

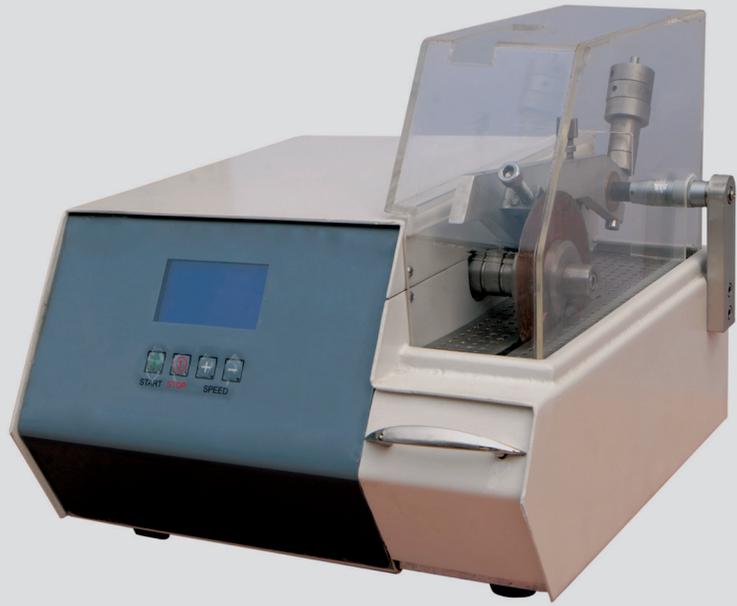


Metallographic Equipment

H1	Low Speed Precise Cutting Machine JMQ-12	P86
H2	Low Speed Precise Cutting Machine QG-4	P87
H3	UniCut Series Manual Cutter	P88
H4	Series Manual Cutter UniCut 250	P89
H5	Series Manual Cutter UniCut 300	P90
H6	Metallographic Cutter UNICUT 400	P91
H7	Automatic Cutter AutoCut 230/250	P92
H8	Metallographic Sample Grinding and Polishing Machine YMP-1A	P93
H9	Double Speed Metallographic Sample Grinding and Polishing Machine YMP-2B	P94
H10	UniPol GP Series Grinder Polisher	P95
H11	Semi-automatic grinder polisher GP-1B/GP-2B	P96
H12	Automatic Grinder Polisher UniPol GP-1A/2A	P97
H13	Automatic Metallographic Sample Mounting Press ZXQ-1	P98
H14	AutoPress Series Automated Mounting Press	P99

JMQ-12

LOW SPEED PRECISE CUTTING MACHINE



Features

●JMQ-12 low speed precise cutting machine is mainly used to cut small cylindrical, square metal body and electronic circuit board material. The cutting force adopts weight blocks for constant load of automatic cutting; it automatically stops when the cutting is finished. It uses micrometer device to adjust the thickness of the sample cutting for precise cutting, therefore can be used as TEM sample preparation equipment. The rotating speed is controllable; to avoid burning the sample due to overheating, the machine is equipped with a strong cooling system. The diamond cutting disc will bring out the cooling water when cutting to cool the cutting disc and the sample. The surface of the sample after cutting is bright and flat without burns. The equipment has easy operation and maintenance and is an excellent machine for cutting small material and electronic circuit boards.

Main Parameters

Diamond wheel diameter	$\Phi 100 \times 0.7 \times \Phi 12.7 \text{mm}$
Cutting capacity	25×25 mm, $\Phi 30 \text{mm}$
The liquid crystal display mode, touch pad control	
Rotating speed of cutting	50~800r/min (stepless)
Power supply	220V, 400W
Dimensions	350×380×290mm
Weight	24 kg

QG-4

LOW SPEED PRECISE
CUTTING MACHINE



Features

- QG-4 multifunctional cutting machine is mainly used for cutting cylinder and irregular samples such as multi-angular shape and convex plate etc. It adopts totally-enclosed structure, which can guarantee the absolute safety of cutting sample. In order to avoid the sample burning the material texture because of overheating in cutting, it is equipped with strong cooling system, and the sample can revolve in the cutting, which can avoid burning the surface of the sample. It can increase the cutting section and improve the availability of the cutting disc. The machine is excellent equipment for cutting irregular samples, easy to use and maintain.

Main Parameters

Maximum Cutting Section:	65×65mm
Rotating Speed:	2800r/min
Cutting Disc Size:	Φ250×2×Φ32mm
Electromotor:	YSR7132, 1.1kw, 380V, 50Hz
Dimensions:	870×590×1110mm
Weight:	180kg

UniCut Series Manual Cutter



UniCut 150



UniCut 230A/B

Features

- High torque high power and variable-speed control system, strong power, high efficiency.
- closed-loop control, precision speed control, variable speed range, 500-3000rpm/minute, rotating speed can be customized.
- diamond cutting disk, which applies widely, the cutting surface is level.
- optional angle cutting holder.
- Aluminum alloy base, good stability, easy to use.
- Hard anodic oxidation working table, abrasion resistance.
- Dry or wafering cutting, vacuum cleaner is optional.
- Non-noise design, noise pollution is avoided.
- Apply to various metal materials, circuit board, semiconductor, crystals, ceramic, quartz glass and lithofacies samples precision cutting. The facility is equipped with kinds of specimen holders, which can cut irregular shaped workpieces, it is ideal for industries and science institutions applications.

Standard Delivery

- Tool Accessories box
- Diamond Cutting Blade
- Blade Guard
- Vertical Clamp
- Screenshot
- Power Line
- Water Output
- Cutting Fluit
- Open Spanner 15mm
- Open Spanner 24mm
- Inner Hexagon Spanner 5mm

Optional Accessory

- Screenshot
- Silicon Cutting Sheet
- Corundum Cutting Sheet
- X axis feed holder 0-30mm
- Geologic Sheet Vacuum Fixture
- Angle Holder
- Vacuum Cleaner

Technical Specification

Tech Data	UniCUT 150	UniCUT 230A	UniCUT 230B
Basic parameter			
Cutting Mode	Manual	Manual/Chop Cutting	Manual/ Table-feed Cutting
Cutting Blade	Φ154x12.7x0.6	Φ230x12.7x1.0	Φ230x12.7x1.0
Speed	500-3000rpm	500-3000rpm	500-3000rpm
Max Cutting Thickness	30mm	50mm	50mm
Y axis travel	50mm	100mm	100mm
Electrical Specification	250W	550W	550W
Cooling Mode	built-in cooling water tank		
Table Dimensions(mm)	290x320	400x450	400x450
Installation Conditions			
Power	Single Phase220V/110V	Single Phase220V/110V	Single Phase220V/110V
Packing Parameter			
Equipment	290x340x230	460x500x350	460x500x350
Packing			

UniCut 250

SERIES MANUAL CUTTER

Optional Accessory

- Silicon Cutting Blade
- Diamond Cutting Blade
- Plastic Water Tank
- Vertical Clamp
- X Axis Feed Holder
- Principal Axis Stepless Speed
- Electronic Brake
- Strong Magnetic Filter
- Exhaust System
- Vertical Working Table

Standard Delivery

- Accessory Tool Box
- Common Water Tank
- X Axis Feed Holder
- Cutting Fluid
- Open End Wrenches, 30mm
- Allen Key, 8mm

Features

- The base is cast in one piece from nodular cast iron, which is of good stability.
- All electronic components are Schneider Electric, safe and reliable.
- 304 corrosion-free stainless steel T-slot clamping table, 304 corrosion-free stainless steel quick holder with double parallel vise. Easy to clamp various irregular shaped specimens.
- 304 stainless steel quick holder, corrosion-free, long life.
- Huge totally closed cutting chamber, easy to use.
- ABB Electric engine, electronic Brake, main arbor continuously variable are optional.
- Apply to cutting ferrous metals, nonferrous metals, thermal treatment workpieces, forge piece, rock, semi-conductor, ceramic, etc. The facility is equipped with kinds of specimen holders, which can cut irregular shaped workpieces, it is ideal for industries and science institutions applications.



UniCut 250,250Y,250XY,250M Manual Cutter

Technical Specification

	UniCUT 250	UniCUT 250Y	UniCUT 250XY	UniCUT 250M
Parameter				
Cutting Mode	Manual	Manual/Y axis Feed	Manual/X+Y Axis Feed	Motor Movement
Cutting Blade	250x32x1.5	250x32x1.5	250x32x1.5	250x32x1.5
Speed (rpm)	•2850	•2850 ○500-3000		
Max Cutting Diameter (mm)	80			
Max Cutting Capacity (mm)	80	80x200	80x200	80x250
Y Axis Range(mm)		200	200	250
X Axis Range (mm)			50	
The Brand of Motor	•Made in China○ABB	•ABB		
Power	2.2KW			
Cooling Mode	Water-cooling			
Installation Conditions				
Electrical Supply	•Three-phase 380V	•Three-phase 380V○Single-phase 220V		

UniCut 300

SERIES MANUAL CUTTER

Optional Accessory

- Silicon Cutting Blade
- Diamond Cutting Blade
- Plastic Water Tank
- Stainless Steel Quick Holder
- Vertical Clamp
- X Axis Feed Holder
- Principal Axis Stepless Speed
- Electronic Brake
- Strong Magnetic Filter
- Exhaust System
- Vertical Working Table

Standard Delivery

- Accessory Tool Box
- Common Water Tank
- X Axis Feed Holder
- Cutting Fluid
- Open End Wrenches, 30mm
- Allen Key, 8mm

Features

- The base is cast in one piece from nodular cast iron, which is of good stability.
- All electronic components are Schneider Electric, safe and reliable.
- 304 corrosion-free stainless steel T-slot clamping table, 304 corrosion-free stainless steel quick holder with double parallel vise. Easy to clamp various irregular shaped specimens.
- 304 stainless steel quick holder, corrosion-free, long life.
- Huge totally closed cutting chamber, easy to use.
- ABB Electric engine, electronic Brake, main arbor continuously variable are optional.
- Apply to cutting ferrous metals, nonferrous metals, thermal treatment workpieces, forge piece, rock, semi-conductor, ceramic, etc. The facility is equipped with kinds of specimen holders, which can cut irregular shaped workpieces, it is ideal for industries and science institutions applications



UniCut 300,300Y,300XY,300M Manual Cutter

Technical Specification

	UniCUT 300	UniCUT 300Y	UniCUT 300XY	UniCUT 300M
Parameter				
Cutting Mode	Manual	Manual/Y Axis Feed	Manual/X+Y Axis Feed	Motor Movement
Cutting Blade	300x32x2.0			
Speed (rpm)	•2850	•2850 ◦500-3000		
Max Cutting Diameter (mm)	80			
Max Cutting Capacity (mm)	Dia.80	Thickness80xDia.200	Thickness80xDia200	Thickness80xDia250
Y Axis Range (mm)		200	200	250
X Axis Range (mm)			50	
The Brand of Motor	•Made in China◦ABB	•ABB		
Power	2.2KW			
Cooling Mode	Water-cooling			
Installation Conditions				
Electrical Supply	•Three-phase 380V	•Three-phase 380V◦220V		

UNICUT 400

METALLOGRAPHIC CUTTER

Standard Delivery

- Cutting Blade
- Cooling Water Box & Cooling Pump
- Water Inlet/ Water Outlet
- 3-phase Power Line & Plug
- Specification
- Warranty Card
- 32 Open-end Wrench
- 8 Hexagon Wrench
- Dedicated Coolant Fluid
- Power Line
- Qualification Certificate
- Encasement Invoices

Optional Accessory

- Diamond Cutting Blade
- Vertical Holder

Features

- High quality ballscrew and linear rail, with handwheel driven chop cutting and automatic driven table-feed cutting systems.
- All electronic components are Schneider Electric, safe and reliable.
- T-slot clamping table, quick holder with double parallel vise. Easy to clamp various irregular shaped specimen

Cutting Material

- Ferrous metals, nonferrous metals
- Casting, thermal treatment workpieces, forge piece
- Semi-conductor, ceramic (must be used with diamond cutting blades)
- Other materials



Vertical Clamp

Technical Specification

Description	Specification	Notes
Cutting blade (hole dia. 32mm)	Standard 400mm ultrathin cutting blade	Optional diamond cutting blade
Cutting capacity	Max dia. 120mm for a pole, Max 80x80mm for diamonds	
Rotating speed	2800rpm	
Electrical specification	380V 50/60Hz 3-phase	Optional 3-phase 220V, 440V, 480V
Motor power	5500W	
Dimensions	127L x 100W x217H cm	
Weight	545kg	

AutoCut 230/250

AUTOMATIC CUTTER

Features

- The base is cast in one piece from nodular cast iron , which is of good stability.
- High torque high power and variable-speed control system, strong power, high efficiency.
- 7 inch color HD touch screen, easy to use.
- All electronic components are Schneider Electric, safe and reliable.
- Standard delivery with electronic Brake, safe and reliable.
- 304 corrosion-free stainless steel T-slot clamping table, 304 corrosion-free stainless steel quick holder with double parallel vise. Easy to clamp various irregular shaped specimens.
- 304 stainless steel quick holder, corrosion-free, long life.
- Huge totally closed cutting chamber, easy to use.
- Apply to cutting ferrous metals, nonferrous metals, thermal treatment workpieces, forge piece, rock, semi-conductor, ceramic, etc. The facility is equipped with kinds of specimen holders, which can cut irregular shaped workpieces, it is ideal for industries and science institutions applications

Optional Accessory

- Silicon Cutting Blade
- Corundum cutting blade
- Plastic Water Tank
- 304 Stainless Steel Quick Holder
- Vertical Clamp
- X Axis Feed Holder
- Electronic Brake
- LaserControl NT
- Strong Magnetic Filter
- Exhaust System
- Vertical Working Table



AutoCut 230/250 Automatic Cutter

Standard Delivery

- Accessory Tool Box
- Diamond Cutting Blade
- Common Water Tank
- Principal Axis Stepless Speed
- Cutting Fluid
- Open End Wrenches,30mm
- Allen Key,8mm

Technical Specification

	AutoCUT 230	AutoCUT 250
Parameter		
Cutting Mode	Manual/Auto	Manual/Auto
Cutting Blade	100-230x12.7x1.2	100-250x32x1.5
Rotating Speed(rpm)	500-3000	
Max Cutting Dia.(mm)	70	90
Max Cutting Capacity (mm)	70x200	90x200
Y Axis Range (mm)	200	
Cooling Mode	Water Cooling	
Power	1.2KW	1.8KW
Installation Conditions		
Electrical Supply	Single-phase 220V	

YMP-1A

METALLOGRAPHIC SAMPLE GRINDING AND POLISHING MACHINE



Features

- In the metallographic sample preparation, pre-grinding, polishing and grinding are the indispensable procedures. This machine is produced with ABS sewage collection plate and cover and is the latest product with a new and beautiful appearance, which can endure long time and is easy to maintain. Only to change the grinding and polishing disc, it can do coarse grinding, fine grinding, dry grinding, wet grinding, etc. In order to expand preparation demands of different samples, the size of the disc is larger than the same products in the market. There are more choices of different linear velocity on the working range, can increase 20-30% of effective working range, can improve the grinding and polishing quality of samples. This machine rotates steadily with low noise, and therefore it is the ideal equipment for metallographic sample preparation.

Main Parameters

Grinding and Polishing Disc	
Diameter	230mm
Abrasive Paper Diameter	230mm
Rotating Speed	500r/min, 1000r/min
Electromotor	YSD802-8/4, 0.25/0.37kw, 380V
Dimensions	420×623×310mm
Weight	35 kg

YMP-2B

DOUBLE SPEED METALLOGRAPHIC SAMPLE GRINDING AND POLISHING MACHINE



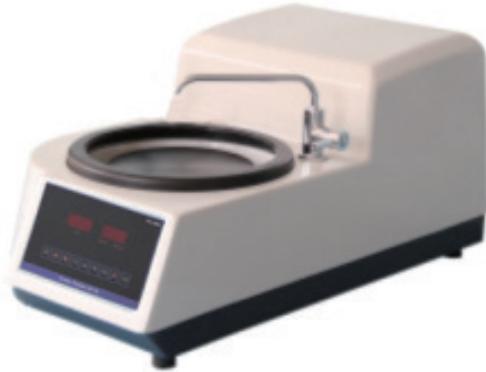
Features

- In the metallographic sample preparation, pre-grinding, polishing and grinding are the indispensable procedures. This machine is produced with ABS sewage collection plate and cover and is the latest product with a new and beautiful appearance, which can endure long time and is easy to maintain. Only to change the grinding and polishing disc, it can do coarse grinding, fine grinding, dry grinding, wet grinding, etc. In order to expand preparation demands of different samples, the size of the disc is larger than the same products in the market. There are more choices of different linear velocity on the working range, can increase 20-30% of effective working range, can improve the grinding and polishing quality of samples. This machine rotates steadily with low noise, and therefore it is the ideal equipment for metallographic sample preparation.

Main Parameters

Grinding and Polishing Disc Diameter	230mm
Abrasive Paper Diameter	230mm
Rotating Speed	500r/min, 1000r/min
Electromotor:	YS7124, 0.55kw, 380V, 50Hz
Dimensions:	757×623×320mm
Weight:	58 kg

UniPol GP Series Grinder Polisher



Single-wheel Grinder Polisher GP-1



Double-wheel Grinder Polisher GP-2

Features

- Multiple usage. Metallographic sample coarse grinding, final grinding, coarse polishing & final polishing, it is ideal for metallographic laboratory as well as for industrial or production applications.
- Variable speed. Grinder polisher special frequency control of motor speed system, Three level of speed and the time can be preset, stop automatically.
- Efficient and low-noise motor and control system. The machine runs quiet and smoothly.
- working wheel for Final grinding and surface process can make the surface smooth.
- FRP(Fiber Reinforced Plastics) cover, high strength and rust-proof.

GP-1/2 Single/Double Wheel Variable Speed Grinder Polisher

Standard Delivery

- Plain-backed grinding paper ring
- Splash guard
- Anti-dust cover
- Plain-backed grinding paper
- Polishing cloth
- Water inlet/outlet
- Power line

Optional Accessory

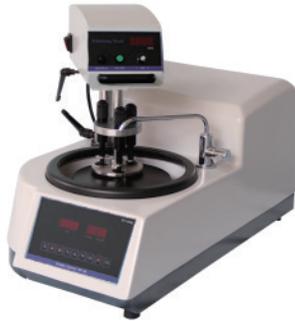
- Diamond Grinding Disk
- Magnetic PSA Base
- Magnetic Plate
- Diamond spray
- Diamond suspension
- Diamond paste
- Alumina Polishing Power
- Alumina Suspension
- Silica Suspension

Technical Specification

Model	UniPOL GP-1	UniPOL GP-2
The wheel Dia.(mm)	●203 ○230 ○254	
Wheel Speed(rpm)	●100-1000 ○Others can be customized	
Number of wheel	1	2
Motor Power	550W	
Installation Requirements		
Power	Single-phase 220V/110V	
Cooling water/water tank	Must	

GP-1B/GP-2B

SEMI-AUTOMATIC GRINDER POLISHER



GP-1B Semi-auto Grinder Polisher



GP-2B Semi-auto Grinder Polisher

Features

- Multiple usage. Metallographic sample coarse grinding, final grinding, coarse polishing & final polishing, it is ideal for metallographic laboratory as well as for industrial or production applications.
- Variable speed. Grinder polisher special frequency control of motor speed system, Three level of speed and the time can be preset, stop automatically.
- Set a Semi-automatic head, grind and polish 3-6 samples in one time, enhance the efficiency of sampling.
- Efficient and low-noise motor and control system. The machine runs quiet and smooth.
- Working wheel for Final grinding and surface process can make the surface smooth.
- FRP(Fiber Reinforced Plastics) cover, high strength and rust-proof.

Optional Accessory

- Plain-backed paper Ring
- Splash Guard
- Anti-Dust Cover
- Plain-backed Paper
- Polishing Cloth
- Water inlet/outlet
- Power Line

Standard Delivery

- Diamond Polishing Wheel
- Magnetic PSA Base
- Magnetic Plate
- Diamond Spray
- Diamond Suspension
- Diamond paste
- Alumina Polishing Power
- Alumina Suspension
- Silica Suspension

Technical Specification

Model	UniPOL GP-1B	UniPOL GP-2B
Grinder Polisher Data		
Working Wheel Dia. mm	○203 ○230 ●254	
Working Wheel Rotating Speed	100-1000rpm, Others can be customized	
Number of Working Wheel	1	2
Motor Power	550W	
Semihead parameter		
Operation Mode	Semi-auto	
Rotating Speed(rpm)	50-200	
Sample Dia.(mm)	Φ30x3 pieces, Others should be customized	
Pressurization	Spring	
Motor Voltage	90W	
Installation Requirements		
Power	220V5A	
Cooling water/ Water Tank	Must	

UniPol GP-1A/2A

AUTOMATIC GRINDER POLISHER



UniPOL-1A Automatic Grinder Polisher



UniPOL-2A Automatic Grinder Polisher

Features

- Multi-usage. Metallographic sample coarse grinding, final grinding, coarse polishing & final polishing, it is ideal for metallographic laboratory as well as for industrial or production applications.
- Variable speed. Grinder polisher special frequency control of motor speed system, Three level of speed and the time can be preset, stop automatically.
- Individual force loading, no need to make virtual sample.
- Cast aluminum base, good stability.
- FRP(Fiber Reinforced Plastics) cover, high strength and rust-proof.

Optional Accessory

- Plain-backed Paper Ring
- Splash Guard
- Anti-dust Cover
- Plain-backed Paper
- Polishing Cloth
- Water inlet/outlet
- Power line

Standard Delivery

- Diamond Polishing Disk
- Magnetic PSA base
- Magnetic plate
- Diamond spray
- Diamond Suspension
- Diamond paste
- Alumina Polishing Power
- Alumina Suspension
- Silica Suspension

Technical Specification

	UniPOL GP-1A	UniPOL GP-2A
Grinder Polisher Parameter		
Working Wheel Dia.(mm)	○203 ○230 ●254	
Working Wheel Rotating Speed	100-1000rpm,Others can be customized	
Number of Working Wheel	1	2
Base	Cast Aluminum	
Motor Voltage	550W	
Grinder polisher Head		
Operation Mode	Full-Auto	
Rotating Speed(rpm)	50-200	
Sample Diameter(mm)	Φ30x6 pieces,Others can be customized	
Pressurization	Pneumatic	
Motor power	90W	
Installation Requirements		
Power	220V5A	
Cooling water/water tank	Must	
Gas Source	Must	

ZXQ-1

AUTOMATIC METALLOGRAPHIC SAMPLE MOUNTING PRESS



Features

- ZXQ-1 Automatic metallographic sample mounting press is designed for mounting small or irregular shape and those difficult to hold samples, which is former procedure of grinding and polishing. The inlaying operation serves to facilitate the grinding and polishing operations of the specimens and the routine observation of the composition of the material under the metallographic microscope. The machine can do heating and pressing automatically, unload the pressure and stop working when finished. With another press of the key, the machine automatically turns up the sample which can be taken away. Note: It is only adapted for the thermosetting materials (such as urea-formaldehyde molding powder and bakelite powder) with the temperature automatically regulated and controlled.

Main Parameters

Mold Diameters	Φ22mm, Φ30mm, Φ45mm (choose one)
Heater Specification	220V, 650W
Total Electric Power	1000W
Dimensions	380×350×420mm
Weight	50 kg

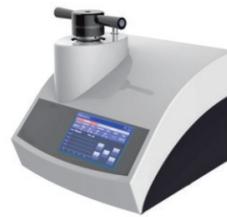
AutoPress Series Automated Mounting Press



AutoPress 500



AutoPress 1200



AutoPress 4001



AutoPress 4002

Features

- Optimized warming up and cooling system, ultrashort mounting time.
- One-key operation, automatically processing warming up, pressing, thermal insulation, pressure maintaining, cooling and unloading.
- Operation on 7inch color touch screen, easy-to-easy.
- Built-in 20 groups of frequently used data, the data can be user-defined.
- Chinese and English interface, it can be switched freely.
- 4002 two site model design, it can press different size of samples at the same time.
- Multiple safety protection.
- Smooth thermostability High strength shell

Standard Delivery

- Black Mosaic Power
- Air Water Filter
- A Funnel
- Water Inlet/Outlet
- Power Line
- Cooling Water Tank

Optional Accessory

- Green Mosaic Power
- Red Mosaic Power
- Electric Conduction Mosaic Power
- Edge Preserving Mosaic Power
- Transparent Mosaic Power
- Cooling Water Tank

Technical Specification

	AutoPress 500	AutoPress 1200	AutoPress 4001	AutoPress 4002
Basic Parameter				
Operation mode	Auto	Auto	Auto	Auto
Station	1	1	1	2
Pressurization	Pneumatically	Hydraulic Pressure	Hydraulic Pressure	Hydraulic Pressure
Cooling Mode	Automatic Water Cooling			
Mould,mm	●30 ○40 ○50 Other specifications can be customized			
Max Pressure (kgs)	500	1200	4000	4000
Highest Temperature(°C)	160	160	200	200
Machine Power	0.9KW	1.2KW	1.6KW	3.2KW
Installation Conditions				
Electrical Supply	220V5A/110V10A	220V6A/110V12A	220V8A/110V15A	220V15A/110V30A
Air Supply	Must			
Cooling Water/Water Tank	Must			