speed or 150/300rpm (two-step constant speed)
 Grinding/polishing disc Diameter: 200/250mm
 Grinding/polishing disc control: Single
 Single Phase 220V 50Hz



MPT Auto Grind Polish Head

MPT model the polishing can match with many kinds of grinding/polishing machine
 Sample Capacity: 1-3
 Rotating Speed: 50rpm
 Sample Force:0-40N
 200/250mm sandpaper diameter Single Phase 220V 50Hz



**MoPao
1000/1000B**



MoPao3S



**MP-1C+MPT
Semi-automatic**

Pneumatic holding. Six pieces $\varnothing 30\text{mm}$ samples can be polished simultaneously

Single Disc and Fully Automatic
Rotate Speed: 50-600rpm stepless
speed or 150/300rpm
Grinding-polishing hard rotating
Speed: 50-100rpm
Max. Dia. of sample: 30/40/50mm
Grinding/polishing disc
Dia.: 250mm
3-Phases 220V 50Hz

Double Disc and Fully Automatic
Rotate Speed: 50-1000rpm
stepless speed or 150/300rpm/top
Grinding-polishing hard rotating
Speed: 50-100 rpm
Max. Diameter of
sample: 30/40/50mm
Grinding/polishing disc Dia.: 250mm
Single Phase 220V 50Hz

Rotate speed: 50-1000rpm
Grinding/polishing disc
Diameter: 200/250mm
Grinding/Polishing
Control: Single
Sample Capacity: 1-3
Rotating Speed: 50rpm
Sample Force: 0-40N
Single Phase 220V 50Hz

GRINDING & POLISHING

P SERIES



**P-1 Polishing
Machine**

Polishing Disc Dia.: 200mm
Rotating Speed: 1400rpm
Polishing Disc Number: 1
Motor: 180W
Power: AC220V, 50Hz
Weight: 20Kg



**P-2 Polishing
Machine**

Polishing Disc Dia.: 200mm
Rotating Speed: 1400rpm
Polishing Disc Number: 2
Motor: 360W
Power: AC380V, 50Hz
Weight: 35Kg



**P-2G Polishing
Machine**

Polishing Disc Dia.: 200mm
Rotating Speed: 1400
Polishing Disc Number: 2
Motor: 360W
Power: AC220V, 50Hz
Weight: 80Kg

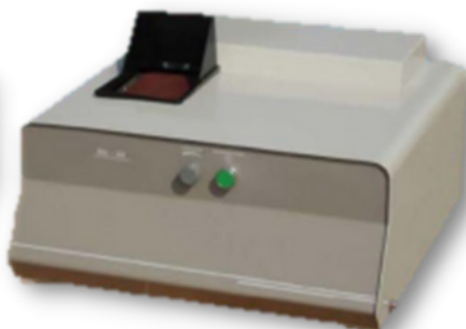


BELT GRINDING



P-2T Polishing Machine

Polishing Disc Dia.: 200mm
Rotating Speed: 1400rpm
Polishing Disc Number:2
Motor: 360W
Power:AC220V, 50Hz
Weight: 40Kg



BG-30 Belt Grinding Machine

Center Distance: 255mm
Surface Speed: 768m/min
Rotating Speed: 1400rpm
Motor: 550W
Power: AC220V, 50Hz
Weight:60Kg



BG-32 Belt Grinding Machine

Center Distance: 255mm
Surface Speed:768m/min
Rotating Speed:1400rpm
Motor: 550W
Power: AC220V,50Hz
Weight: 100Kg

MICROSCOPE



4x B Metallurgical Microscope

Magnifications: 100X-1250X
Mechanical tube length: 160mm
Micro Focus: Adjusting range: 7mm,
grid value: 0.002mm
Rough Focus range: 7mm
Mechanical table: 75×50mm
Lighting bulb: 6V,12W Bromine
tungsten lamp
Weight: 5Kg
Packing dimensions: 360×246×350mm

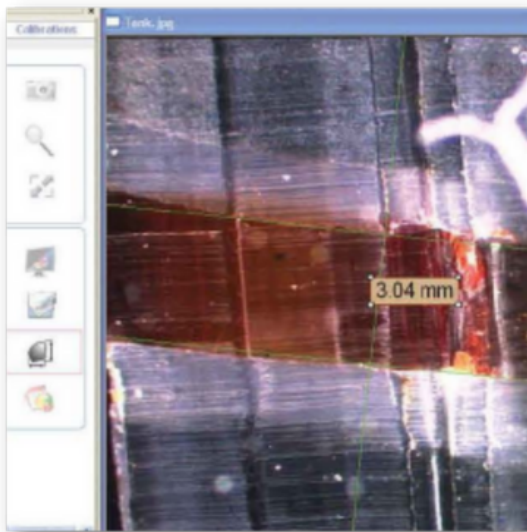
METALLURGICAL MICROSCOPE



4x C Metallurgical Microscope

Three Eyepiece Tube: Tilting Angle:30°
Adjustable Range: 55 ~ 75mm
Eyepiece: Wide View Eyepiece 10X(16m)
Objective Lens: Flat Fielding Achromatic
Objective Lens 10X, 20X, 40X, 100X(oil)
Total Magnification: 100X ~ 1000X
Loading Table: 150×200mm
Moving Range: Vertical 15mm, Horizontal 15mm

IMAGE ANALYSIS

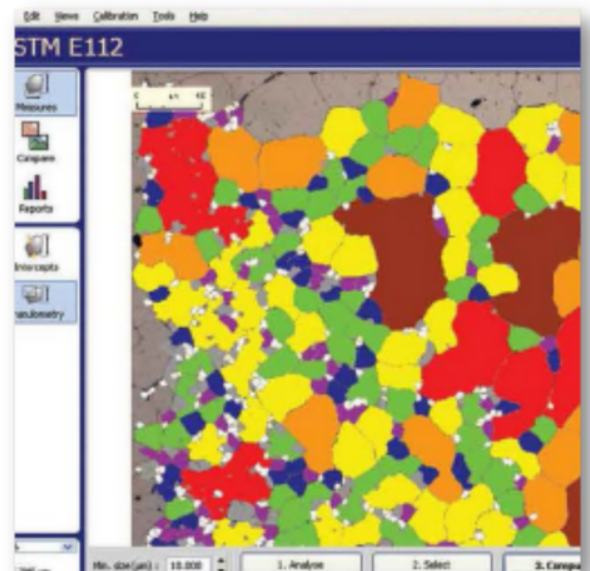


Imagin Mesura 200

Imagin Mesura 200 allows you to view the live microscope Image, Compare it with stored images and if necessary save it to the system. Several databases can be created according to the customers, Projects, Materials or specimens. Imagin Mesura 200 has several measurement tools for performing manual measurements for performing manual measurements of lines, curves, angles, areas etc. After which they can be saved and archived. Many application areas exists like "weld assesments, Macro analysis, PCB component measurements etc."

Imagin Mesura 200

Imagin Grano 200 module has been designed for automatic measure of grain size according to ASTM E112 and EN ISO 643. Firstly, the grain size can be calculated in each field and the grain size is calculated by Abrams 3-circle or Linear Equations. "Area Method" determines the size of each individual grain by area which the grains are categorized for the calculation of fractions.



Imagin Nodula 200

Imagin Nodula 200 module is designed for the analysis of graphite in cast irons especially in Ductile and gray iron foundries and quality control labs. nodularity assesment is made bypercent count and nodules proportion. It is also possible to measure "Area percent ferrite, area percent graphite and area percent pearlite. "Archiving of all images with calibration and generating reports creates an additional advantage to increase productivity and repeatabilityl.

