

# 2024-2025 PRODUCT CATALOG

METALLOGRAPHIC EQUIPMENT AND CONSUMABLES

ABRASIVE & PRECISION CUTTING COMPRESSION & CASTABLE MOUNTING GRINDING & POLISHING MICROSCOPY & ANALYSIS HARDNESS TESTING LAB FURNITURE

PO PP PO SS

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# MANUAL METALLOGRAPHIC POLISHERS





# **NANO-1000S**

#### 8-10 inch Single Wheel

- Manual Grinder/Polisher
- Single wheel
- 8 and 10-inch wheel diameter options
- 1 hp dynamic torque servo motor (100-1000 rpm)
- Three programmable preset speeds and times for quick speed or time changes
- Easy to use control panel with 3-inch LCD screen
- Auto timer control
- User friendly, robust and durable

# **NANO-2000S**

#### 8-10 inch Dual Wheel Manual Grinder/Polisher

- Dual wheel
- 8 and 10-inch wheel diameter options
- 1 hp dynamic torque servo motor (100-1000 rpm)
- Three programmable preset speeds and times for quick speed or time changes
- Easy to use control panel with 3-inch LCD screen
- Auto timer control
- User friendly, robust and durable



High Torque Dynamic Servo Motor



8-inch Working Wheel

Anodized 8-inch working wheel for NANO-S polishers Catalog no. PW-800A

#### 8 /10-inch Splash Guard



Splash Guard for NANO-S Polisher Catalog no. PTM-125-001



**10-inch Working Wheel** 

Anodized 10-inch working wheel for NANO-S polishers Catalog no. PW-1000A



Polishing wheel cover for NANO-S polishers Catalog no. PTM-125-007

### 8 & 10-inch Metallographic Polishers

| FEATURE                                       | NANO-1000S DESCRIPTION  | NANO-2000S DESCRIPTION  |
|---|---|---|
| Motor power                                   | 1 hp (750 W) dynamic torque<br>servo motor  | 1 hp (750 W) dynamic torque<br>servo motor  |
| Power head upgrade                            | FEMTO-1100S / FEMTO-1500S FEMTO-1100S / FEMTO-150                                   |   |
| Polishing wheels                              | Single - 8 &10-inch diameter Double - 8 &10-inch diamet                             |   |
| Electrical specification                      | 110 / 220V (50/60 Hz)   | 110 / 220V (50/60 Hz)   |
| Speed (rpm)                                   | Variable (100 - 1000 rpm)<br>- Grinding (600-1000 rpm)<br>- Polishing (100-600 rpm) | Variable (100 - 1000 rpm)<br>- Grinding (600-1000 rpm)<br>- Polishing (100-600 rpm) |
| Anodized Working wheels:<br>8-inch<br>10-inch | S:<br>Part no. PW-800A<br>Part no. PW-1000A<br>Part no. PW-1000A                    |   |
| Dimensions<br>(W x D x H)                     | 16 x 15 x 15-inch30 x 22 x 15-inch(420 x 380 x 380 mm)(750 x 570 x 380 mm)          |   |
| Weight  | 63 lbs (29 kg) 80 lbs (36 kg)   |   |
| Catalog Number                                | NANO-1000S  | NANO-2000S  |
| Optional                                      | Recirculating filtering tank<br>(RC-1000A)  | Recirculating filtering tank<br>(RC-1000A)  |
|   |   |   |

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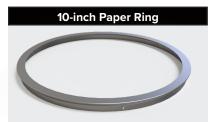
#### year warranty Limited Warranty

#### Benefits:

- Variable speed 100-1000 rpm, 1 rpm increments
- CCW and CW direction control
- Rapid programmable speed and time selection
- Timer (count down to zero and turns off) range from 1 second up to 99 minutes and 60 seconds
- Emergency stop switch
- Flexible / retractable water spout
- 1 hp (750W) high torque dynamic servo motor for constant torque over the full range of motor speeds
- Splash guard and cover
- Electrical connections for FEMTO-1100S/1500S auto polishing



Paper rings for plain-backed papers Catalog no. PTM-125-005 (8-inch)



Paper rings for plain-backed papers Catalog no. PTM-125-006 (10-inch)

| NANO-S 8 & 10-inch Polisher Accessories                      | Catalog Number |
|--|----------------|
| 8-inch diameter hard coat anodized aluminum working wheel    | PW-800A        |
| 10-inch diameter hard coat anodized aluminum working wheel   | PW-1000A       |
|  |                |
| 8 & 10-inch splash guard                                     | PTM-125-001    |
| 8 & 10-inch cover  | PTM-125-007    |
|  |                |
| 8-inch 304 stainless steel plain-backed grinding paper ring  | PTM-125-005    |
| 10-inch 304 stainless steel plain-backed grinding paper ring | PTM-125-006    |



Machinery Directive 2006/42/EC 2014/35/ EU Low Voltage Directive 2014/30/EU Electromagnetic Compatibility Directive

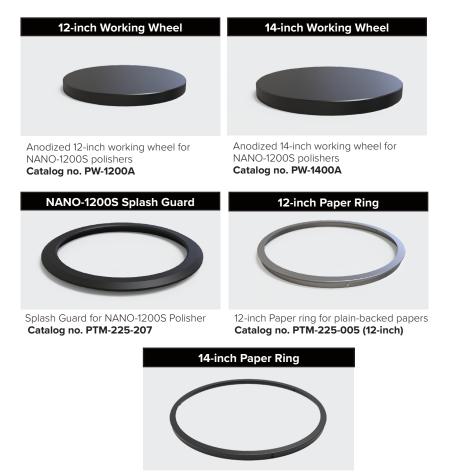
# MANUAL METALLOGRAPHIC POLISHERS



# NEW NANO-1200S

#### 12-14 inch Single Wheel Manual Grinder/Polisher

- Single wheel
- 12 and 14-inch wheel diameter options
- 1.3 hp (1000W) motor (100-1000 rpm)
- Three programmable preset speeds and times for quick speed or time changes
- Easy to use control panel
- Auto timer control
- User friendly, robust and durable



14-inch Paper ring for plain-backed papers Catalog no. PTM-225-006 (14-inch)



SiC particles in a Si3N4 matrix , 1000X (DIC)



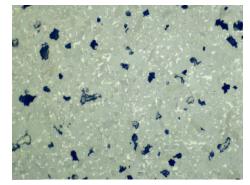
AIN substrate with a molybdenum/ nickel, gold coating 400X (B.F.)

### 12 & 14-inch Metallographic Polishers

| FEATURE  | NANO-1200S DESCRIPTION  |
|--|---|
| Motor power                                    | 1.3 hp (1000 W)   |
| Power head upgrade                             | FEMTO-2200S / FEMTO-2500S   |
| Polishing wheels                               | Single - 12 &14-inch diameter   |
| Electrical specification                       | 110 or 220V (50/60 Hz) pre wired at factory   |
| Speed (rpm)                                    | Variable (100 - 1000 rpm)<br>- Grinding (600-1000 rpm)<br>- Polishing (100-600 rpm) |
| Anodized Working wheels:<br>12-inch<br>14-inch | Part no. PW-1200A<br>Part no. PW-1400A  |
| Dimensions (W x D x H)                         | 20 x 16 x 25-inch<br>(510 x 420 x 640 mm)   |
| Weight   | 95 lbs (43 kg)  |
| Catalog Number                                 | NANO-1200S  |
| Optional                                       | Recirculating filtering tank (RC-1000A)   |

| NANO-1200S 12 & 14-inch Polisher Accessories                 | Catalog Number |
|--|----------------|
| 12-inch diameter hard coat anodized aluminum working wheel   | PW-1200A       |
| 14-inch diameter hard coat anodized aluminum working wheel   | PW-1400A       |
|  |                |
| 12 & 14-inch splash guard                                    | PTM-225-207    |
|  |                |
| 12-inch 304 stainless steel plain-backed grinding paper ring | PTM-225-005    |

14-inch plastic plain-backed grinding paper ring



BeO, 400X (B.F.) as polished condition



PTM-225-006

NANO-1200S / FEMTO-2200S Autopolisher



Machinery Directive 2006/42/EC 2014/35/ EU Low Voltage Directive 2014/30/EU Electromagnetic Compatibility Directive

#### Benefits:

- Variable speed 100-1000 rpm
- CCW and CW direction control
- Rapid programmable speed and time selection
- Timer (count down to zero and turns off) range from 1 second up to 99 minutes and 60 seconds
- Emergency stop switch
- Swinging water spout
- 1.3 hp (1000W) motor
- Splash guard
- Electrical connections for FEMTO-2200S/2500S auto polishing

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# **ANCILLARY POLISHING SYSTEMS**

| ZETA-2000S ABRASIVE DISPENSER DAce" |                       |
|-------------------------------------|-----------------------|
| Dispenser Selection                 | Dispenser Settings    |
|                                     | Frequency Duration    |
| ✓ 1 ✓ 2                             | 00:30 00:02           |
|                                     | Start Time Total Time |
| 3 4                                 | 00:00 04:00           |
| Prime All Lines Back to Menu        | START STOP            |

# NEW ZETA-2000S

#### Abrasive and Lubricant Dispenser

- 4 (24v) dedicated, programmable peristaltic pumps.
- Setting adjustments for frequency, duration, start time, total time
- 7-inch touchscreen interface
- Compatible with NANO polishing machines as well as competitors' polishing devices
- Controlled priming for each pump and dispensing lines for more immediate application of the abrasive / lubricant
- Flushing/ priming sequence for changing of abrasive/lubricant options
- Variable flow 1.2~90 ml/minute
- Flex line for easy adjustment of dispensing nozzles
- 110/220V compatible
- Easy to use, robust and durable



# **RC-1000A**

### **Recirculating / Filter System**

- Series of three replaceable filters (0.2, 0.5 and 1 micron)
- Positive pressure 24V pump (40W) (connected to 110V/220V power supply)
- 1.3 GPM (5 liters/min) maximum flow
- Easy to operate

### ZETA-2000S Metallographic Abrasive Dispenser



| FEATURE                   | ZETA-2000S<br>DESCRIPTION  |
|---------------------------|--|
| Pumps                     | 4 (24v) dedicated,<br>programmable peristaltic<br>pumps<br>Setting adjustments for:<br>- Frequency<br>- Duration<br>- Start time<br>- Total time |
| Flow rates                | 1.2 - 90 ml/minute   |
| Cleaning                  | Water flushing   |
| Electrical specification  | 110 / 220V (50/60 Hz)  |
| Dimensions<br>(W x D x H) | 9.5 x 11 x 12-inch<br>(240 x 70 x 300 mm)  |
| Weight                    | 20 lbs (9.1 kg)  |
| Catalog Number            | ZETA-2000S   |

# year warranty

#### **Benefits:**

- Microprocessor controlled
- Can be used manually on competitors' equipment
- Interfaces with the FEMTO-S Auto Polishing heads for automated abrasive fluid dispensing
- Capable of dispensing NANOMETER alumina and SIAMAT colloidal silica and subsequently back flushing the lines to keep them clean and reusable

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### **RC-1000A Recirculating / Filter System**



| FEATURE                   | RC-1000A DESCRIPTION   |
|---------------------------|--|
| Filtering                 | Coarse (2-straining filters)<br>Fine Filters (0.2, 0.5 and 1 μm) |
| Tank capacity             | 14 gallons (53 L)  |
| Pump                      | 24VDC Diaphragm Pump<br>(1.3 GPM, 5 liters/min)                  |
| Electrical specification  | 110 / 220V (50/60 Hz)  |
| Pressure                  | 60 psi (0.42 MPa)  |
| Dimensions<br>(W x D x H) | 32 x 16 x 20-inch<br>(800 x 420 x 500 mm)                        |
| Weight                    | 30 lbs (14 kg)   |
| Catalog Number            | RC-1000A   |

2 year warranty Limited Warranty

### **Benefits:**

- Eliminates need for water and sewer hookup
- Allows the polishing machine to be mobile
- Environmentally friendly
- Self-contained system

Machinery Directive 2006/42/EC 2014/35/ EU Low Voltage Directive 2014/30/EU Electromagnetic Compatibility Directive