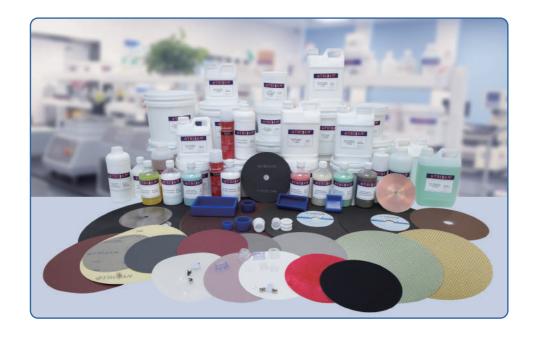


Since 2005

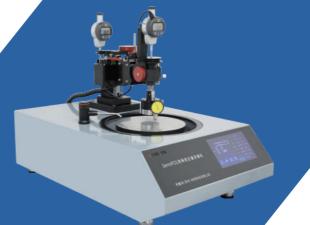




Provide Comprehensive Metallographic Analysis Solutions







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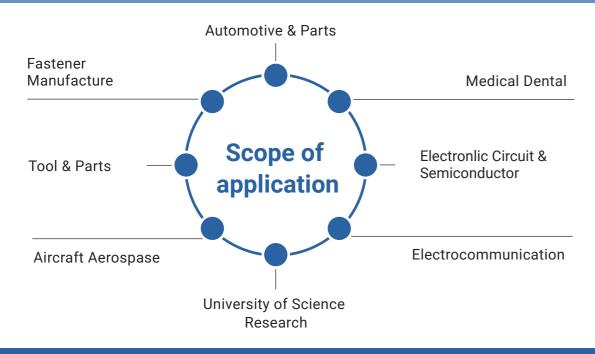
Add: Building 26, No. 228 Gongtang Road, Luzhi Town,Wuzhong Suzhou, China

Product Catalog 2024/2025



tions provider in metallographic analysis field. We have been focusing on the research and development, production and sales of metallographic equipments and consumables for over 19 years and we have independently developed a series of metallographic equipment and material.

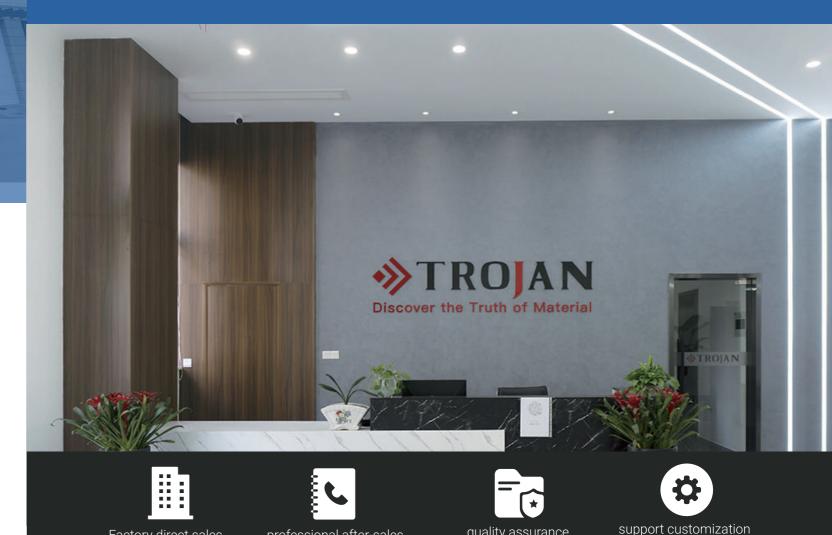
TROJAN and its employees have many years of rich experience in metallography and materials science as well as in microstructure analysis of materials and we have done extensive pioneering works and accumulated rich professional knowledge in this area.



THE HISTORY OF TROJAN

- 2005/ TROJAN (Suzhou) Material Technology Co., Ltd. was established in Suzhou (Near Shanghai) China.
- 2006/ TROJAN set up a metallographic consumables production base in Suzhou Singapore Industrial Park to produce a full range of metallographic consumables under the Trojan brand.
- 2011/ TROJAN established marketing and customer service centers in Chengdu, Tianjin and Shenzhen to provide services and technical support for customers in SouthWest, North and South China.
- 2013/ TROJAN Hong Kong Holdings Limited was established. Trojan started to enter the international market. Our products were exported to Europe, USA and Southeast Asia, received recognition from foreign customers.
- 2016/ TROJAN establishes the Metallographic Equipment Company. Provide research and development, production, sales and technical maintenance services for metallographic cutting, mounting, grinding and polishing
- 2018/ TROJAN established the Optical Polishing Division and launched the OPT series of plane polishing equipment to provide grinding and polishing products and technical support for optical fiber, epitaxial wafers, chips and
- 2019/ TROJAN has newly launched Alpha, Beta and Fless series of high-end metallographic testing equipment to meet the needs of our customers.
- 2020/ A brand new factory of more than 4,000 square meters was completed and put into use, opening a new era
- 2024/ We head towards a better future with material science.

Factory direct sales



professional after-sales

quality assurance



Customer Service

Trojan provides you with perfect consultation, installation training and thoughtful after-sales service! Your complete satisfaction is our goal.



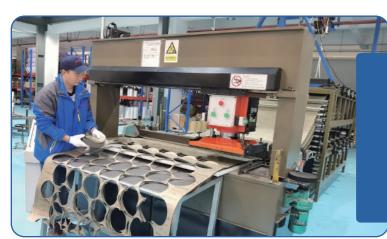
Engineering

Trojan has an experienced and professional mechanical and electrical design team to ensure the high performance and reliability of product quality, and can provide professional customized solutions according to the needs of customers.



Machine Manufacturing

Trojan Suzhou factory has an assembly workshop of 1500 square meters. All products have been strictly tested before leaving the factory. All the machine has obtained EU CE certification.



Consumables Manufacturing

Trojan provides you with a full range of metallographic consumables. All consumables are tested and certified by third-party institutions such as SGS.



Applications Laboratory

Trojan application engineers provide you with free technical consultation, product training and sample testing. TROJAN is not only a manufacturer and supplier of metallographic products, but also a service provider of complete metallographic application technology and solutions.



Warehouse

Trojan warehouse has a large inventory of finished products, and regular products can be shipped within 1-2 days. And provide you with special customized products in the shortest time.



Shipping

Trojan provides you with the safest, economical and reliable transportation mode according to customer needs.



Environment

50KW solar power station Environmental protection is indispensable in business activities. Trojan has always adhered to the green energy policy.

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SECTIONING

Cutting is the first step of material analysis. The selection of cutting machine and cutting wheel must comply with the geometric size and material characteristics of the sample. The perfect metallographic cutting should avoid microstructure thermal damage and deformation, and preserve the necessary accuracy and efficiency.

Hardness and ductility are the two main parameters for selecting the cutting wheel. The best choice of the cutting wheel depends on the size, hardness and ductility of the material and the equipment used. Trojan's cutting products speak with facts and the cutting process is simple, fast and accurate.

TableCUT 200

(page 08)





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Beta-500 (page 17~18)



CT-250S (page 10)



Beta 400Pro (page 15~16)



Cutting Blades (page 19~22)



TableCUT 200 Automatic Cut-Off Machine

TableCUT-200 is a manual-auto cut-off machine which equipped with a variety of fixtures that can cut irregular-shaped workpieces, suitable for various metal materials, PCB circuit boards, semiconductors, crystals, ceramics, quartz glass and petrographic samples, etc. It is one of the necessary equipment for sample preparation in the laboratories of factories, R&D Institute and college.







Features

- Equipped with 7" touch screen, program control cutting process, easy to operation;
- The cutting speed is precisely adjustable from 0.01-5mm/s;
- The speed of the cut-off blade is adjustable from 500-3000rpm, with speed pre-set buttons;
- Laser alignment which can locate the cutting routine precisely, quick clamping the fixture;
- Auto quick find the origin in idle speed, saving cutting time;
- Dry & wet cutting method, the whole machine is simple and beautiful in hidden cooling system;
- A variety of fixtures has equipped which can cut irregular-shaped workpieces, automatic fixtures is
- Overload protection & 4 cutting modes to ensure perfect cutting results.

Technical Specifications

Model		TableCUT 200
	Speed	500~3000rpm
Wheel	Diameter	Ф200mm
	Arbor	Φ12.7 / Φ22 mm
	Voltage/Frequency	220V/50Hz
Flactuical	Voltage Power	1.5kw
Electrical	Touch Screen	5 inch
	Y-axis Feeding	Manual movement via joystick or automatic feed
Cutting Capacity	Diameter	Ф50mm
Cutting Capacity	Square	50*126mm
Table	Dimension(W*D)	465*270mm
IdDIC	Travel	240mm
Cooling Tank	Capacity	5L
Dimensions	W*D*H	570*717*405mm(Close), 570*717*900mm(Open)
Weight		63kg

CT-2300

Manual Cut-off Machine

CT-2300 is a simple, Cut-off Machine. It is widely used in the cutting of PCB boards, semiconductor components, wafer ceramics, guartz glass and petrographic samples.









Features



- Dry or wet cutting;
- T-slot vises which easy to clamping and matches variety of shaped fixture;
- Huge transparent observation window makes easy to observe the cutting process;
- For the specimens which exceed the dimensions of the table, the cover of the cutter can be set to "unlock" mode;
- Closed-loop control and precise speed adjustment between: 200-3000 rpm, the speed can be customized;
- The motor has equipped with cooling fan & overheat protection.



Technical Specifications

Model		CT-2300
Cutting Method	Manual	The blade moves by operating a hand-wheel
	Diameter	Ф180-230mm
Wheel	Arbor size	12.7mm
	Speed	200~3000rpm
Cutting Consoity	Max round shape	Ф30mm
Cutting Capacity	Max square shape	Ф30x50mm
Table	Travel	100mm
Table	Demensions W*D	350*370mm
Flantsia	Power	900W
Electric	Voltage	110 / 220V,(1Ph/N/PE)
On alima Taul	Cooling Type	Dipped into the coolant
Cooling Tank	Water tank	Internal, around 3L
Dimensions	W*D*H	470*505*359mm(Close), 470*556*631mm(Open)
Weight		45kg

CT-250S/CT-250V

Manual Cut-Off Machine

CT-250S/CT-250V is a manual cut-off machine, which designed according to the principles of safety and environmental friendly. It has equipped with a safety lock and an emergency stop button to ensure safety. It adopts a WEG high-torque waterproof motor, ergonomic cutting handle, and simple control panel. Equip with a popular used 250 mm/10" diameter cut-off blade which is suitable for rapid cutting of various metal and non-metallic materials. It is one of the necessary equipment for sample preparation in the laboratories of factories, R&D Institute and college.









Features

- Manually chop cutting, operation easily;
- Omron electronic switch accessories, safe and reliable;
- Huge observation window & high-brightness lighting system makes to observe the cutting process;
- Super cooling system make sure the sample won't burning during cutting;
- The separate water tank and filter system can collect the swarf easily and Extend the life of the cut-off machine;
- Rugged and reliable with low noise.



CT-250S(2800rpm)



CT-250V(1000-3500rpm)



Technical Specifications

Model	CT-250S	CT-250V	
Max. Dia	Ф250	0mm	
Cutting Capacity	Ф80	mm	
Feeding Mode	Mar	nual	
Dimension of Table	210*230mm		
Power	2.2kw		
Power supply	3x380V/50Hz Standard (2	20,440,480V/60Hz Option)	
Wheel Speed	2800rpm(50Hz)	1000-3500rpm	
Weight	100kg	105kg	
Dimension W*D*H	664*684*621mm (Close) 664*898*829mm (Open)		
Volume of the tank	60L		
Dimension of the tank	620*420	*520mm	

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CT-300

Manual Cut-off Machine

CT-300 is an easy-to-use and powerful manual cutting machine that can be used with Φ300mm and Φ350mm cutting blades. It can handle the cutting of the specimens of various shapes, sizes, and complex materials. The push-up safety door design makes putting samples into the cutting chamber easy and fast. Powerful motors and ergonomic cutting arms allow for efficient and smooth cutting. The simple and clean operator panel allows any operator to cut workpieces quickly and efficiently with minimal training.







Features

- Adopts high-power motor (5.5Kw) to make the cutting more powerful and labor-saving;
- Cast aluminum base, integrated worktable, strong rigidity, making cutting more stable;
- Extra large working surface and operating space for faster specimen clamping;
- The simple and clean operator panel allows any operator to learn how to use quickly;
- Enlarged cooling pipes for more adequate cooling.



Cutting Consumables:



Cut Off Wheels





Diamond Wafering Blades





CBN Wafering Blades

Cutting Coolant



Technical Specifications

Model		CT-300
	Speed	2000 & 2500rpm
Cutting	Diameter	Φ300 mm (Can up to Φ350 mm by replacing the shield)
wheel	Wheel flange size	Ф32mm
Cutting	Diameter	Ф100mm
Cutting capacity	Height x Length	90*130mm
@Ф300	Cutting length	240mm
Table	Size (W*D)	380*330mm (X-direction travel can be extended: 430x330mm)
Table	T-slot	12mm
	Input	3x380V+1PE (Optional Voltage: 3x220V)
Electric	Cutting power	5.5KW
	Current, normal load	10A
	Emergency stop	Press to cut off the control circuit and main power
Safety	Safety door lock	When it is running, the door is locked and cannot be opened
	Overload	LED flashing when current is exceeded
	Capacity	65L
	Dimension (W*D*H)	400*600*630mm
Cooling system	Interface	Inlet: ID=19mm hose Drain: ID=38mm hose
	Flow rate	100L/min
Exhaust	Exhaust volume	10m³/h
system (Optional)	Control method	ON, OFF, Auto
Advanced	X-axis table	Stroke: 50mm, precision: 0.1mm, hand wheel movement
Features	Double blade	Optional function: slice thickness can be customized
Dimension	W*D*H	907*1067*1530(closed) 907*1067*1974(open)
Weight		285kg

Beta 300Pro

Automatic Cut-off Machine



Beta-300Pro is an automatic cut-off machine which adopted advanced intelligent control & touch screen operation technology. With three-axis joystick, and laser alignment and larger workbench makes easy to operate. Beta-300Pro has integrated a variety of cutting methods and techniques, even cutting large-section sample for heavy-duty, can also get excellent cutting surface. Its automatic cutting mode can achieve the highest level of reproducibility of cutting processes.





• Features

- Equipped with 7" touch screen & saving 20 programs; Can automatic cutting from 3-axis X-Y-Z, laser
- alignment which can display the cutting routine, rapid position;
- Various cutting modes can meet different cutting requirements;
- According to the hardness of the material and preset cutting current, intelligent adjustment & optimization the cutting progress;
- T-slot vises which easy to clamping and matches variety of shaped fixture;
- Pulsing cutting adjust the cutting speed automatically which can get better surface quality;
- Auto detect whether cut-off.



Cutting Accessories:



Large Vertical Fixture



Flat Push

Fixture

Cutting Machine Special-shaped Fixture fixture



Fixture

Technical Specifications

Model		Beta 300Pro			
	Rotation speed	800~3500rpm			
Cutting blade	Diameter	Ф300mm			
	Arbor size	32mm			
Electronic	Input	3x380V+1PE			
Liectionic	Rated power	Total power 5.0KW, Cutting power 4KW			
	Emergency stop	Press to disconnect the control loop and main power			
	Security door lock	When the door is open, it cannot be started; when it is run is locked	ning, the door		
Safety	Joystick	Requires two-hand control			
	Over load Protection	Automatic shutdown for overload current			
	Cutting force	Monitoring cutting force, automatic stop when exceeding	the set value		
	Display / Control	7 inch Touch Screen			
Control	Z-axis feed	Automatically: 0.1~5mm/s			
Control	Y-axis feed	Automatically: 0.1~5mm/s			
	X-axis feed	Electric control rocker			
	Capacity	80L			
	Dimension	720x550x550mm(W*D*H, with paper pump)			
Cooling	Connector	Inlet: DN15, High Pressure pipe of Φ 19 inner diameter; outlet: 1.5 ", Flexible pipe of Φ 38 inner diameter			
	Water way	Two, flow: 50L/Min			
	Cutting Mode	Y-axis/ Z-axis (chopping)/ Y Z linkage			
	Speed control mode	Constant speed cutting/pulse cutting/automatic speed re	gulation		
Intelligent	Laser Alignment	Equipped			
Cutting	Automatic tool setting	Equipped			
	Automatic cut-off	No need to set cutting depth, automatic stop after cut off			
Cutting	Max. diameter	Ф110mm			
Capacity	Max. Square section	80*200mm			
	Dimension	280*536mm			
Workbench	T-slot	12mm Z((150mm) Y (200mm)		
	Travel	Z-axis: 150mm; Y-axis: 200mm; X-axis: 80mm;	→ X (80mm)		
Dimension	W*D*H	979*940*1535mm(Close), 979*940*1881mm(Open)			
Maight	Cutter	376kg			
Weight	Water tank	34kg			

Beta-400MA/400Pro

Automatic Cut-off Machine

The **Beta-400MA/400Pro** is a fully automatic, large-sized cutting machine, suitable for cutting various metal materials, ceramics, quartz glass and petrographic samples. The equipment is equipped with a variety of clamps to cut irregularly shaped workpieces. It also realizes automatic/manual feed cutting of the workbench (Y direction), automatic chopping cutting of the cutting blade (Z direction), and manual/automatic translation of the workbench (X direction). The flexible and automatic cutting method can meet cutting requirements of various samples.







Features

- Cast aluminum base, 304 stainless steel cover, overall rigidity, more durable, corrosion resistant;
- Use the joystick to control the XYZ axis for tool setting, which is more labor-saving and faster;
- Extra large work surface and operating space;
- The X-direction platform can move automatically, realizing one-time clamping and automatic continuous cutting;
- Equipped with a one-button flushing function to quickly remove water mist on the window and flush away debris in the cutting chamber;
- It is equipped with ventilation and air purification devices to quickly remove water vapor in the cutting room and purify the odor generated during cutting;
- The floor-standing independent water tank has a large volume and is easy to remove for cleaning;
- With laser tool setting device.





Technical Specifications

Model		Beta-400MA	Beta-400Pro	
	Speed	800-2000 rpm		
Cut-off Wheel	Diameter	Φ400 ~ Φ450 mm		
	Arbor Dia.	Ф32mm		
	Height above table	220mm @Ф400 blade; 190mm @Ф450 blade		
	Size (W×D)	438X388 mm		
	T-slots	12mm		
Cutting table	Feed rate	0.1-4r	mm/S	
	Travel along Y-	370	mm	
	Travel along X-	220mm, Manual	220mm, Motoried	
Capacity @	Dia.	Ф130) mm	
Ф400 Wheel	Height × Length	130x40	00 mm	
Capacity @	Dia.	Ф150	Omm	
Φ450 Wheel	Height × Length	150x300mm		
Power supply	Power inlet	3x380V/50Hz+1N + 1PE		
i ower dappry	Rated power	7.5KW		
	E-stop	Press to cut off the control circuit		
Safety	Interlock switch	Door is locked while cutting		
<i>-</i>	Joystick	Two-handed operation		
	Overload protection	Automatic ad	ljust feed rate	
	Capacity	15	OL	
Cooling Tank	Dimensions	1200x450x610mm(WxDxH, with water pump)		
3	Inlet & Outlet	Inlet: ID=Φ19 mm hose;	Outlet: ID= Φ38 mm hose	
	Water flow	6 channels, flow	v rate: 100L/min	
Smart cutting	Cut mode	Manual/Table Feeding /Chop Cut	Manual/Table Feeding/Chop Cut/ Segment / Paralleled Cut	
	Feed mode	Constant speed/ Pulse /Auto-adjust speed		
Dimension	W*D*H	1017*1317*1729mm(closed); 1851*1774*2224mm(open)		
Waight	Main unit	550kg	560kg	
Weight	Water tank	40kg		

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Beta-500

Automatic Cut-off Machine



Beta-500 is a fully automatic large-scale vertical cutting machine, suitable for cutting various metal materials, ceramics, quartz glass and petrographic samples. It can realize fully automatic, multi-stage automatic cutting with different thicknesses and different angles of XYZR four axes (the R-axis is an optional function).





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Features

- XYZR four-axis fully automatic control. R-axis (rotation/angle) is optional.
- It can realize multi-segment continuous cutting on the X-axis (R-axis), with equal thickness (angle), or at any specified position;
- Extra large work surface and cutting chamber; work surface size reaches 728x832mm. The cutting chamber size reaches 1248x1220mm and the height is 900mm.
- Can clamp ultra-long specimens that run through the left and right sides;
- Simulation function of cutting route;
- Equipped with a wireless handwheel to control the movement of four axes to achieve rapid tool setting;
- The one-piece cast aluminum base and reliable powder coating ensure durability and no rust;
- 10-inch large touch screen;
- Floor standing water tank with large volume, easy to remove for cleaning;
- Equipped with magnetic separator and paper tape filtration system;
- Laser tool setting device.





Technical Specifications

Model		Beta-500
	Speed	500~2500rpm
Cutting blade	Diamete	Ф508mm
	Center hole	Ф32mm
Electricity	Supply	3x380V/50Hz+Neutral+Ground
Liectricity	Cutting power	15KW(S1)
Cutting	Diameter	Ф190mm
capacity	Square section	190*360mm
Safety	Cutting mode	Vertical / Horizontal / Segment / Continuous / Angle (Optional)
	Feeding method	Constant speed / Pulse / Automatic speed control
Travel		Z-direction (vertical): 330mm, Y-direction (front-back): 500mm; X-direction (left-right): 550mm
Working	Size (WxD)	832x728mm
bench	T-slot	12mm
Angle Cutting	Bench size mm	Ф600mm
(Optional)	Number of automatic cuts	20
	Tank capacity	200L
	Tank Size	1500x900 height 650mm
Cooling	Connector	Inlet: Φ19 inner diameter high-pressure pipe; Outlet: Φ80 inner diameter hose
	Flow rate	100L/min
Filter	Method	Paper tape + magnetic separator
Fliter	Accuracy	30um
Oil mist collector	Power	0.37Kw
(optional)	Air volume	600m3/h
Weight	Beta-500	1450Kg
vveigiit	Water tank	155Kg





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Cut Off Wheels

Cutting is the first step in a complete material analysis, the selection of cutting machine and blades must match geometry and material properties of sample. TROJAN cutting products make the cutting process simple, fast and accurate.

TROJAN cutting blades and consumables have a unique formula and process, it can be fully cooled and reduce thermal damage. TROJAN Cut off wheel adopts unique manufacturing technology. It can be fully cooling up and reduce thermal damage of the samples. Furthermore, the surface of the product can also eliminate the accumulation of debris during the cutting process and the convenient cleaning method can keep the worktable and the cutting chamber also clean.



A60 Cut Off Wheels (Extremely Hard)

Description: Aluminum Oxide Material, Resin Bond.

Application: For cutting extremely hard ferrous metals(HRC>55).

Order No:	Code	Spec.(mm)	Package
01.01.111	A601505	150*12.7*0.5	10pcs
01.01.114-1	A601808	180*12.7*0.8	10pcs
01.01.118	A602008	200*22.0*0.8	10pcs
01.01.150	A602515	250*32.0*1.5	10pcs
01.01.160	A603020	300*32.0*2.0	10pcs
01.01.170	A603525	350*32.0*2.5	10pcs
01.01.180	A604030	400*32.0*3.0	10pcs
01.01.185	A604530	450*32.0*3.2	10pcs
01.01.190	A605040	508*50.8*4.0	10pcs

A50 Cut Off Wheels (Medium Hard)

Description: Aluminum Oxide Material, Resin Bond.

Application: For cutting medium hard ferrous metals(HRC40-55).

Order No:	Code	Spec.(mm)	Package
01.01.213-1	A501505	150*12.7*0.5	10pcs
01.01.214	A501808	180*12.7*0.8	10pcs
01.01.224	A502008	200*22.0*0.8	10pcs
01.01.250	A502515	250*32.0*1.5	10pcs
01.01.260	A503020	300*32.0*2.0	10pcs
01.01.270	A503525	350*32.0*2.5	10pcs
01.01.280	A504030	400*32.0*3.0	10pcs
01.01.285	A504530	450*32.0*3.2	10pcs
01.01.290	A505040	508*50.8*4.0	10pcs

A30 Cut Off Wheels (Soft)

Description: Aluminum Oxide Material, Resin Bond. **Application:** For cutting soft ferrous metals (HRC20-40).

Order No:	Code	Spec.(mm)	Package
01.01.313	A301505	150*12.7*0.5	10pcs
01.01.314	A301808	180*12.7*0.8	10pcs
01.01.315	A302008	200*22.0*0.8	10pcs
01.01.350	A302515	250*32.0*1.5	10pcs
01.01.360	A303020	300*32.0*2.0	10pcs
01.01.370	A303525	350*32.0*2.5	10pcs
01.01.380	A304030	400*32.0*3.0	10pcs
01.01.385	A304530	450*32.0*3.2	10pcs
01.01.390	A305040	508*50.8*4.0	10pcs

S20 Cut Off Wheels (Soft Non-Ferrous)

Description: Silicon Carbide Material, Resin Bond. **Application:** For cutting soft Non-Ferrous, AI, Cu Alloys.

Order No:	Code	Spec.(mm)	Package
01.02.413-1	S201505	150*12.7*0.5	10pcs
01.02.422	S202008	200*22.0*0.8	10pcs
01.02.450	S202515	250*32.0*1.5	10pcs
01.02.460	S203020	300*32.0*2.0	10pcs
01.02.470	S203525	350*32.0*2.5	10pcs
01.02.480	S204030	400*32.0*3.0	10pcs
01.02.485	S204530	450*32.0*3.2	10pcs
01.02.490	S205040	508*50.8*4.0	10pcs

S10 Cut Off Wheels (Ductile Metal)

Description: Silicon Carbide Material, Resin Bond.

Application: For cutting ductile titanium and titanium alloys, refractory metals.

Order No:	Code	Spec.(mm)	Package
01.02.500	S101505	150*12.7*0.5	10pcs
01.02.580	S102008	200*22.0*0.8	10pcs
01.02.570	S102515	250*32.0*1.5	10pcs
01.02.560	S103020	300*32.0*2.0	10pcs
01.02.510	S103525	350*32.0*2.5	10pcs
01.02.520	S104030	400*32.0*3.0	10pcs

-6

Diamond/CBN Wafering Blades

Wafering blades have very thin cut width, are recommended for precision cutting/sectioning or when cut width loss needs to be minimized. There are plating, resin and metal bond 3 types configurations with Diamond or CBN.









DP Series (Diamond Plating)

DR Series (Diamond Resin)

DM Series (Diamond Metal)

CBN-M Series

DP Diamond Plating Wafering Blade

Material: A metal core with diamonds nickel plated to the rim.

Application: For cutting PCB, plastic, fiber composites resin or soft non-ferrous metals.

Order No:	Code	Spec.(mm)	Package
01.03.520	DP101304	100*12.7*0.4	1pc
01.03.525	DP131304	125*12.7*0.4	1pc
01.03.530	DP151305	150*12.7*0.5	1pc
01.03.541	DP181308	180*12.7*0.8	1pc
01.03.551	DP202210	200*22.0*1.0	1pc
01.03.560	DP253215	250*32.0*1.5	1pc
01.03.570	DP303220	300*32.0*2.0	1pc

DR Diamond Resin Bond Wafering Blade

Application: For cutting hard, brittle or delicate materials including ceramics, composites, carbides and exotic metals.

Order No:	Code	Spec.(mm)	Package
01.04.620	DR101304	100*12.7*0.4	1pc
01.04.625	DR131304	125*12.7*0.4	1pc
01.04.630	DR151305	150*12.7*0.5	1pc
01.04.640	DR181608	180*16.0*0.8	1pc
01.04.656	DR201310	200*22.0*1.0	1pc
01.04.660	DR253215	250*32.0*1.5	1pc
01.04.670	DR303220	300*32.0*2.0	1pc

DM Diamond Metal Bond Wafering Blade

Application: For very hard or brittle materials, glass ceramics, stone.

Order No:	Code	Spec.(mm)	Package
01.05.720	DM101304	100*12.7*0.4	1pc
01.05.725	DM131304	125*12.7*0.4	1pc
01.05.730	DM151305	150*12.7*0.5	1pc
01.05.741	DM181308	180*12.7*0.8	1pc
01.05.748	DM202210	200*22.0*1.0	1pc
01.05.760	DM253215	250*32.0*1.5	1pc
01.05.770	DM303220	300*32.0*2.0	1pc

CBN-M CBN Metal Bond Wafering Blades

Application: Used for hard steel, iron, cobalt nickel and lead based alloys, most commonly used at lower speeds.

Order No:	Code	Spec.(mm)	Package
01.10.920	CBN-M101304	100*12.7*0.4	1pc
01.10.925	CBN-M131304	125*12.7*0.4	1pc
01.10.930	CBN-M151305	150*12.7*0.5	1pc
01.10.935	CBN-M181308	180*12.7*0.8	1pc
01.10.950	CBN-M202210	200*22.0*1.0	1pc
01.10.960	CBN-M253215	250*32.0*1.5	1pc
01.10.970	CBN-M303220	300*32.0*2.0	1pc



Cut Off Wheels



Diamond Wafering Blades



Cutting Coolant

In order to get better cutting effect and reduce burns of samples, metallographic cutting coolant is usually added in the cutting process of metallographic test. The product solution is clear and transparent, without any minerals and nitrite, and has the dual effect of cooling and lubrication.

TJ 1220 Cutting Coolant

How to use: Mix with 20-30 times water when using;

Application: Protect the sample overheating, good rust prevention,



Order No:	Description	Package
01.07.810	TJ 1220 Cutting Coolant	1L
01.07.820	TJ 1220 Cutting Coolant	5L

TJ 1410 Cutting Coolant

How to use: Mix with 20-30 times water when using;

Application: Protect the sample overheating, good lubrication.



Order No:	Description	Package
01.07.857	TJ 1410 Cutting Coolant	1L
01.07.860	TJ 1410 Cutting Coolant	5L

TJ 1506 Cutting Fluids Preservatives

How to use: Dissolved in water, alcohol and propylene glycol in any proportion, and it can work alone or in combination with other active components, recommended dosage: 0.1%-0.3%;

Application: For anticorrosion and sterilization of metallographic cutting fluid, prevents mildew and odor of cutting fluid, and prolongs the service life of cutting fluid.



Order No:	Description	Package
01.07.890	TJ 1506 Cutting Fluids Preservatives	1L
01.07.900	TJ 1506 Cutting Fluids Preservatives	5L



MOUNTING

Hot Mounting

Hot mounting is ideal solution to get high quality, uniform size sample,as well as short process time. It is to use mounting compounds with certain pressure, temperature to make a sample.

Cold Mounting

TROJAN cold mounting resin system avoides sample from high temperature and pressure, making sample preparation results stable and reliable, efficient.



UV Mount (page 29) New!







MT-2H







FLEXPRESS Mounting Press







FLEXPRESS

Mounting Press

FlexPRESS is a flexible hot mounting machine which has modular unit design, it has combined one base unit and 1-5 extended units. It can meet different customer's specific needs. Very suitable for the need to make a large number of specimen.







Features

- Modular units design; basic with additional pressing units are optional;
- Sliding cap design can be opened & closed automatically or manually;
- Equipped with 7" touch screen on basic unit and store 16 user-defined programs;
- Can be heated on the top& surround, to get rapid and completed curing for the resin;
- Pre-heating& pre-pressurized function with adjustable heating power (speed);
- Several cooling modes & optional recirculating tank.

Technical Specifications

Model	FlexPRESS Basic unit	FlexPRESS Extended unit	
Voltage	110/220V		
Heating Power	2.0h	Kw	
Mold Size	Ф30mm(Standard),Ф25.4mm,Ф32	2mm,Ф40mm,Ф50mm(Optional)	
Heating Range	60~2	50°C	
Holding Time	1~60	min	
Max,pressure	0~500Bar (Depend	ling on mold size)	
Heating Position	Surrounding and Top		
Heating Method	First preheating, then insulation or without preheating		
Pressurized Method	Pre-pressurize first, then hold the pressure (also without pre-pressure)		
Cooling Mode	Auto:by temperature or time.manual mode		
Cooling Rate	High, mediu	m and low	
Control Panel	7-inch touch screen	Push buttons	
Environment Temperature	-20°C - 60°C		
Environment Humidity	0-95%RH		
Dimesion (W*D*H)	300*561*492mm	254*550*492mm	
Weight	60kg	52kg	

MT-1H/2H Auto Mounting Press

MT-1H/2H Press is an automatic hot mounting machine which is suitable for curing different resin, such as Eposy, Phenolic and Acrylic. The machine has higher applicability, high sample preparation efficiency with good quality.









• Features

- 7"touch screen, convenient to operate;
- Automatic water cooling with several cooling mode, high sample preparation efficiency;
- Live monitoring the process in the prominent display &simple big button;
- Pre-set and Pre-load procedures on main screen;
- Sliding closure design with precise positioning, confortable to use;
- Over heating& over load protection to ensure safty.





Technical Specifications

Model	MT-1H	MT-2H
Power supply	220V, 1P, 2.5 Kw, 15A	220V, 1P, 4.5 Kw, 30A
Heating power	2.0Kw	4.0Kw
Heating control	Power can be	set (10-100%)
Sample size	Ф30mm(Standard), Ф25.4, Ф	Ф32, Ф40, Ф50mm(Optional)
Heating range	100-2	200°C
Holding time	0 ~ 9	9min
Pressure range	0 - 500Bar (Depends on cylinder size)	
Heating part	Surrounded	
Cooling method	Automatic mode: by time/temperature; manual mode	
Cooling rate	High, medium and low cooling rate	
Control panel	7-inch touch screen	
Water inlet	OD=Φ8mm connecte	er, pressure<0.3MPa
Water outlet	OD=Φ12mm connecter	
Ambient temperature	-20°C - 60°C	
Ambient humidity	0-95%RH	
Dimensions (W*D*H)	400*509*537mm 657*509*548mm	
Weight	48kg 70kg	

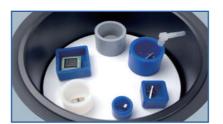
ThetaVAC-2

Vacuum Cold Mounting Machine

ThetaVAC-2 is a program-controlled vacuum cold mounting machine with light and compact design. It can be quickly and effectively vacuumed by external compressed air and also can connect to a vacuum pump. The excellent pore impregnation properties makes the resin penetrates into tiny pores and cracks quickly and efficiently, thus ensuring edge-retention and full filling of the sample. Very suit for the preparation of porous materials such as specimens for failure analysis of cracks, porous castings and composites, electronic components, rock minerals, ceramics, etc.



Mounting







- Program control, vacuum, cycle times and time can be set;
- Large chamber, can hold 12pcs specimen (in dia.40mm) simultaneously;
- Electric rotary table, convenient to operation;
- External high pressure air, easy &safe to operate, (optional vacuum pump);
- Teflon coating inside makes easy to clean.

Technical Specifications

Model		ThetaVAC-2
	Power Supply	100-240V, 50Hz, 35W(Vacuum pump not included)
	Control Panel	5"touch screen
Electrical	Timing Cycle	Range 0-10min, automatic vacuumize/deflation, cycle repeated
	Maximum number of cycles	100
	Program	20groups
	Vacuum Level	0 ~ -80kPa, vacuum pump 0 ~ -90kpa
Vacuum	Maximum Vacuum Flow	75L/min
vacaam	Air Consumption	28-42L/min
	Noise	55-60dBA
	Diameter	Inner diameter Φ252, Place 12 Φ40 samples Simultaneously
Chamber	Height	For molds with a diameter of less than 100mm, the Max. of height is 100mm; For molds with a diameter of more than 100mm, the Max. of height is 80mm.
	Tray Rotation	Electric button, direction: clockwise/counterclockwise
Supply Air	Pressure	Same with the power input
Va avvina Divana	Voltage	OD=Φ6mm pipe, Pressure requirment 0.6~0.7MPa
Vacuum Pump (Optional)	Power	Max:1000W
(Optional)	Cable Connector	National standard three-core type male plug
Dimensions	W*D*H	497*461*293mm (Close), 497*461*655mm(Open)
Weight		18kg

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UVmount

Curing Machine

UVmount is a cold mounting machine for cold mounting sample preparation that utilizes UV light to rapid mounting resins. Pour the resin into a transparent mold, put it into the UVmount. In just 60 seconds, a completely transparent mounted specimen can be obtained. The sample preparation is fast and the sample contains no bubbles, which can meet the needs of high-quality sample preparation.







Features

Door automatic/electric open & close;

New!

- Realize "one key start", automatically complete the process and bringout the samples;
- 4.3"touch screen;
- The curing time is adjustable, with 4 preset timer buttons;
- The upper and lower double-layer light sources make sure the irradiation even distribution;
- Curing faster and more uniform;
- Low heat generation during curing, the maximum temperature during curing is less than 90°;
- The max temperature is less than 60° on the sample;
- Dual fan cooling system;
- Can be equipped with air extraction and purifier to prevent unpleasant odor from leaking.(optional)



Technical Specifications

Model		UVmount Curing Machine
Communication and accordance	Dimension	260*200mm
Sample support surface	Max. height	50mm
LIV	Curing time	0~100min
UV	Wavelength	Main 365nm
Dimensions	W*D*H	Close: 400*404*188mm; Open: 400*651*188mm
Electrical	Voltage/Frequency	85~240V,50/60Hz (1Ph/N/PE)
Weight		15kg

ThetaMount

Pressure Cold Machine

ThetaMount pressure cold mounting machine is designed with compact pressure technology with maximum pressure as high as 2bar, which can ensure that the specimen does not contain bubbles after mounting while the physical and chemical properties of the resin & mounting agent will not change. So it can be used for rapid mounting of all cold mounting resins (especially for TJ-2210 acrylic resin) and make high-quality spenimen.









Features



- Specimen does not contain bubbles after mounting;
- Won't influence the physical and chemical properties of the resin & mounting agent;
- No unpleasant smells during mounting;
- Much efficient and good quality in sample preparation.



Technical Specifications

Model	ThetaMount
Operating Pressure	2.0bar
Safety Valve Overflow Pressure	2.8~3.3bar
Chamber Diameter	Ф235*170mm
Dimension W*D*H	308×415×289mm (Close); 308×415×342mm(Open)
Weight	8.5kg

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Hot Mounting Compounds

Prducts	PT 2231	BB 2232	TM 2261	EP 2237	DC 2239	MA 2275
Description	Phenoloc Resin	Glass fiber filled Phenolic	Transparent	Glass fiber filled Epoxy	Conductive	Mineral filled melamine resin
Components	black/red/ green grit	black grit	white powder	black grit	Black-Brown Grit with powder	light yellow to white powder
Heat time	4-6min	4-6min	6-8min	5-7min	4-6min	4-7min
Cooling time	2-3min	2-3min	7-10min	4-6min	4-6min	5-8min
Cooling speed	High/Medium	High/Medium	Low	Medium	High	Medium
Pressure	100-300bar	100-150bar	100-150bar	100-300bar	100-300bar	100-300bar
Heat temperature	150-180°C	140-180°C	160-180°C	150-180°C	150-180°C	150-180°C
Hardness (Shore D)	88-91	90-92	86-88	90-94	80-83	88-90

^{*}The above parameters is base on Φ 30mm mold.

PT 2231



Features: Low price, black, green and red phenolic grit.

Application: For routine applications suit for most products.

Order No:			Package
Black	Green	Red	
02.01.310	02.01.311	02.01.312	1kg
02.01.320	02.01.321	02.01.322	4kg
02.01.325	02.01.326	02.01.327	20kg

BB 2232

Features: Extreme hardness, very good grinding and polishing properties, does not stick on embedding instruments, non adherent.

Application: All hard materials, e.g. hardened gears, hard metals and ceramics.

Order No:	Package
02.01.210	1kg
02.01.220	4kg
02.01.225	20kg

DC 2239



Features: Excellent conductive, voltage loss almost eliminated completely.

Application: SEM analysis.

Order No:	Package
02.01.910	1kg
02.01.940	4kg
02.01.945	20kg

TM 2261



Features: Transparent and very clear. allows easy sample observation.

Application: Same as TM 2235 and can be dissolved by Trojan special solvent.

Order No:	Package
02.01.140	1kg
02.01.144	4kg
02.01.145	20kg

EP 2237



Features: Thin, extreme hardness, optimal edge connection, good adhesion to the specimen surface, very good grinding and polishing properties.

Application: All hard materials, e.g. hard gears, metals and ceramics.

Order No:	Package
02.01.710	1kg
02.01.720	4kg
02.01.751	20kg

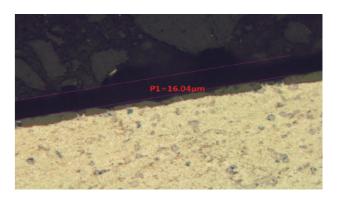
MA 2275

Features: High hardness, optimum edge connection, good adhesion to the sample surface, very good grinding and polishing properties, suitable for black surface specimen.

Application: Medium hard materials like normal hard metals, steel in general, aluminum, copper materials, etc.

Order No:	Package
02.01.960	1kg
02.01.965	4kg
02.01.970	20kg





Good edge connection

Gap



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Cold Mounting System

Custom	Acrylic	System	Epoxy System					
System	'	ure times,or need mple preparation.	Used for excellent flow and penetration,or when better adhesion chemical resistance,less shrinkage and clarity are required.					
Products	TJ 2210	TJ 2800	TJ 2220	TJ 2568	TJ 2221	TJ 2226	TJ 2227 Conductive	TJ 2562
Part A	Powder	Powder	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
Part B	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
A:B (w/w)	10:8	10:5	2:1	4.5:1	2:1	4.5:1	4.5:1	3:1
Pot life	2-4min	2-4min	4-8min	5-10min	5-10min	10-20min	10-20min	30-60min
Cure time 25°C	8-12min	8-10min	30-60min	45-90min	1-2hour	4-6hour	4-6hour	10-12hour
Peak temperature	80°C	85°C	144°C	125°C	112°C	90°C	90°C	<32°C
Hardness (Shore D)	80	82-83	82	82	78	82	82	80
Edge protection	Good	Better	Better	Excellent	Good	Excellent	Better	Better

^{*}The above parameters is in 30mm mold.25°C

Acrylic Curing System is typically used for rapid cure times, or When large volume sample throughput is needed.



TJ 2210 Acrylic Resin

Features: High transparent, good flow and penetration. especially for PCB and other electronic components.

Order No:	Description	Package
02.03.411	White, Resin, Powder	1kg
02.03.412	Hardener, Liquid	800ml
02.03.421	White, Resin, Powder	2.5kg
02.03.423	Hardener, Liquid	2000ml



TJ 2800 Acrylic Resin

Features: Translucent, good edge protection, low shrinkage. Cure with the mounting pressure pot.

Order No:	Description	Package
02.03.511	White, Resin, Powder	1kg
02.03.512	Hardener, Liquid	1000ml

Epoxy Curing System is typically used for excellent flow and penetration, or when better adhesion, chemical resistance, less shrinkage and clarity are required.



TJ 2220 Epoxy Fast (2:1)

Features: Transparent yellowish fast cure epoxy system, good adhesion.

Order No:	Description	Package
02.04.660	Epoxy Resin, Liquid	2kg
02.04.661	Hardener, Liquid	1kg



TJ 2568 Epoxy Quick (4.5:1)

Features: Clear, fast curing epoxy system, low shrinkage, excellent adhesion.

Order No:	Description	Package
02.04.857	Epoxy Resin, Liquid	1kg
02.04.858	Hardener, Liquid	230g



TJ 2221 Epoxy King (2:1)

Features: Clear, general purpose fast cure epoxy system.

Order No:	Description	Package
02.04.721	Epoxy Resin, Liquid	2kg
02.04.722	Hardener, Liquid	1kg



TJ 2226 Epoxy Resin (4.5:1)

Features: Clear, transparent, general purpose slow cure epoxy resin

Order No:	Description	Package
02.04.773	Epoxy Resin, Liquid	1kg
02.04.774	Epoxy Curingagent,Liquid	230g



TJ 2562 Epoxy Thin (3:1)

Features: Clear, low viscosity and very low peak temperature, good adhesion.

Order No:	Description	Package
02.04.853	Epoxy Resin, Liquid	1.5kg
02.04.854	Hardener, Liquid	0.5kg



TJ 2227 Epoxy Resin (2:1)

Features: Colorless and transparent, electrically conductive, suitable for SEM analysis.

Order No:	Description	Package
02.04.920	Epoxy Resin, Liquid	1kg
02.04.921	Epoxy Curingagent,Liquid	0.5kg

Low energy UV curable resin, high transparency and low heat release, cured after about 1 minute. Ideal for curing samples that require fast, batch volumes.



TJ 2400 UV Curing Resin

Features: Resin with fast curing speed, high transparency and low heat release.

Order No:	Description	Package
02.05.110	UV Curable Resine	1kg
02.05.120	UV Curable Resine	5kg

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^{*}The Trojan Dissolver is a blend of solvents that when heated removes cured resin from a specimen.



Mounting Accessories

Sample Holding Clips

Made of PET material or SUS material, it has the characteristics of good elasticity, beautiful and practical.

	Order No:	Description	Package
0	07.06.020	White X-shaped sample clip	100pcs/pkg
2	07.06.030	Transparent X-shaped sample clip	100pcs/pkg
3	07.06.050	Green X-shaped sample clip	100pcs/pkg
4	07.06.040	Red X-shaped sample clip	100pcs/pkg
5	07.01.010	Plastic Coil Clip, 6*100mm	100pcs/pkg
9	07.01.012	Plastic Coil Clip, 6*100mm	1000pcs/pkg
6	07.01.016	Stainless Steel Clip, 7*120mm	100pcs/pkg
	07.01.017	Stainless Steel Clip, 7*120mm	1000pcs/pkg
7	07.06.010	Black X-shaped sample clip	100pcs/pkg
8	07.05.001	S Black Plastic Clip, 20*10*8mm	100pcs/pkg

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5	986
7	8

2-Part Mounting Cups

Reusable cup has a separable bottom, which is easy to remove mounting sample after curing.

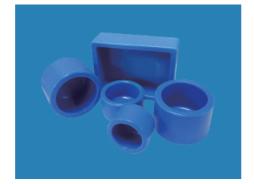
Order No:	Description	Package
08.02.002	Separate Firm Molds, Φ25*20mm	10pcs
08.02.004	Separate Firm Molds, Φ30*23mm	10pcs
08.02.006	Separate Firm Molds, Φ32*25mm	10pcs
08.02.008	Separate Firm Molds, Φ40*27mm	10pcs



Silicone Mold Cups

Durable, reusable silicone mold cups are widely used for acrylic and epoxy mounting system.

Order No:	Description	Package
08.02.018	Silicone, Φ20*18mm(depth)	10pcs
08.02.020	Silicone, Φ25*18mm(depth)	10pcs
08.02.022	Silicone, Φ30*18mm(depth)	10pcs
08.02.030-1	Silicone, Φ40*25mm(depth)	10pcs
08.02.050	Silicone, 50*70*20mm(rectangle)	10pcs
08.02.058	Silicone, 180*106*30mm(rectangle)	10pcs



Etakit Mounting Splitter

EtaKit Splitter is used to release oval mounting cups, easy, efficient.

Order No:	Description	Package
13.20.003	Apply to 2-part mounting cups	1pc/pkg



Transparent Silicone Mold Cups

Transparent ,Durable, reusable silicone mold cups are Widely used for UV light-curing embedding materials.

Order No:	Description	Package
08.02.022-3	Ф30*18mm(deep)	10pcs
08.02.024-4	Ф31*30mm(deep)	10pcs
08.02.030-3	Ф40*27mm(deep)	10pcs
08.02.055-1	50*50*20mm(Transparent)	10pcs



Teflon Mold Cups

Durable, reusable Teflon mold cups are very easy to remove mounting samples after curing.

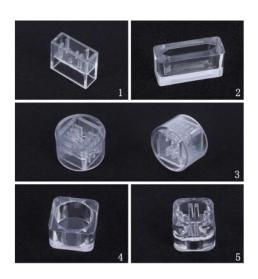
Order No:	Description	Package
08.02.110	Teflon, easy release, Φ25mm	1pc
08.02.120	Teflon, easy release, Φ30mm	1pc
08.02.132	Teflon, easy release, Φ40mm	1pc



Disposable Mounting Cups

Economical choice for high volume mounting requirements.

	Order No:	Description	Package
0	08.01.013	24*20*10mm, Single lattice	500pcs
2	08.01.015	22*11*8mm, Single lattice	500pcs
	08.01.016	22*11*8mm, Single lattice	1000pcs
	08.01.030	Ф30mm, externally circular and internally square	100pcs
3	08.01.032	Φ30mm, externally circular and internally square	200pcs
	08.01.035	Φ30mm, externally circular and internally square	500pcs
4	08.01.038	20*20*12.3 mm, externally square and internally circular	500pcs
6	08.01.039	20*20*12.3 mm, externally square and internally circular	1000pcs





Sample Flattener





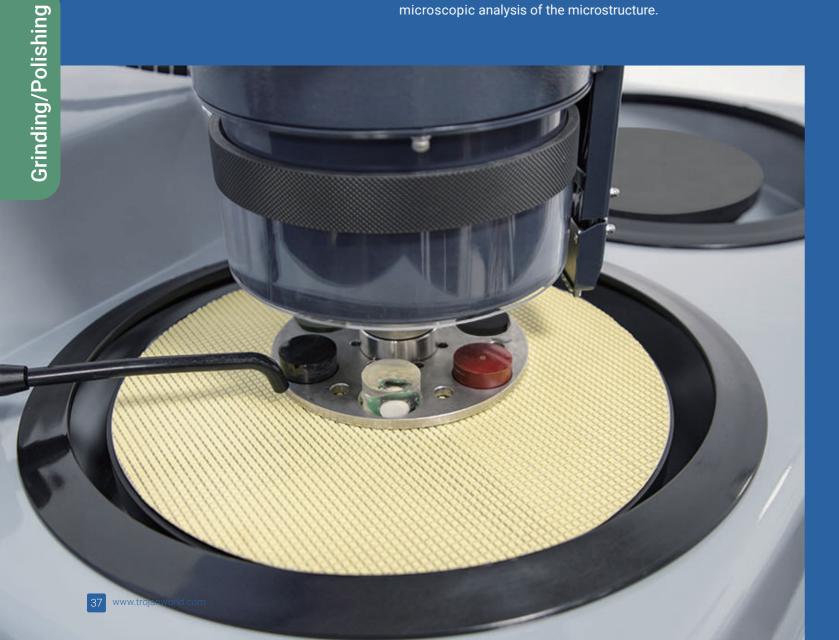
GRINDING AND POLISHING

Grinding

The surface of mounting sample is not smooth. Grinding is to remove excess part of the sample with abrasive materials.

Polishing

Polishing is to use a small amount of polishing powder or polishing liquid to place on polishing cloth, later the sample is polished. Purpose of polishing is to remove the deformation and scratches during the grinding process, resulting in a scratched mirror surface for microscopic analysis of the microstructure.



















Alpha Series

Manual Grinder and Polisher Machine

Alpha-series is suitable for rough grinding, fine grinding and polishing of metallographic/petrographic specimens. It is widely used in material analysis/theory analysis laboratories of large and small enterprises and scientific research institutions.



0

Features

- One-button flushing and cleaning, effective prevent the obstruction causing by grinding debris;
- Faucet can be switched to automatic mode, less operations for manual grinding and polishing;
- Large diameter drain hose, not easy to blocking and drainage quickly;
- Retractable water hose for easy cleaning and remaining;
- Optional glass operation panel, easy to clean and good at sealing;
- Optional buttons operation panel, simple and practical for using.











Technical Specifications

Model		Alpha-100	Alpha-202			
	Wheel	Single wheel	Double wheels With Individual Control Panel			
Working Wheel	Speed	50-1000rpm				
	Diameter	8"-10"(200/250mm)				
	Direction	Clockwise/Counter clockwise				
Electronic	Voltage/Frequency	110V/60Hz.220V/50Hz				
Liectionic	Rated Power	750W	1500W			
Operation Panel	Glass Touch Panel	Standard				
operation and	Button Press Panel	Button Press Panel Optional				
Dimensions	W*D*H	740*455*340mm 740*820*340mm				
Weight		45kg 85kg				

Alpha-108/208/210

Series Grinder and Polisher

New!

Alpha-108/208/210 is a single disc grinder and polisher with an 8"(203mm) disc diameter. The machine is small in size, compact in structure and easy to operate. Adopting the popular touch panel, it is especially suitable for grinding and polishing of various specimens.









- Servo motor helps maintain high torque even at low speed;
- Glass touch panel, simple to operate and easy to use;
- Fully sealed design in the working tray, no water will leak into the equipment even if there is water inside the tray;
- Retractable faucet for easy cleaning and washing;
- No tools are needed to disassemble the working plate, the disassembly is extremely convenient;
- ABS molded shell, small and beautiful, high strength.



Technical Specifications

Model		Alpha-108	Alpha-208	Alpha-210			
	Number	Single	Doi	uble			
	Diameter	8" (203mm) / 10" (254mm)	8" (203mm)	10" (254mm)			
Wheel	Speed	50-600rpm					
	Direction		CW/CCW				
	Torque		10N.m				
	Voltage/Frequency		220V/50Hz (1Ph/N/PE))			
Electronic	Rated Power	750W	150	WOO			
	Rated Current	4A	8	3A			
	Panel	Tempered glass, Touch Panel					
Control	Preset 3 Speed	Yes					
	Timing/Countdown	Yes					
	Maximum water pressure	<0.3MPa					
Water Supply	Inlet connector	G 3/4 External thread					
water Supply	Outlet diameter	OD=Φ32mm(1-1/4 inch)					
	Circulating water tank		Optional				
Noise	Measured at a distance of 1 meter	<40dBA					
Environment	Tempersture	-	-20°C - 60°C (-4°F -140°F	=)			
Liviloiiiieiit	Humidity		0-95%RH				
Dimensions	W*D*H	380*657*270mm 672*575*280mm 770*657*270mm					
Weight		20kg	34kg	40kg			

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Grinding/Polishing











Grinding/Polishing

Features

- 750W servo motor to maintain high torque output even at speeds as low as 5RPM;
- SUS 304 stainless steel housing;
- Control panel is convenient and easy to operate;
- The wheel can be locked for hand grinder;
- Retractable water spout;
- The automatic temperature-sensing cooling fans can reduce failure rate and improve working life.



Technical Specifications

Model		Alpha-112	Alpha-212D			
	Wheel	Single	Double			
	Max. dia.	12"/30	05mm			
Working Wheel	Speed	0-600rpm				
villee.	Direction	CW/	CCW			
	Torque	10N.m				
	Voltage/Frequency	220V/50Hz	(1Ph/N/PE)			
Electronic	Rated Power	750W	1500W			
	Rated Current	4A	8A			
	Max. pressure	<0.3MPa				
Water	Pipe dia. on inlet	OD=Φ8mm				
Supply	Pipe dia. on outlet	Ф32	2mm			
	Recirculating water tank	Optional				
Noisy	Measured at 1 meter	<40	dBA			
Dimensions	W*D*H	470*662*279mm	860*662*279mm			
Weight		34kg	56kg			

Alpha-600/606 is an automatic grinding and polishing machine with compact designed especially for high quality grinding and polishing surfaces needs. The maximum diameter of the grinding dics is as large as 300mm. There are two types of pressurization, central pressure and individual pressure. 4 groups of dosing system are optional. The machine can set & save 20 groups of commonly used grinding programs. It is convenient and quick to obtain high-quality mirror polishing results with high repeatability.





Features

- Convenient and easy operate on 5.6"touch screen;
- Both Central and individual pressure can be achieved;
- Electrical connections for 4 groups of dosing/stirring
- Contains 21 groups of commonly used grinding programs, customized programs also can be saved;
- Large diameter of drain hose;
- Replaceable wheel design makes easy to clean and maintenance;
- The automatic temperature-sensing cooling fan, can reduce failure rate and improve working life;
- Retractable water spout.







Technical Specifications

Model		Alpha-600	Alpha-606				
Working Wheel	Wheel	Single wheel	Double wheels				
	Force Application	Central and Individual					
	Central Force	20-300N					
Head	Individual Force	5-6	ON				
пеаи	Power	220V,	400W				
	Speed	20-15	0rpm				
	Direction	CCW					
	Power	750W	220V, 1500W				
0	Speed	50-750rpm					
Grinder	Wheel Diameter	8"-10"-12"(203/254/305mm)					
	Direction	CW/CCW					
Dosing System	Pump	0-52mL/min					
Dosing Gystein	Pump numbers	4*500ml					
Specimen	Individual pressure	6хФ5	0mm				
holder	Central pressure	6хФ50mm, 8хФ40mm, 10хФ30	Omm (Customization required)				
Operating	Temperature	-20°C	- 60°C				
Environment	Humdity	0-95%RH					
Dimensions	W*D*H	510*700*640mm 911*700*640mm					
Weight		80kg	102kg				

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Alpha-610

Automatic Grinder and Polisher

Alpha-610 is an automatic and single-disc grinder and polisher. It is driven by two server motors, which can output the large torque even at very low speed rotation. Discs with the diameter of Φ 200 ~ Φ 300 mm can be installed on Alpha-610. And both the central force and individual force can be applied on it. At least 20 groups of procedures can be edited and stored. The optional lubricant distribution system is made up with 4 peristaltic pumps and 4 stirring motors. Test results with high reproducibility can be obtained conveniently and quickly on Alpha-610.



Features

- Using aluminum casting base, and standard piston for individual force, the design is more reliable, stronger and more durable.
- 7-inch touch screen with simply and friendly interface designed.
- The moving-up and -down of the sample holder is controlled by two-handed buttons. Also the removal and installation of the sample holder is unlocked/locked by one button on the screen.
- Both central force and individual force can be realized. And the material removal can be specified while using the central force.
- Optional lubricant dosing system with 4 pumps or 8 pumps.
- Built-in at least 20 groups of procedures.
- Large diameter of drain hose, with water proofed seal of the spindle shaft.
- Retractable faucet for easy cleaning and flushing.
- Built-in automatic temperature-sensitive cooling fan.



Technical Specifications

Model		Alpha-610
	Force Type	Central and Individual
	Force Range	Central: 20-360N; Individual: 5-60N
Head	Power	220V, 750W
	Speed	10-150rpm
	Direction	CCW
	Disc Num.	One
	Diameter	8"-10"-12"(203/254/305mm)
Disc	Power	220V, 750W
	Speed	50-600rpm
	Direction	CW/CCW
Sample Holder	Individual	6xΦ30mm (6xΦ25, 6xΦ40, 6xΦ50mm)
Sample Holder	Central	6xΦ30mm (6xΦ25, 6xΦ40, 6xΦ50mm)
Dosing System	Max. Flow	52 mL/min
Dosing System	Pumps	4 or 8
Surrounding Temperature		-10-40°C
Humidity		0-95%RH
Dimensions (Wx	DxH)	680*500*650mm
Weight		65kg

OPT-380

Automatic Precision Grinder and Polisher

OPT-380 is an automatic precision grinding and polishing machine, which has strong comprehensive performance in the industry, mainly used for grinding and polishing of metal, ceramics, glass, PCB board, optical materials (such as zinc sulfide, silicon and other material), refractory materials, composite materials and other materials. It is one of the ideal grinding and polishing equipment for scientific research institutes and production enterprises. The Φ381mm disc can be used for preparing the specimen with a diameter of $\leq \Phi 142$ mm or a rectangular plane with a diagonal length of \leq 142mm.









Features

- The grinding disc can be convenient to replace as the swing arm can be quickly disassembled and
- The motor adopts the stepless speed control method, and the speed in real time can display on the
- Even longer service life as the motor adopts angular contact bearing instead of ball bearing;
- Can accurately control the working time (between 0-999H) with timing function;
- Can running long-term in low-speed with a cooling system;
- Convenient to operate on the 2.4" simple LCD screen.



Technical Specifications

Model		OPT-380
	Speed	10-200rpm
Working Wheel	Diameter	Ф381mm
	Station	Three station
Grinding Capacity	Specimen Size	Dia < Φ142mm
Gilluling Capacity	Planeness	less-than 0.002mm per 20*20mm
	Voltage/Frequency	220V/50Hz
Electric	Rated Power	800W
LIECTIC	Standby Power	15W
	Timer	0-999H 59M 59S
	Max. pressure	0.6MPa
Water Supply	Dia. on inlet pipe	Φ8mm
	Dia. on outlet pipe	Ф32mm
Operating	Temperature	-20°C - 60°C
Environment	Humidity	0-95%RH
Dimensions	W*D*H	653*771*338mm
Weight		150kg

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Grinding/Polishing

Precision Grinder and Polisher

SemiPOL can accurately grind and polish various materials (optical lenses, semiconductor wafers, metal and non-metal crystal phases) for microscopic (SEM, FIB, TEM, etc.) analysis. The target accuracy is micron level. It is mainly used for parallel grinding and polishing, combined with more accessories, would make the grinding and polishing of complex special-shaped parts and surfaces easier.

Monitor material removal in real time, or quantitatively set the amount of material to be ground and realize unattended operation. Dual stepping motor drive, respectively control the swing speed and amplitude of the grinding seat, can improve the flatness of the grinding parts, finish and utilization of grinding consumables.







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Features

- 7-inch touchscreen panel with a simple and easy-to-understand interface;
- Size of grinding disk: 10 inches (Φ254mm);
- Grinding disc speed: 0 600rpm, forward/reverse rotation;
- The LCD screen displays the amount of material removed in real time, with a resolution of 1um and a stable accuracy of ±2um;
- Built-in 16 groups of commonly used grinding and polishing process parameters, you can also save customized parameters;
- Large-diameter side-discharge water outlet is not easy to block and drains quickly;
- Pluggable faucet design facilitates cleaning and maintenance in the dish;
- Built-in automatic temperature-sensing cooling fan to reduce failure rate and extend working life.



Technical Specifications

Model		SemiPOL
	Speed	0-50rpm. Infinitely adjustable speed
	Rotating direction	CW/CCW
Grinding	Semi-rotation	Yes, adjustable amplitude
head	Swing	Yes, adjustable speed
	Torque of motor	0.8N/M
	Maximum removal	10mm
	Power	750W
Grinder &	Speed	0-600rpm
polisher	Diameter of grinding disc	8"-10"(203/254mm)
	Rotating direction	8"-10"(203/254mm)
Dripping	Pump flow	CW/CCW
(optional)	Number of pumps	4
Operating	Temperature	-20°C - 60°C
environment	Humidity	0-95%RH
Dimensions	W*D*H	700*430*580mm
Weight		57kg

VP-430

Vibratory Polisher

VP-430 vibratory polishing machine can minimize the wearing of the sample, eliminate the surface stress and bring excellent flatness with less stress deformation, is an ideal preparation equipment for EBSD (backscattered electron diffraction), AFM (atomic force microscope) & SEM (scanning electron microscopy) analysis and Nano indentation or micro-hardness testing. The equipment is particularly suitable for surface polishing on soft and ductile materials such as Titanium, Aluminium, pure Copper and Copper alloys, Aluminium alloys, steel and Nickel-based alloys.







• Features

- Low power consumption& noise design with piezoelectric vibratory plate, light weight but stable in operation;
- Convenient to operate, user friendly;
- Easily replacement design on disc, convenient to change and clean;
- 7"LCD touch screen operate & can save 20 customized programs:
- Automatically adjust frequency.

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Technical Specifications

Model		VP-430		
	Diameter	12inch (305mm)		
Working Plate	Sample Holder	1inch, 1.25inch, 1.5inch, 2inch (customized according to customer needs)		
	Voltage/Frequency	100~240V / 50 / 60 Hz		
	Rated Power	50W		
Electrical	Time Setting	9999hours		
	Speed	1-20rpm (Depends on the weight of the sample, here are the results for a single sample weighing about 150g.		
	Vibration Frequency	40~400Hz		
Operating	Temperature	-20°C - 60°C		
Environment	Humidity	0-95%RH		
Dimensions	W*D*H	503*516*379mm(Close) 503*607*669(Open)		
Weight		53kg		

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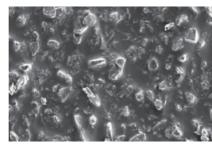
Grinding/Polishing

Grinding/Polishing

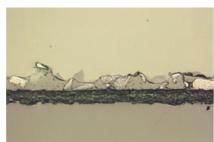
Abrasive Paper

There are silicon carbide and alumina for choice, which has good waterproof, durable long lasting life with uniform cutting characteristics that minimizes sample distortion and deformation.









SEM 50X

Before use 50X

After use 50X

Commonly Abrasive Grade Comparison Chart

Particle Size(um)	260	200	125	80	68	52	40	35	26	22	15	10	5
USA Grit	#60	#80	#120	#180	#220	#240	#280	#320	#360	#400	#600	#800	#1200
FEPA	P60	P80	P120	P180	P240	P280	P360	P400	P600	P800	P1200	P2400	P4000





Plain Back

PSA

Silicon Carbide Disc (Plain Back)

FEPA(Grit)	8 inch(200mm)	10 inch(250mm)	12 inch(300mm)	Package
120	03.03.103	03.03.403	03.03.703	50pcs
180	03.03.104	03.03.404	03.03.704	100pcs
400	03.03.107	03.03.407	03.03.707	100pcs
800	03.03.109	03.03.409	03.03.709	100pcs
1200	03.03.111	03.03.411	03.03.711	100pcs
2000	03.03.113	03.03.413	03.03.713	100pcs
2500	03.03.114	03.03.414	03.03.714	100pcs
2400	03.03.115	03.03.415	03.03.715	100pcs
4000	03.03.116	03.03.416	03.03.716	100pcs

Silicon Carbide Disc (PSA)

FEPA(Grit)	8 inch(200mm)	10 inch(250mm)	12 inch(300mm)	Package
120	03.04.203	03.04.503	03.04.803	50pcs
180	03.04.204	03.04.504	03.04.804	100pcs
400	03.04.207	03.04.507	03.04.807	100pcs
800	03.04.209	03.04.509	03.04.809	100pcs
1200	03.04.211	03.04.511	03.04.811	100pcs
2000	03.04.213	03.04.513	03.04.813	100pcs
2500	03.04.214	03.04.514	03.04.814	100pcs
2400	03.04.215	03.04.515	03.04.815	100pcs
4000	03.04.216	03.04.516	03.04.816	100pcs



Plain Back



PSA

Alumina Disc (Plain Back)

FEPA(Grit)	8 inch(200mm)	10 inch(250mm)	12 inch(300mm)	Package
60	03.01.101	03.01.401	03.01.701	50pcs
120	03.01.103	03.01.403	03.01.703	100pcs
180	03.01.104	03.01.404	03.01.704	100pcs
240	03.01.104-1	03.01.404-1	03.01.704-1	100pcs
320	03.01.105	03.01.405	03.01.705	100pcs
400	03.01.106	03.01.406	03.01.706	100pcs
800	03.01.108	03.01.408	03.01.708	100pcs
1200	03.01.110	03.01.410	03.01.710	100pcs

Alumina Disc (PSA)

FEPA(Grit)	8 inch(200mm)	10 inch(250mm)	12 inch(300mm)	Package
60	03.02.401	03.02.500	03.02.801	50pcs
120	03.02.403	03.02.503	03.02.803	100pcs
180	03.02.404	03.02.504	03.02.804	100pcs
240	03.02.404-1	03.02.504-1	03.02.804-1	100pcs
320	03.02.405	03.02.505	03.02.805	100pcs
400	03.02.406	03.02.506	03.02.806	100pcs
800	03.02.408	03.02.508	03.02.808	100pcs
1200	03.02.410	03.02.510	03.02.810	100pcs



Diamond Grinding Disc

DiaNi Diamond Disc

Diamond discs are nickel plated bond, extremely durable and very fast grinding speed.Recommended for steel,hard metals,glass and minerals.



FEPA(Grit)	8 inch(200mm)	10 inch(250mm)	12 inch(300mm)	Package
80	04.21.110S	04.21.210S	04.21.310S	1pc
120	04.21.120S	04.21.220S	04.21.320S	1pc
200	04.21.125S	04.21.225S	04.21.325S	1pc
400	04.21.130S	04.21.230S	04.21.330S	1pc
800	04.21.140S	04.21.240S	04.21.340S	1pc
1200	04.21.150S	04.21.250S	04.21.350S	1pc

DiaRe Diamond Disc

Diamond discs are resin bond, recommended for most of the materials. Very long service life.



FEPA(Grit)	Color	8 inch(200mm)	10 inch(250mm)	12 inch(300mm)	Package
120	•	04.22.120S	04.22.220S	04.22.320S	1pc
200		04.22.125S	04.22.225S	04.22.325S	1pc
400		04.22.130S	04.22.230S	04.22.330S	1pc
800		04.22.140S	04.22.240S	04.22.340S	1pc
1500	•	04.22.150S	04.22.250S	04.22.350S	1pc
3000		04.22.160S	04.22.260S	04.22.360S	1pc
5000		04.22.170S	04.22.270S	04.22.370S	1pc

PF Diamond Polishing Film

Trojan PF precision diamond polishing film series are mainly used for polishing optical fiber inserts, chips and other materials and metallographic samples. Among them, 0-30 microns are suitable for rough grinding, 3 microns and 1 micron are suitable for obtaining fine surfaces.



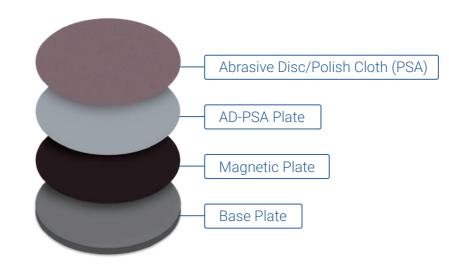
Micron	8 inch(200mm)	10 inch(250mm)	12 inch(300mm)	Package
1um	14.01.461-3	14.01.475-1	14.01.484-1	5pc
3um	14.01.462-1	14.01.476-1	14.01.485-1	5pc
6um	14.01.463-1	14.01.478-1	14.01.486-1	5pc
9um	14.01.464-1	14.01.477-1	14.01.483-1	5pc
15um	14.01.465-1	14.01.479-1	14.01.487-1	5pc
30um	14.01.466-1	14.01.481-1	14.01.488-1	5pc



Adapter Plate System

AD-PSA Plate

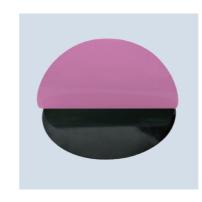


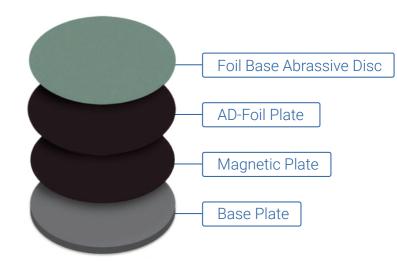


The **AD-PSA** system allows adhesive backed abrasive discs/polishing cloths to be easily removed and no residual left.

Order No:	Description	Package
04.08.410	200mm	1pc
04.08.413	250mm	1pc
04.08.420	300mm	1pc

AD-Foil Plate





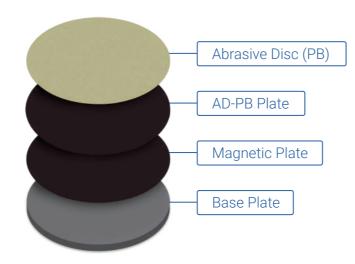
The AD-Foil system is for Foil base abrasive SIC disc or diamond disc. If the AD-Foil transfer plate is dirty, just washing with water.

Order No:	Description	Package
04.08.422	200mm	1pc
04.08.430	250mm	1pc
04.08.432	300mm	1pc

Grinding/Polishing

AD-PB Plate



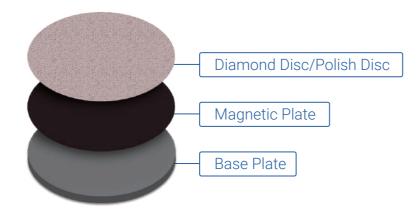


The AD-PB system is for Plainback abrasive SiC disc or diamond disc. If the AD-PB transfer plate is dirty, just washing with water.

Order No:	Description	Package
04.08.310	200mm	1pc
04.08.320	250mm	1pc
04.08.330	300mm	1pc

Magnetic Plate





The **Magnetic** floppy plate is attached to the chassis of the grinder and can firmly adsorb various conversion plates (AD-PSA, AD-PB, AD-Foil Plate).

Order No:	Description	Package
04.08.010	200mm	1pc
04.08.020	250mm	1pc
04.08.030	300mm	1pc



ZN-ZP Black Polyurethane Polishing Cloth(PSA)



It is low-napped, used for chemical/mechanical polishing. Recommend to use with Trojan 0.02-1um silica or alumina polishing suspension.

Order No:	Description	Package
05.01.110	8 inch, Black, Polyurethane	10pcs
05.01.120	10inch, Black, Polyurethane	10pcs
05.01.130	12inch, Black, Polyurethane	10pcs

SR-ZP Red Synthetic Fabric Polishing Cloth(PSA)



Used for most materials fine or final polishing. Recommend to use with Trojan 0.3 - 3.0 um alumina or diamond suspension.

Order No:	Description	Package
05.02.150	8 inch, Red, Synthetic Fabric	10pcs
05.02.160	10 inch, Red, Synthetic Fabric	10pcs
05.02.170	12 inch, Red, Synthetic Fabric	10pcs

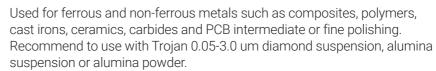
ET-JP White Synthetic Velvet Polishing Cloth(PSA)



Used for soft materials such as copper,tin,resin,PCB,SMT,semiconductor final polishing. Recommend to use with Trojan 0.05-3.0um, alumina suspension or alumina powder.

Order No:	Description	Package
05.03.210	8 inch, White, Synthetic Velvet	10pcs
05.03.220	10 inch, White, Synthetic Velvet	10pcs
05.03.230	12 inch, White, Synthetic Velvet	10pcs

YR-JP Brown Synthetic Rayon Polishing Cloth(PSA)





Order No:	Description	Package
05.04.310	8 inch, Grey, Synthetic Rayon Fibers	10pcs
05.04.320	10 inch, Grey, Synthetic Rayon Fibers	10pcs
05.04.330	12 inch, Grey, Synthetic Rayon Fibers	10pcs

YS-JP White Fiber Polishing Cloth(PSA)

Used for copper, aluminum, tin and softer ferrous metals fine polishing. Recommend to use with TROJAN 1-6um diamond suspension or spray.



Order No:	Description	Package
05.07.710	8 inch, White	10pcs
05.07.720	10 inch, White	10pcs
05.07.730	12 inch, White	10pcs

GF-JP White Synthetin Silk Polishing Cloth(PSA)

Suitable for ferrous metals intermediate polishing. Recommend to use with TROJAN 3-9 um diamond suspension or spray.



Order No:	Description	Package
05.10.010	8 inch, White	10pcs
05.10.020	10 inch, White	10pcs
05.10.030	12 inch, White	10pcs

SC-JP White Natural Silk Polishing Cloth(PSA)

Suitable for ferrous metals intermediate or fine polishing. Recommend to use with Trojan 0.5-6.0 um diamond suspension.



Order No:	Description	Package
05.05.510	8 inch, White	10pcs
05.05.520	10 inch, White	10pcs
05.05.530	12 inch, White	10pcs

CS-JP Blue Synthetin Silk Polishing Cloth(PSA)

Suitable for ferrous and non-ferrous metal, plating and plastic, fine polishing. Recommend to use with TROJAN 0.5-6 um diamond suspension or spray.



Order No:		Description	Package
	05.12.110	8 inch, Blue	10pcs
	05.12.120	10 inch, Blue	10pcs
	05.12.130	12 inch, Blue	10pcs

Final Red Final precision polishing cloth (Adhesive Back)

It is widely used in precision polishing of electronic components, especially for SEM or TEM evaluation materials. It is recommended to use it with Trojan diamond polishing suspension (less than 3um) and colloidal suspensions or alumina suspension.



Order No:	Description	Package
05.13.110	8 inch,Red	10pcs
05.13.120	10 inch,Red	10pcs
05.13.130	12 inch,Red	10pcs

Application of polishing cloth

	Rough Polishing			Fine Po	olishing			Final P	olishing	
Model	NL-CP	GF-JP	SC-JP	YS-JP	CS-JP	SR-JP	ET-JP	YR-JP	Final-Red	ZN-JP
Recommended Granularity	6~15µm	3~9µm	1~6µm	1~6µm	1~6µm	0.3~3µm	0.05~1μm	0.05~1μm	0.05~1μm	0.05~0.3µm
Alumina Polishing Suspension	-	-	-	*	*	**	**	**	**	**
Silica Polishing Suspension	-	-	-	-	-	-	*	*	**	**
Diamond Polishing Suspension	**	**	**	**	**	**	*	*	-	-
Ceramics	**	*	**	-	*	*	*	*	-	**
Hard Metal	**	**	**	*	**	**	*	-	-	**
Steel	**	**	**	**	**	**	*	*	*	**
Compound Material	-	*	**	*	*	*	**	**	**	**
Mineral	**	*	*	*	**	*	*	*	-	*
Spray Coating	-	**	*	*	**	**	**	**	-	**
Grey Cast iron	**	**	**	**	**	**	*	*	-	**
Copper Alloy	-	*	*	**	**	**	**	**	**	**
Aluminium Alloy	-	*	*	**	**	**	**	**	**	**
Soft Metal	-	*	*	**	**	**	**	**	**	**
Non iron Based Materials	-	*	**	**	*	*	*	*	-	**
Electronic Materials	-	**	*	-	*	**	**	**	**	**
Plastic	-	-	*	-	*	**	**	**	*	**

★★ Excellent ★ Good

Grinding/Polishing

Material application

Material	Picture	Grinding steps	Polishing material	Polishing material 1	Polishing material 2	Polishing material 3	
			Polishing cloth	GF Polishing Cloth	SC-JP Polishing Cloth		
Ceramic		DiaRe Diamond Disc P400/P800	Granularity	9µm PD-WT	1μm PD-WT		
		1 400/1 000	Abrasive / cooling	Polycrystalline diamond suspension	Polycrystalline diamond suspension		
		D: D D: 10:	Polishing cloth	SC-JP Polishing Cloth	ZN-ZP Polishing Cloth		
Metal thermal spray	37 ₂₀₀	DiaRe Diamond Disc P400/P800/P1500	Granularity	3μm PD-WT	AO-439		
			Abrasive / cooling	Polycrystalline diamond suspension	Silica polishing suspension		
			Polishing cloth	SC-JP Polishing Cloth	ZN-JP Polishing Cloth		
Ceramic thermal	A STATE OF	DiaRe Diamond Disc	Granularity	3μm PD-WT	AO-439		
spray		P400/P800/P1500	Abrasive / cooling	Polycrystalline diamond suspension	Silica polishing suspension		
	e Branch and Cons		Polishing cloth	CS-JP Polishing Cloth	ZN-JP Polishing Cloth		
		DiaRe Diamond Disc	_		A0-439		
Cemented carbide		P400/P800/P1500	Granularity	3µm PD-WT Polycrystalline diamond			
			Abrasive / cooling	Polycrystalline diamond suspension	Silica polishing suspension		
Printed circuit	#:#::Tf =	SiC abrasive	Polishing cloth	SC-JP Polishing Cloth	ET-JP Polishing Cloth		
board		P400/P1200/P2500	Granularity	3µm PD-WT	AO-W		
			Abrasive / cooling	Polycrystalline diamond suspension	Aluminium oxide		
Oili i-		SiC abrasive	Polishing cloth	SC-JP Polishing Cloth	ET-JP Polishing Cloth		
Silicon in Microelectronics		P400/P1200/P2500	Granularity	3μm PD-WT	AO-W		
			Abrasive / cooling	Polycrystalline diamond suspension	Aluminium oxide		
			Polishing cloth	SC-JP Polishing Cloth	ZN-JP Polishing Cloth		
Microelectronic Materials		SiC abrasive P400/P1200/P2500	Granularity	3μm PD-WT	AO-W		
Materials			Abrasive / cooling	Polycrystalline diamond suspension	Aluminium oxide		
			Polishing cloth	YS-JP Polishing Cloth	ZN-JP Polishing Cloth		
Aluminium Alloy	是可以	SiC abrasive	Granularity	3μm PD-WT	AO-439		
		P400/P1200/P2500	Abrasive / cooling	Polycrystalline diamond suspension	Silica polishing suspension		
	TANALE SALE		Polishing cloth	YS-JP Polishing Cloth	ZN-JP Polishing Cloth		
Nickel-based	护汉公公科	SiC abrasive	Granularity	3μm PD-WT	AO-439		
Superalloy	NO THE REAL PROPERTY.	P400/P1200	Abrasive / cooling	Polycrystalline diamond suspension	Silica polishing		
			Polishing cloth	YS-JP Polishing Cloth	suspension ZN-JP Polishing Cloth		
Titanium Alloy		SiC abrasive		3μm PD-WT	A0-439		
Titulium Alloy		P400/P1200	Granularity	Polycrystalline diamond	Silica polishing		
			Abrasive / cooling	suspension	suspension	7N ID Deliebies Ols	
Copper and	No Control of	SiC abrasive	Polishing cloth	YS-JP Polishing Cloth	ET-JP Polishing Cloth	ZN-JP Polishing Clo	
Copper Alloy		P400/P1200	Granularity	3µm PD-WT	0.05μm AO-W	AO-439	
			Abrasive / cooling	Polycrystalline diamond suspension	Alumina Suspension	Silica polishing suspen	
			DiaRe Diamond Disc	Polishing cloth	YS-JP Polishing Cloth	ZN-JP Polishing Cloth	
Hard Steel			P400/P800/P1500	Granularity	3μm PD-WT	AO-439	
			Abrasive / cooling	Polycrystalline diamond suspension	Silica polishing suspension		
	PACKO!	0.0	Polishing cloth	YS-JP Polishing Cloth	ET-JP Polishing Cloth		
Mild Steel		SiC abrasive P400/P1200/P2000	Granularity	3μm PD-WT	AO-439		
			Abrasive / cooling	Polycrystalline diamond suspension	Silica polishing suspension		
			Polishing cloth	SC-JP Polishing Cloth	ET-JP Polishing Cloth		
Cast Iron	10 200	SiC abrasive P400/P1200/P2000	Granularity	3μm PD-WT	AO-439		
	0 40	1 400/1 1200/1 2000	Abrasive / cooling	Polycrystalline diamond suspension	Silica polishing suspension		
	TO SHEET WEST		Polishing cloth	YS-JP Polishing Cloth	ET-JP Polishing Cloth		
leat treated steel		SiC abrasive	Granularity	9µm PD-WT	1µm PD-WT		
		P400/P1200/P2000	Abrasive / cooling	Polycrystalline diamond suspension	Polycrystalline diamond suspension		
	In a little with the latest the l		Polishing cloth	SC-JP Polishing Cloth	Suspension ET-JP Polishing Cloth		
ainless Steel and	4. 分集	SiC abrasive	_	3µm PD-WT	A0-439		
Maraging steel	The state of the s	P400/P1200	Granularity	Polycrystalline diamond			
			Abrasive / cooling	suspension	Silica polishing suspension		
Polymer	1	SiC abrasive	Polishing cloth	SC-JP Polishing Cloth	ET-JP Polishing Cloth		
Composites	1	P400/P1200	Granularity	3µm PD-WT	0.05µm AO-W		
	THE WAY		Abrasive / cooling	Polycrystalline diamond suspension	Alumina Suspension		
Droporation for	0011	Di-D- Di	Polishing cloth	GF Polishing Cloth	YS-JP Polishing Cloth	ET-JP Polishing Clot	
Preparation for iversal Bulk Loading		DiaRe Diamond Disc P400/P800	Granularity	9μm PD-WT	3μm PD-WT	0.05μm AO-W	
	27/06		Abrasive / cooling	Polycrystalline diamond	Polycrystalline diamond	Alumina Suspension	



The diamond suspensions contain heavy concentration of monocrystalline or polycrystalline diamond. The suspension is stable which is excellent for distributing diamond easily and uniformly over the cloth or platen surface.

MD-WT Monocrystalline Diamond Suspension



Water-based diamond suspension, used for polishing most materials.

Order No:	Description	Package
06.01.110-1	Monocrystalline,0.25µm	500ml
06.01.120-1	Monocrystalline,0.5µm	500ml
06.01.130-1	Monocrystalline,1µm	500ml
06.01.140-1	Monocrystalline,3µm	500ml
06.01.150-1	Monocrystalline,6µm	500ml
06.01.160-1	Monocrystalline,9µm	500ml

PD-WT Polycrystalline Diamond Suspension



Water-base diamond suspension, loffering better polishing surface and faster polishing rate when using the same grit.

Order No:	Description	Package
06.02.210	Polycrystalline,0.25µm	500ml
06.02.220	Polycrystalline,0.5µm	500ml
06.02.230	Polycrystalline,1µm	500ml
06.02.240	Polycrystalline,3µm	500ml
06.02.250	Polycrystalline,6µm	500ml
06.02.260	Polycrystalline,9µm	500ml

Polishing Lubricants



Lubricant is used to enhance polishing performance of diamond suspensions, compounds, sprays and films. It reduces friction and increase the life of polishing clothes.It can be applied manually or used with automatic dispenser.

PL-W	PLW-B	Description	Package
-	06.09.630	Liquid	5000ml
06.09.510	06.09.640	Liquid	500ml
06.09.520	06.09.650	Liquid	1000ml

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AO-W Alumina Suspension

It is a water based stable suspension. Used for copper, tin and other soft metal or plastic material, such as PCB, SMT, semiconductor.



Order No:	Description	Package
06.04.210	0.05µm	500ml
06.04.220	0.3µm	500ml
06.04.230	1μm	500ml

AO-P De-agglomerated Alumina Polishing Powder



The alumina polishing powder is de-agglomerated, strict particle size distribution. Mix the powder with DI water before use.

Order No:	Description	Package
06.13.011	0.05µm	500g
06.13.021	0.3µm	500g
06.13.031	1μm	500g

Diamond Paste



Water based diamond paste, high polish speed, good polish surface.

Monocrystalline (5g)		Polycrysta	alline (10g)
06.10.030	1um/Blue	06.10.110	1um/Black
06.10.040	3um/Green	06.10.130	3um/Black
06.10.050	6um/Yellow	06.10.160	6um/Black
06.10.060	9um/Red	06.10.190	9um/Black

Monocrystalline Diamond Spray



Simple to use, convenient, with polishing efficiency.

SP-DM	Description	SP-DP	Package
06.03.310	0.25µm	-	350ml
06.03.115	0.5µm	06.03.510	350ml
06.03.320	1µm	06.03.520	350ml
06.03.325	2.5µm	06.03.530	350ml
06.03.335	5μm	06.03.550	350ml
06.03.340	10µm	06.03.560	350ml

SO-T401 Non-Crystallizing Silica

Use for the final polishing.

Non-crystallizing silica suspension with 10.5 PH, provides a chemical-mechanical polishing action for Titanium, Stainless Steel etc.



Order No:	Description	Package
06.05.310	50nm	500ml
06.05.320	50nm	1000ml
06.05.330	50nm	5000ml

SO-A439 Crystallizing Silica

Polishing fluid Used for final polishing of tin.

10.2 PH Non-crystallizing silica suspension, can be used for chemical mechanical polishing of special alloy materials (such as non-ferrous metals, aluminum, aluminum-magnesium alloys, PCB and IC, etc.).



Order No:	Description	Package
06.07.310	50nm	500ml
06.07.320	50nm	1000ml
06.07.330	50nm	5000ml

SO-A539 Crystallizing Silica

Polishing fluid Used for final polishing of tin, aluminum and other materials.

10.2 PH silica suspension, can be used for chemical mechanical polishing of special alloy materials (such as non-ferrous metals, aluminum, aluminum-magnesium alloys, PCB and IC, etc.)



Grinding/Polishing

Order No:	Description	Package
06.07.520	50nm	500ml
06.07.523	50nm	1000ml

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IMAGING/ANALYSIS

Advanced microscope products can be equipped with specific digital micrograph devices to ensure high resolution and accurate color restoration of images. Users are free to create work schemes to meet the workflow and other needs of different environments. While the users are concentrating on their work, we also provide users with a variety of convenient and time-saving tools to make daily routine work easier.

MN 50B series microscope

Meets all your requirement by High performance optical system,technological innovation,high stability, It also can be easily upgraded, for example DIC Viewing.





Technical Specifications

Item		MN 50B
Optical Syatem	Infinite optical system	Standard Outfit
	WF10X/22	Standard Outfit
Extra Wide Field	WF10X/22,Eyepiece with Scale of Cross hair	Standard Outfit
Eyepiece	WF15X/16	Optional
	WF20X/12	Optional
	5X/0.12/∞/0 (BF/DF) LWD 10mm	Standard Outfit
Infinite LWD Dlan	10X/0.25/∞/0 (BF/DF) LWD 10mm	Standard Outfit
Infinite LWD Plan Achromatic Objective	20X/0.4/∞/0 (BF/DF) LWD 5mm	Standard Outfit
remember objective	50X/0.75/∞/0 (BF/DF) LWD 1.3mm	Standard Outfit
	100X/0.9/∞/0 (BF/DF) LWD 0.7mm	Standard Outfit
Viewing Head	Siedentopf binocular viewing head, Inclined at 30°, Interpupillary 48mm-75mm	Standard Outfit
	12V/50W Halogen light, Center and brightness adjustable	Standard Outfit
W.I	Polarizer and analyzer	Standard Outfit
Kohler Incident Light	DIC	Optional
	Built-in Green,Blue,Yellow,Gray and ground glass	Standard Outfit
Focusing	Coaxial coarse and fine adjustment,fine division 2µm	Standard Outfit
Converter	Backward quintuple nosepiece	Standard Outfit
Stage	Double layer mechanical stage 226X178mm, Moving range 40mmX40mm	Standard Outfit
Stage	Stage: Φ20,Φ30,Teardrop	Standard Outfit
	Photo/Video Attachment	Optional
Accessories	Micrometer Scale 0.01mm	Standard Outfit

MN 80

series metallographic microscopes

MN 80 series metallographic microscopes make metallographic inspection easier, more convenient and more efficient. Ergonomically designed, comfortable to operate; specially designed for metallography, ensuring high resolution and color reproduction, perfect rendering of every detail. Trojan has always provided new ideas, solutions and technical support for a variety of industries including metallographic inspection, semiconductor wafers, flat panel displays and electronic equipment.



Technical Specifications

Model	Configuration Standard / O	Optional
Optical System	Infinity Chromatic Aberration Corrected Optical System	•
Optical magnification	50 times -500 times (optional 500/1000 times)	•
Digital magnification	150 times -1500 times (21.5 inch display)	•
Industrial camera	12M/1.8" color Sony industrial chip (6.3M and 20M pixels optional)	0
Observation tube	Positive image, infinity hinged three-way observation tube, interpupillary distance adjustment: 50mm~76mm, two-level splitting ratio binocular: trinocular=100:0	0
Observation tube	Reverse image, infinity hinged three-way observation tube, interpupillary distance adjustment: 50mm~76mm, two-level splitting ratio binocular: trinocular=100:0	•
i	High eye point wide field eyepiece SWH10X-H/23mm, diopter adjustable	•
Eyepiece	High eye point wide field eyepiece SWH10X-H/25mm, diopter adjustable	0
	Infinity fluorite semi-complex bright field objective lens 45MM visible light metallographic objective lens 5X NA0.15 WD20.0mm	•
	Infinity fluorite semi-complex bright field objective lens 45MM visible light metallographic objective lens 10X NA0.30 WD11.0mm	•
Objective lens	Infinity fluorite semi-complex bright field objective lens 45MM visible light metallographic objective lens 20X NA0.45 WD3.0mm	•
	Infinity fluorite semi-complex bright field objective lens 45MM visible light metallographic objective lens 50X NA0.8 WD1.0mm	•
	Infinity fluorite semi-complex bright field objective lens 45MM visible light metallographic objective lens 100X NA0.9 WD1.0mm	0
Managina	5 hole bright and dark field nosepiece (with DIC slot)	•
Nosepiece	5 holes bright and dark field motorized nosepiece (motorized/with DIC slot)	0
On-frame light source	Rack for reflection, low hand position coarse and fine coaxial focusing mechanism. The coarse adjustment stroke is 35mm, and the fine adjustment accuracy is 0.001mm. It has an adjustable elastic device and a random upper limit device to prevent sliding. Built-in 100-240V wide voltage system, digital dimming, with light intensity setting and reset functions	•
Stage	4-inch stage, platform area 310*240mm, moving stroke: 100mmX100mm mechanical platform, coaxial adjustment in X and Y directions	•
Condenser	Swing-out Achromatic Condenser (N.A.0.9)	
Reflective illuminator	Brightfield epi-illuminator with iris diaphragm, field diaphragm, center adjustable, with filter slot, with polarizer/analyzer slot	•
Lamp room	10W adjustable LED lamp house, universal for transmission and reflection, reservation center	
Camera port	Photography camera accessories: 0.65X, C-type interface, adjustable focus (optional 0.5X/1X)	•
Polarizer	Polarizer insert, 360° rotatable analyzer insert	
Computer	Branded Computers and Monitors	0
Measurement software	Measurement software OMT-1.5D, software control motorized objective lens turntable, photo taking, video recording, measurement, real-time image stitching, depth of field fusion	0
Ruler	High-precision micrometer, division value 0.01mm	0

lmaging/Analysis

MTV 03 stereoscopic microscope

With the development of the times, people have more and more functional requirements for microscopes. Compared with traditional optical microscopes, MTV 03 stereoscopic microscope has the advantages of automatic magnification recognition, digital magnification, easy observation, easy data storage, and intelligent operation. It can significantly reduce the fatigue of long-term work; one-button power-on enables high-definition video image observation, bringing users a fast and comfortable experience.





Technical Specifications

Model	MTV 03
Features	The coded lens is adopted, and the magnification is directly displayed. After the microscope magnification is switched, the software magnification is self-adapted and directly measured, ensuring the accuracy of the microscope measurement.
Magnification	12-77times/20-135times
Objective	0.75X-4.5X continuous zoom, objective zoom ratio
Sensor	1/2"COMS
Resolution	1920*1080P@ 60FPS(2 million)
Output interface	HDMI、USB
Display	11.6"/21.5"
Function	Real-time observation, photo taking, video recording, measurement, storage, data output
Base bracket	320*260mm (Various base brackets can be selected according to requirements, see the base bracket parts diagram for details)
Lighting	LED adjustable light source, (can be equipped with various fluorescent and LED ring lights that meet the specifications)
Power supply	External wide voltage adapter, input: 100V-240V-AC50/60HZ, output: DC12V2A



7MHVS-1000A

Digital Micro Hardness Tester

7MHVS-1000A Digital Micro Hardness Tester Mainly used for micro-Vickers hardness measurement of various metals and some non-metallic materials. Capable of measuring the hardness of various parts (machined parts, forgings, cast iron, cast steel parts, etc.), non-ferrous metals, heat post-treated parts, various tiny and thin parts, glass, ceramics, agate, gemstones, etc., It is also applicable to the measurement of effective depth of carbonization, effective depth of quenching and hardening layer, coating, surface coating and heat affected parts of welding parts. It can also be used for the observation of the internal metallographic organization of various metal parts and the collect, display and output of images. Especially suitable for measuring the hardness gradient distribution curve of the workpiece, the surface hardness of gears after heat treatment and the depth of effective hardened layer.



Features

- This product adopts a unique and precise design in mechanics, optics and light source, enables clearer indentation imaging and more accurate measurement;
- Adopts the new touch screen display, the operation interface adopts the menu structure. The hardness scale HV or HK and the tested hardness value can be selected on the operation panel. It can convert various hardness values:
- The machine is equipped with a 10x digital display measuring microscope and a 40x objective lens both of which can participate in the measurement, making the measurement range larger and the application wider;
- Using touch screen, the operation is more intuitive and clearer, able to display the test method,
- test force, indentation length, hardness value, test force holding time, number of measurements, date, time, hardness conversion value, etc. on the screen;
- It has functions such as conversion scale, storage, printing, etc. and has a threaded interface for connecting a digital camera and CCD camera, which is convenient for optional computer and hardness analysis and measurement software.

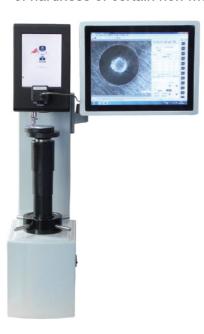
Technical Specifications

Model	7MHVS-1000A
Testing force	10gf、25gf、50gf、100gf、200gf、300gf、500gf、1kgf 0.098N、0.245N、0.49N、0.98N、1.96N、2.94N、4.9N、9.8N
Convert Scales	HRA、HRB、HRC、HRD、HRF、HV、HK、HBW、HBS、HR15N、 HR30N、HR45N、HR15T、HR30T、HR45T
Min. Measuring unit	0.025µm
Testing Mode	HV/HK
Testing range	5~3000HV
Test Force Application Method	Automatic (Loading, Dwell, Unloading)
Turret Method	Automatic
Objective	10X、40X
Eyepiece	10X
Total magnification	100X (observation) 400X (testing)
Test force dwell time	1~60S
X-Y table size	100*100mm
X-Y Test Table Max. Movement	25*25mm
Data output	Touch screen readout with built-in printer
Max. Sample Height	110mm
The Distance From the Center of the Indenter To the Inner Wall	110mm
Power Supply	AC220V±5%, 50~60Hz
Execute Standard	ISO 6507, ASTM E384, JIS Z2244, GB/T 4340.2
Dimension	405*290*480mm
Weight	About 40kg

HBST-3000Z

Computerized Image Brinell Hardness Tester

HBST-3000Z computer-based image Brinell hardness tester is made of casting, with strong rigidity and high measurement accuracy; it adopts precise structural design, and the test force is directly controlled by the force sensor, which makes the structure of the whole machine compact, and the loading and unloading test force is stable and accurate. It is suitable for hardness determination of cast iron, steel, non-ferrous metals and soft alloys, as well as hard plastics, bakelite Determination of hardness of certain non-metallic materials.





Features

- An industrial tablet computer is installed on the side of the fuselage, with a built-in industrial-grade camera, which is processed by CCD image software, and can directly export data and images, and complete the manual and automatic measurement of images, which is convenient and fast.
- The test process is controlled electrically by the CPU, the objective lens and the indenter are automatically switched, and the switching positioning adopts the double cooperation of mechanical and electronic, so that the positioning accuracy is improved. Built-in touch screen and microcomputer make parameter setting and result display more intuitive and operation more convenient.



Technical Specifications

Madal	LIDCT 20007
Model Test force	HBST-3000Z 31.25kgf , 62.5kgf , 100kgf , 125kgf , 187.5kgf , 250kgf , 500kgf 750kgf , 1000kgf , 1500kgf , 3000kgf (306.45N , 612.9N , 980.7N , 1266N ,1839N , 2452N , 4903N , 7355N , 9807N , 14710N , 29420N)
Measuring ruler	HBW2.5/31.25 , HBW2.5/62.5 , HBW5/31.25 , HBW5/62.5 , HBW5/125 , HBW10/100 , HBW10/125 , HBW2.5/187.5 , HBW5/250 , HBW10/250 , HBW10/500 , HBW5/750 , HBW10/1000 , HBW10/1500 , HBW10/3000
Hardness test range	8~650HBW
Test force application method	Automatic (automatic loading/dwelling/unloading)
Hardness reading	8-inch built-in touch screen, 14-inch touch screen computer all-in-one
Pixel camera	3 million pixels
Convert ruler	HRA,HRB, HRC, HRD, HRF, HV , HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Data output	Built-in printer, R232 interface
Objective and indenter switching	Auto switch
Micrometer	20 X Digital micrometer eyepiece
Micrometer drum minimum scale value	0.001mm
Dwell time	0~60S
Distance from the center of the indenter to the machine wall	150mm
Maximum height of sample	280mm
CCD measurement method	Automatic or manual
Power supply	AC220V 50HZ
Executive standard	ISO 6506, ASTM E10, JIS Z2243, GB/T 231.2
Dimensions	580*560*930mm
Weight	135kg

Hardness Tester

7MHXZD-1000A Automatic micro hardness tester Mainly used for micro-Vickers hardness measurement of various metals and some non-metallic materials. Capable of measuring the hardness of various parts (machined parts, forgings, cast iron, cast steel parts, etc.), non-ferrous metals, heat post-treated parts, various tiny and thin parts, glass, ceramics, agate, gemstones, etc. It is also applicable to the measurement of effective depth of carbonization, effective depth of quenching and hardening layer, coating, surface coating and heat affected parts of welding parts. It can also be used for the observation of the internal metallographic organization of various metal parts and the collect, display and output of images. Especially suitable for measuring the hardness gradient distribution curve of the workpiece, the surface hardness of gears after heat treatment and the depth of effective hardened layer.

- This product adopts a unique and precise design in mechanics, optics and light source, enables clearer indentation imaging and more accurate measurement;
- Adopts the new touch screen display, the operation interface adopts the menu structure. The
 hardness scale HV or HK and the tested hardness value can be selected on the operation panel.
 It can convert various hardness values;
- The machine is equipped with a 10x digital display measuring microscope and a 40x objective lens both of which can participate in the measurement, making the measurement range larger and the application wider;
- Using touch screen, the operation is more intuitive and clearer, able to display the test method,
- test force, indentation length, hardness value, test force holding time, number of measurements, date, time, hardness conversion value, etc. on the screen;
- It has functions such as conversion scale, storage, printing, etc. and has a threaded interface for connecting a digital camera and CCD camera, which is convenient for optional computer and hardness analysis and measurement software.



Technical Specifications

Model	7MHXZD-1000A				
Testing force	10gf、25gf、50gf、100gf、200gf、300gf、500gf、1kgf 0.098N、0.245N、0.49N、0.98N、1.96N、2.94N、4.9N、9.8N				
Convert Scales	HRA、HRB、HRC、HRD、HRF、HV、HK、HBW、HBS、HR15N、HR30N、HR45N、HR15T、HR30T、HR45T				
Data input	Automatic				
Testing method	Automatic and manual, auto-focus				
Testing range	5~3000HV				
Test Force Application Method	Automatic (Loading, Dwell, Unloading)				
Turret Method	Automatic				
Objective	10X、40X				
Eyepiece	10X				
Total magnification	100X (observation) 400X (testing)				
Test force dwell time	1~60S				
X-Y-Z Electric automatic stage	A set for single and multi-dotting automatic testing, manual and automatic focus, measurement				
Test storage count	Group of 10, 500 groups				
Display method	7-inch screen LCD touch screen digital display, computer display				
Max. Sample Height	90mm				
The Distance From the Center of the Indenter To the Inner Wall	110mm				
Power Supply	AC220V±5%, 50~60Hz				
Main Functions	System linkage, pressure linkage, loading linkage, image acquisition, automatic measurement, automatic point finding, diagonal measurement, four-point measurement, hardness conversion, graphic report, result statistics				
Min. movement unit	0.015625μm				
Execute Standard	ISO 6507, ASTM E384, JIS Z2244, GB/T 4340.2				
Dimension	320*500*570mm				
Weight	60kg				

Hardness Tester

8MHRS-150H Digital Rockwell Hardness Tester

8MHRS-150 8 inch big color touch screen digital display Rockwell hardness tester is a high-tech product with novel appearance and stable performance. Visual digital display and computer control, stable performance, is a set of mechanical and electrical integration of high-tech products, can carry out Rockwell scale hardness test. Touch screen interface, easy to operate.





7MHVS-5A

Touch Screen Vickers Hardness Tester

7MHVS-5A is a touch screen Vickers hardness tester. The body part of the product is formed by one-step casting process and has undergone a long-term aging treatment. Compared with the assembly process, this process ensures a small amount of deformation for long-term use, and can effectively adapt to various hostile environments; For ferrous metals, non-ferrous metals, IC flakes, surface coatings, laminated metals, glass, ceramics, agate, gemstones, thin plastics and other carbide and quenched layers of depth and gradient hardness testing, especially suitable for precision Vickers measurement of parallel planes and tiny parts and ultra-thin parts.

HB-3000C

HB-3000C The electronic Brinell hardness test is mainly used to determine the hardness of cast iron, steel, non-ferrous metals and soft alloys, and it can also be used to determine the hardness of some non-metallic materials such as hard plastics and bakelite. The hardness tester removes the loading weight, adopts an electronic automatic loading system, has a ten-level test force, has a wider test range and higher accuracy. It is suitable for factories, workshops, laboratories, universities and research institutions. The test is mainly used to determine the hardness of cast iron, steel, non-ferrous metals and soft

LABORATORY SYSTEM

Trojan provides laboratory overall solutions, including laboratory overall planning and design, ventilation systems, laboratory furniture systems, laboratory renovation projects, laboratory equipment and so on.







Electronic Brinell Hardness Tester

alloys.







Central station

Side table







Gas cabinet



Medicine cabinet



Drip rack



Fume hood(1)



Fume hood(2)



Reagent rack



Water tap



Vientiane vacuum cover

Notes