

**Banbros**

Believes in Quality

# METALLOGRAPHY SPECIMEN PREPARATION EQUIPMENTS



- Value
- Versatility
- Performance



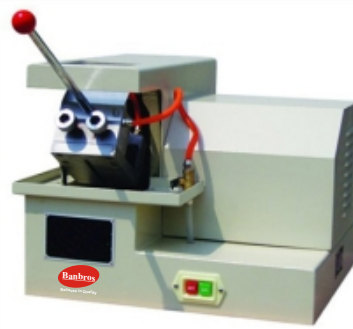
**THE PRECISION MEASUREMENT PEOPLE**

**BC-80B / BC-100 B****SBC - 80 / SBC - 100**

Metallography Specimen Cutting Machine is equipped with big cutting room and movable T-slotted work table. Therefore this machine has the ability of cutting rectangle and large specimens. Also equipped with double vice is very convenient for operator to clamp various heterotypical work pieces.

**SPECIFICATIONS:**

MODEL	BC-100B	BC-80B	SBC-80	SBC-100
Cutting Speed	2.25, 3, 4, 5, 7, 9, 12, 15 mm/min		Manual	
Revolution of abrasive wheel	2100rpm		2800rpm	
Specifications of abrasive wheel	350 x 2.5 x 32mm		250x2x32mm	350x2.5x32mm
Cutting capacity	100mm x 200mm	80mm x 200mm	Ø80mm	Ø100mm
Power supply	440V, Three Phase			
Overall dimensions (mm)	930x 700x610	930x 700x610	720 x 700 x 620	

**(BQ-2)****(BQ-2A)**

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). Besides various metal materials, this machine can also be used to cut other non-metal material such as plastic, rubber hose etc.

**SPECIFICATIONS:**

MODEL	BQ-2	BQ-2A
Max. cutting diameter	30mm	55mm
Sand wheel specification	250 x 2 x 32mm	250 x 2.5 x 32mm
Sand wheel rotating speed	2800 rpm	
Motor	1.1 KW, 220V 50Hz.	2.2KW, 440V, 3 Phase
Dimensions	65 x 45 x 40 cm	63 x 50 x 65 cm
Net weight	60 Kg	130 Kg



**ACO-200**



**ACO-110**



**ACO-100 / ACO-150**

ACO Series Abrasive Cutting machines are rugged, sturdy and designed to cut metallurgical samples to optimal quality consistently and safely. Abrasive wheel spindle is connected with motor shaft by pulley and belt mechanism except in ACO 110 where the motor is directly coupled to abrasive wheel. The movement of cutting wheel towards the specimen is applied by handle fixed with motor base pivot spindle and the cutter unit is balanced by springs for smooth downward movement.

**Features:**

Large viewing window to monitor the cutting operation. Inside chamber is illuminated and see-through hood is provided for monitoring the cutting operation. Coolant circulation is provided with suitable filtering arrangement.

**SPECIFICATIONS:**

MODEL	ACO-200	ACO-150	ACO-100	ACO-110
Cutting Speed	Manual			
Revolution of abrasive wheel	1440rpm			
Specification of abrasive wheel	500 x 3.0 x 31.5mm	400 x 2.5 x 31.5mm	300 x 1.5 x 31.5mm	350 x 2.5 x 31.5mm
Cutting capacity	Ø200mm	Ø150mm	Ø100mm	Ø110mm
Self centering 360° rotation Vice	200mm / 8 inch	150mm / 6 inch	100mm / 4 inch	
Power supply	440V, Three Phase, 50Hz			
Overall dimensions (WxDxH)	1500x 2000x2500mm	900x 1000x1750mm	650x 800x1450mm	800x 1000x1550mm
Weight (approx)	450 Kg	320 Kg	200 Kg	300 Kg

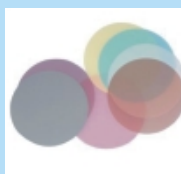

**BP-1**
**BP-2T**

**BP-2G**

Metallography Specimen Polishing Machine is designed and improved on the basis floor type double disk metallography specimen polishing machine. The appearance is changed from original floor type into cabinet type. This machine features nice appearance design, big store cabinet and cooling system (which can clear up the heat produced during grinding so as to prevent the metallography structure from being damaged). By equipping the motor with different rotating speed, it can meet the different demands of different materials when polishing. It is the ideal specimen preparing instrument for using in factories, scientific research institutes and laboratories of colleges.

**SPECIFICATIONS:**

MODEL	BP-2T	BP-2G	BP-1
Diameter of polishing disk	Ø200mm, double disks	Ø200mm, double disks	200mm. single disk
Polishing disk rotating speed	900 rpm		
Motor	2x180W, 220V, 50Hz.		180W, 220V, 50Hz.
Dimensions in cm	90 x 50 x 92	55 x 82 x 97	32 x 32 x 30
Net weight	30 Kg	43 Kg	16 Kg

**Polishing Paper**
**Grinding Emery Paper**
**Cutting Sand Wheels**
**Alumina Paste**
**Diamond Paste**
**Bakelite Powder**
**Cold Cutting Compound**





**MBP-2B**

**MBP-1B**

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. By adjusting the transducer, it can realize the rotating speed of grinding and polishing disk adjustable from 50 to 1000 rpm. This bring this machine with much more extensive use and make it become the necessary metallography specimen preparing instrument for using in factories, scientific research institutes and laboratories of colleges.

**SPECIFICATIONS:**

MODEL	MBP-2B	MBP-1B
Display of rotating speed	Digital display	
Working voltage	220V, 50Hz	
Diameter of disk	Ø 230mm, rotating speed 50-1000 rpm	
Diameter of sand paper	Ø 200mm	
Motor	2x 550W, 220V, 50Hz	550W, 220V, 50Hz
Dimensions	690 X 715 X 310mm	650 x 370 x 310 mm
Net weight	45 Kg	30Kg


**BOPAO 1000**

**BOPAO 2000**
**Main features:**

- Digital display rotating speed.
- Load pressure & specimen preparation time are adjustable.
- Disc has two functions: two-level constant speeds or stepless speed changing.
- Head can be set to stepless speed changing status.
- Equipped with beautiful appearance glass fibre reinforced plastic machine shell and full stainless steel parts which never rust.
- Central pressure loading.
- Automatic and big volume feeding system of grinding materials.
- Can process 6 specimens at same time.
- One-key restoring program function

**SPECIFICATIONS:**

MODEL	BOPAO-1000	BOPAO-2000
Grinding & polishing disks rotating speed	0-600rpm (stepless speed changing) or 150/300 rpm (two-level constant speed)	
Loading range	1-200N	1-225N
Loading Mechanism	Mechanical	Pneumatic
Specimen preparing time	0-999 seconds	0-999 seconds
Max. diameter of specimen	Ø30mm / Ø45mm	
Diameter of grinding & polishing disks	Ø250mm	
Power supply	220V/50Hz	
Dimensions	660 × 380 × 640 mm	
Net weight	45 Kg	

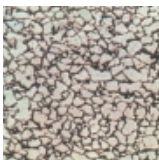

**BPS-2G**

**BPS-1G**

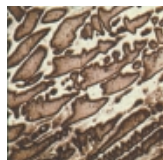
Metallography specimen grinding & polishing stations is equipped with double disks and features stepless speed changing grinding and polishing. It can finish the whole process of rough grinding, fine grinding, rough polishing and finishing polishing for specimen preparation. By adjusting the transducer, it can realize the rotating speed of grinding and polishing disk adjustable from 50 to 1000 rpm. This bring this machine with much more extensive use and make it become the necessary metallography specimen preparing instrument for using in factories, scientific research institutes and laboratories of colleges.

**SPECIFICATIONS:**

MODEL	BPS-2G	BPS-1G
Display of rotating speed	Digital display, rotating speed 50-1500 rpm	
Diameter of grinding disk	Ø 200mm	
Diameter of polishing disk	Ø 200mm	
Diameter of sand paper	Ø 200mm	
Warm Air Drier (optional)	1000W	-
Motor	2 x 0.5HP (DC), 220V, 50Hz	
Working voltage	220V, 50Hz	
Dimensions	900 X 500 X 1400mm	900 x 500 x 1000 mm
Net weight	80Kg	70Kg



Carbon Steel



S.Steel Casting



Alloy Steel



Ni-based Alloy

**SPECIFICATIONS:**

MODEL	INSIPOL-2000
Supply Voltage	230V AC
Running Power Consumption	280W
Length (L)	430 mm
Height (H)	330 mm
Width (W)	235 mm
Weight (Empty)	11 Kg.
Pump Speed Control	Electronic
Polishing Voltage	0 - 60V
Polishing Current	0 - 3 Amp
Polishing Timer	0 - 90 sec
Etching Voltage	0 - 18 V
Etching Timer	0 - 90 sec


**BQ2B SERIES**

The mounting press is a mechanical type machine. By turning the hand-wheel of the machine, a couple of bevel gear is rotated to drive the screw rod which in turn pushes/pulls the lower die up and down along the mould sleeve. The thermo set plastics together with specimen being mounted is formed under heated conditions. During this process the pressure is self adjusted by a spring fixed inside the machine. A signal light is used to indicate the pressure level.

The mounting press is equipped with a digit temperature controller to establish real-time temperature meanwhile, a timer is equipped to realize the semi-automation of sample making, while obviously increasing working efficiency. For each specimen-mounting, 8-10 minutes is enough and a mirror-like specimen can be reproduced.

**SPECIFICATIONS:**

MODEL	BQ2B-22	BQ2B-30	BQ2B-45
Specimen Size	Ø 22x25mm	Ø 30x25mm	Ø45x25mm
Heater Capacity	650W 220V		
Adjustable Temperature Range	0 - 400°C		
Power	15% 220V 50Hz voltage fluctuation less than + 15%		
Overall dimensions	340mm x 270mm x 400mm		
Weight	25 Kg. (approx.)		


**(ABQ2B-50)**

Model ABQ2B-50 Automatic Metallography Specimen Mounting Press is a kind of full automatic mounting press, equipped with in-out water cooling system. It is suitable for the heat mounting (thermohardening & thermoplastic) for all kinds of materials. After the parameters such as heating temperature, heat preserving time and applied force etc. are set up, put the specimen and mounting material into the machine, close the cover and press the start button, then the machine will finish the job automatically. It is not necessary for the operator to be near the machine. According to different requirements of the material, there are four kinds of moulds that can be chosen to meet the demands at will. Also it is available to prepare two pieces of specimens at the same time, the capacity is doubled.

**SPECIFICATIONS:**

MODEL	ABQ2B-50
Diameter of specimen	Φ25mm, Φ30mm, Φ40mm, Φ50mm
Power	220V 50Hz
Maximum power consumption	1800W
Hydraulic Pressure	0~2Mpa
Temperature	0~300 °C
Holding time	0~99 minutes and 99 seconds
Dimensions	615 x 510x 500mm
Weight	110Kg
Cooling Method	Water cooling

**BBG 100**

Belt Grinder is suitable for flat, coarse grinding prior to fine grinding. The specimens to be ground in 60, 80 or 120 grit after cutting operation or moulding to remove surface imperfections. Useful step to remove light metallurgical damage in the specimen surface induced during cut-off operation.

**Features:**

For Pre-Grinding of Metallographic Specimens

Table top Model

Motor : ½ HP Single Phase, 1440 rpm

100mm x 915mm Endless Belt

Constant Belt release mechanism

Size: 500 x 360 x 300mm

Stand : Optional

**BPJ-35**

BPJ-35 Spectro Specimen Grinding Machine is used for rough grinding for metallographic specimen. It adopts wet grinding, the cooling system can cool down the specimen surface, prevent the specimen's metallographic structure from being broken because of overheat, and take on way the scraps of specimen. The machine features easy and safe operation. It is the ideal specimen preparation instrument for using in laboratories, scientific research institutes, colleges and factories.

**Technical specifications:**

Rotating speed:	1450 rpm
Size of abrasive blade:	350 x 40 x 40 mm
Power supply:	440V, Three Phases, 50 Hz
Motor:	3 KW
Dimensions:	630 x 850 x 980 mm
Net weight:	180 Kg