# 2022 METALLOGRAPHIC MACHINE CATALOG









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### For over thirty years, Precision Surfaces International, Inc. has been a leader in supplying a full range of products for metallographic sample preparation and superfinishing. Our business model is simple: to give our customers great customer service, quick delivery and excellent products at competitive prices.

Starting from our home market of Houston, Texas, we have expanded to include customers throughout the U.S. and in many international markets. We continue to focus on constant product improvement and new product development. All our equipment is manufactured in an ISO 9001 certified factory, adhering to the strictest quality standards. We look forward to working with you, and to providing you with the best possible materials for your application.

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We appreciate your business. Our prosperity and very existence is totally dependent on our customers' goodwill.



- available.

- change at time of order.

- charge cards.



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1. Your complete satisfaction is our primary goal.

2. You are always assured of receiving the finest quality products

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5. Your order will be processed quickly and efficiently.

6. Prices are subject to change. You will be advised of any price

7. Orders are shipped FOB (Ex-Works) PSI's facility in Houston, Texas. We can either prepay and add the freight charges to the invoice, or ship collect if you will give us your shipping information.

8. Our payment terms are Net 30 Days, with approved credit.

9. We accept VISA, MasterCard, American Express and Discover

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# **ABRASIVE CUTTERS**

### ABRASIVE CUTOFF MACHINES

The ALTOCUT CK series of abrasive cutters offer the user a line of robust cutters for use in the metallographic lab or the shop floor. We offer the CK series in medium-sized table top cutters up to large cutters, using 16" cutoff wheels.

### **CK SERIES**

- Meter display load on motor during cutting Easy store magnetic spray gun for cleaning Several auto shut-off features to protect user Auto return at end of cut •
- •
- •
- Joy stick or button control Cam lock vises included •
- •

Model No.	260	360	460
	01 /51	-1 /1	1.01
Motor Power	3hp/5hp	5hp/7.5hp	10hp
Max Cut	70/90mm	90/120mm	120mm
Cutoff Wheel	305mm	106mm	406mm
	50511111	40011111	40011111
Wheel Speed	2500rpm	2500rpm	2500rpm

Our smaller CK Series cutters are smaller versions of our larger cutters, with the same robust build, precision components and ease of usage. All come equipped to work right away, includ-ing a recirculating system and vises.

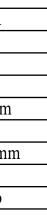
Model No.	200	200A
Motor Power	2hp	2hp
Max Cut	50mm	50mm
Cutoff Wheel	255mm	255m
Feed Method	Manual	Auto





### ABRASIVE CUTOFF MACHINES

### **CK SERIES**





### **ABRASIVE CUTOFF MACHINES**

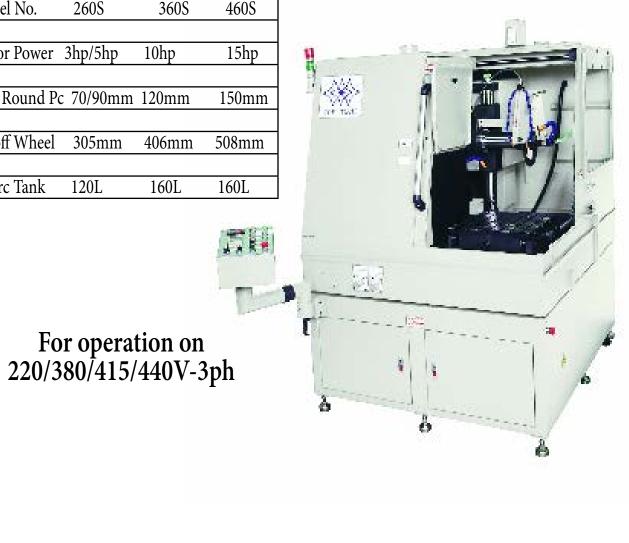
The ALTOCUT CF series of abrasive cutters are our largest cutters,, using blades as large as 20" (508mm) and able to handle long and heavy work pieces.

- Meter display load on motor during cutting
  Easy store magnetic spray gun for cleaning
  Auto shut-off features to protect user
  Auto return at end of cut

- Cam lock vises included
- Stainless steel T-slot bed
- Corrosion resistant construction
- Able to cut in Z axis

Model No.	260S	360S	460S
Motor Power	3hp/5hp	10hp	15hp
Max Round Po	c 70/90mm	120mm	150mm
Cutoff Wheel	305mm	406mm	508mm
Recirc Tank	120L	160L	160L

### **CF SERIES**



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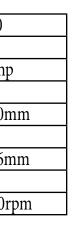
The ALTOCUT CT series of abrasive cutters offer the user a line of robust cutters for use in the metallographic lab or the shop floor. We offer the CK series in medium-sized table top cutters up to large cutters, using 16" cutoff wheels.

### **CT SERIES**

Model No.	260	360	460
Motor Power	3hp/5hp	5hp/7.5hp	10h
Max Cut	70/90mm	90/120mm	1201
Cutoff Wheel	305mm	406mm	4061
Wheel Speed	2500rpm	2500rpm	2500



### **ABRASIVE CUTOFF MACHINES**



- Meter display load on motor during cutting
  Easy store magnetic spray gun for cleaning
  Several auto shut-off features to protect user
  Auto return at end of cut

- Joy stick or button control •
- Cam lock vises included

### ABRASIVE CUTOFF MACHINES

### **CL-70 Manual Abrasive Cutter**



# The CL-70 is a compace and powerful, talbe-top manual abrasive cutter, that fits well into any metallographic or materials oriented lab. With a robust 3hp motor, the Cl-70 is a workhorse that can hold up to continual heavy use.

- 3hp Motor
- Max Round Cut 70mm
- Cutoff Wheel 305mm
- Cutting Depth 260mm
- Wheel Speed 2500 rpm
- Feed Method, Manual
- Power 220V/3ph



# **PRECISION DIAMOND SAWS**



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### PRECISION SAWS

### PRECISO CL40 LOW SPEED DIAMOND SAW



The PRECISO Low Speed Diamond Saw CL40 is perfect for the user needing to section delicate parts or materials with no deformation. Using ultra-thin diamond wafering blades, with con-tinual lubrication, the CL-40 insures no burning or alteration of the surface.

- Adjustable speed 0-400 rpm
- Weight setting up to 400gm
- Wide variety of chucks available
- Takes a 3", 4" or 5" blade, with 12.7mm arbor
- Continual lubrication of blade





The PRECISO CL-50 High Speed Precision saw is easy to use and quiet. The CL-50 allows the user to precisely cut very thin sections with no deformation or burning. Controls are done from a color LCD touch screen. Easy to cut, zero and cut again.
Hericantel metric to the precision saw is easy to use and quiet. The CL-50 allows the user to precisely cut very thin sections with no deformation or burning. Controls are done from a color LCD touch screen. Easy to cut, zero and cut again.
Wide variety of chucks available Horizontal movement up to 40mm.



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- Adjustable speed 150-2000 rpm

- Takes a 3"-7" blade, with 1/2" (.5") arbor
- Continual lubrication of blade •

# **MOUNTING PRESSES**



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### **PRESIDON MANUAL PRESSES**



PRESIDON manual mounting presses are robueasy to use and quiet. Joy stick control allows the effortless up and down movement of the rate powerful electro-hydraulic system makes for fast and silent application of pressure. Heating ments ranging from 1200W to 3200W, dependion the unit, insure the rapid and complete melto of the mounting medium.

### MOUNTING PRESSES

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Model No.	MA	MA-E3
Sample Sizes	25mm/32/	40/50mm
Mount Quanti	ty 1 pc/time	1-3 ps/time
Thermal	1200-1600W	2400-3200W
Fo	or operation on 2	20V-1ph

### **MOUNTING PRESSES**

# PRESIDON AUTOMATIC PRESSES, ML-L1 SERIES



PRESIDON automatic mounting presses are ro-bust, easy to use and quiet. The powerful electro-hydraulic system makes for fast and silent applica-tion of pressure. Heating elements ranging from 1200W to 3200W, depending on the unit, insure the rapid and complete melting of the mounting medium. Color LCD touch screen on all L models.



- Adjustable heating and cooling times
- Programmable memory
- LCD color touch screen on L models
- L2-E3 can do 6 samples simultaneously
- Powerful heating eleements, ranging from 1200 for single mold to 3200 watts per mold for double.

MODEL NO	В	B-E3	L1	L1-E3	L2	L2-E3
QUANTITY P/MACHINE	1	1-3	1	1-3	1	1-3 X 2
HEATING ELEMENT	1200/1600	2400/3200	1200/1600	2400/3200	2400/3200	4800/6400
	1200/1000	2400/3200	1200/1000	2400/3200	2400/3200	4000/0400
MOLD SIZE	N	IOLD SIZE C	ON ALL MAC	CHINES 25/3	2/40/50MM	







The B series of automatic mounting presses are perfect for the metallographic lab with medium volume. Economical, easy to use and versatile.

MODEL NO	В	
QUANTITY P/MACHINE	1	
HEATING ELEMENT	1200/1600	24
MOLD SIZE	N	IOI

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### PRESIDON AUTOMATIC PRESSES, ML-B SERIES

- Adjustable heating and cooling times
- Powerful 1200-1600W heating elements
  - Available to do 3 molds simultaneously •
  - Mold sizes up to 50mm
  - For operation on 220V/1ph

B-E3	L1	L1-E3	L2	L2-E3		
1-3	1	1-3	1	1-3 X 2		
400/3200	1200/1600	2400/3200	2400/3200	4800/6400		
LD SIZE ON ALL MACHINES 25/32/40/50MM						

### **GRINDER/POLISHERS**



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# PLATO MANUAL GRINDER/POLISHERS, E SERIES

PLATO series of grinder/polishers offer the user an easy to use way to prepare samples in a low-volume lab. Robust, with low vibration and high torque, these machines are built to last. Avail-able in 8", 10" and 12" machines, with single or double platen.



MODEL NO.	
GRINDING METHOD	
NO. OF PLATENS	
HORSE POWER	
PLATEN DIAMETER	20
For C	)pe



- Adjustable water pipe and spigot.
- Overload protection on all units.
- Low vibration
- Adjustable speed, 50-600
- For operation on 110V or 220V, single phase

E-F	E-FR
Manual	Manual
1	2
250W	250W
00/250/300mm	200/250/300mm X 2
eration on 110V or 2	220V-1 ph



### TWO MOTORS, TWO PLATENS **INDEPENDENT CONTROLS**



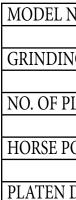
### E-FRD

- Manual grinder/polisher
- Two grinding or polishing platens
- Each platen is controlled independently •
- Each platen is driven by a powerful 250W motor
- Variable speed, 50-600rpm
- Choice of 200mm, 250mm or 300mm platen









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### page 18

- Adjustable water pipe and spigot.
- Overload protection on all units.
- Low vibration
- Variable speed, 50-600
- For operation on 110V or 220V, single phase
- Digital Speed Display
- Patented spring system for holding up to five 32mm samples

NO.	HA-FS-A	HA-FRS-A
NG METHOD	Auto	Auto
PLATENS	1	2
OWER	250W	250W
DIAMETER	200/250/300mm	200/250/300mm X 2

### **GRINDER/POLISHERS**



The PLATO R-Series of semi-automatic grinder/pol-ishers are our top of the line machines for grinding and polishieng multiple samples simul-taneously. Among the many features offered are reversible sample holder and platen, touch screen controls, pneumatically applied individual pressure on the samples and a stong motor and gear box, giv-ing the machine it's needed torque. Machines avail-able for used with 8" (200mm), 10" (250mm) or 12" (300mm)

PLATO GRINDER/POLISHERS, R-SERIES

(300mm).

- Uses either individual pistons or central pressure •
- Can do 1-5 samples simultaneously ٠
- Platen sizes of 200mm, 250mm or 300mm ٠
- Default sample size of 32mm; other sizes available (20, 25, 30, 40mm or larger, special sizes available ٠
- Programmable for automatic operation
- Pressure display in Kg or Lbs. ٠
- Reversible platen direction ٠
- Powerful 1 HP motor •
- For operation on 110V or 220V-1 ph

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TOP TECH

### **GRINDER/POLISHERS**



# PLATO COARSE GRINDER, MP-SERIES

A robust machine designed to maximize material removal, and achieve flatness, in the initial preparation process. The M-P100M offers a number of great features, including:

- Two belts for high throughput
- Strong with low vibration
- Easy changing of belts
- Virtually maintenance free

M-P100M
4" (101.6mm)
220V-1 ph
300W







All PSI equiment is manufactured by Top Tech Machines Co., Ltd., a Taichung (ROC) based manufacturer. Top Tech's engineerng staff, which design all their own equipment, have many international patents to their credit. Machines are manufactured on site in an immaculate 80,000 sq. foot factory.

In business since 1995, Top Tech was certified ISO 9001 in 2003 for their quality assurance operation system. ISO certification propelled Top Tech to further staff and enhance their R & D and quality management systems. This spirit of quality and innovation is one of the primary driving forces throughout the company. As Top Tech continues to grow, the dedication to excellent customer service, rapid response to requests, quality products and innovation remain the heart of the company in addition to a continual focus on the needs of our customers.



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