

MetaServ® 250

Single & Twin Grinder-Polishers
Vector® & Vector® LC 250 Power Heads



BUEHLER

Excellent Results. Easily Repeatable.™

Versatile



49-10055 MetaServ® 250 Grinder-Polisher for manual operation. Upgradable to semi-automatic operation with the addition of a Vector® LC 250 Power Head.



49-10057 MetaServ® 250 Twin Grinder-Polisher for manual operation. Upgradable to semi-automatic operation with the addition of a Vector® LC 250 Power Head.

The MetaServ® 250 single and twin grinder-polishers offer a combination of performance, economy and reliability for most microstructural analysis applications. Designed for manual or semi-automatic grinding and polishing, the base can be combined with one of two power heads. The molded protective housing provides long lasting corrosion and impact resistance. Each bowl includes a removable splash guard reduces overspray and allows easy access to the platen. A built-in drain and bowl wash flush out particles and minimize build-up of grinding-polishing debris. The adjustable water flow nozzle can be positioned anywhere over the platen, providing cooling precisely where needed.

All base models include an easy-to-use control panel with quick access to power on/off, platen run/pause, digital up/down timer and reset, water on/off/run-active control, variable platen speed control from 50 – 500 rpm, and an emergency stop. In addition to the emergency stop button, other safety features include built-in circuit protection and low voltage controls.

Transform the MetaServ® 250 Single or Twin Grinder-Polishers to a semi-automatic operation with the addition of a Vector® LC 250 Power Head. An easy to operate, economical power head with basic single sample operation, improves specimen consistency for low volume applications. Pressure can be set individually for each of the 1-4 sample via mechanical loading. An analog pressure display and power switch are easily accessed on the front of the power head.



49-10055 MetaServ® 250 Grinder-Polisher and 60-10059-115 or 60-10059-230 Vector® LC 250 Power Head



49-10057 MetaServ® 250 Twin Grinder-Polisher and 60-10059-115 or 60-10059-230 Vector® LC 250 Power Head

MetaServ® 250 Single Grinder-Polisher

The MetaServ® 250 Single Grinder-Polisher and Vector Power Head is a semi-automatic system providing both single and central force modes. While the single force mode provides preparation flexibility, central force provides superior specimen flatness. The control panel located on the front of the power head includes a digital timer, digital force control, complimentary or contra rotation selection, water control, and on/off control of the PriMet dispenser. This option must be purchased as a system.



49-10056 MetaServ® 250 Grinder-Polisher with Vector® Power Head (available in single platen only)



Burst® Dispensing System

Burst® Dispensing System

The optional Burst® Dispensing System can be connected to the MetaServ® Grinder-Polishers for semi-automatic dispensing during preparation. Using a peristaltic, non-misting pump, the Burst® dispenser applies lubricant, diamond or final polishing suspensions to the platen, offering repeatable results regardless of the operator

Specifications

All equipment is CE Marked with EC Applicable Directives and requires the following Ambient Operating Parameters: Temp 40-104° F (5-40° C) Humidity: 30-90% Relative Humidity

	Power	Motor	Water Supply Pressure	Water Supply Flow	Air Supply
MetaServ® 250 Grinder-Polisher	115/230 VAC, 50/60 Hz, 1 phase	300 Watt	14-18 psi (1-2 bar)	0.5 gpm (2 lpm)	N/A
Vector® LC 250 Power Head	115/230 VAC, 50/60 Hz, 1 phase	90 Watt	N/A	N/A	N/A
MetaServ® and Vector System	85-265 VAC, 50/60 Hz, 1 phase	32 Watt	14-18 psi (1-2 bar)	0.5 gpm (2 lpm)	55-85 psi (3.8-5.8 bar)

	Dimensions (WxDxH)	Weight
MetaServ® Single	17.8 x 28.9 x 9.5" (453 x 735 x 242mm)	44 lbs (20kg)
MetaServ® Twin	31.7 x 28.3 x 10.2" (806 x 719 x 260mm)	119 lbs (54kg)
MetaServ® Single with Vector® LC 250	17.8 x 28.9 x 24.5" (453 x 735 x 648mm)	82 lbs (37kg)
MetaServ® Twin with Vector® LC 250	31.7 x 28.3 x 26.2" (806 x 719 x 666mm)	157 lbs (71kg)
MetaServ® Single with Vector® Power Head	17.8" x 28.9" x 23.25" (452 x 735 x 591mm)	72 lbs (33 kg)



Both power heads are easily moved to the side or positioned on the platen edge and locked in place



The bowl cover and hex wrench are conveniently stored at the back of the machine when not in use.



60-10062 Vector® LC 250 Single force specimen holders allow for preparation flexibility of 1 to 4 samples.

Ordering Information

MetaServ® Grinder-Polishers,

Includes splash rings, bowl covers, power cord, and operating instructions.

- 49-10055**, 8/10" (203/254mm) single platen, base only
- 49-10056**, 8/10" (203/254mm) single platen, system with Vector® Power Head
- 49-10057**, 8/10" (203/254mm) twin platen, base only

Vector® LC 250 Power Head

Includes power cord and operating instructions.

- 60-10059-115**, 115 VAC, 50/60 Hz, 1 phase power head
- 60-10059-230**, 230 VAC, 50/60 Hz, 1 phase power head

Accessories

Platens, Aluminum

8" (203mm)	10" (254mm)	12" (305mm) <i>for manual operation only</i>
40-4061	40-0500	40-1777

Vector® LC 250 Single Force Specimen Holders

This power head will supply forces of 0-11 lbs (0-50 N) per specimen, accommodating 1-4 specimens at a time.

- 60-10060**, 4 x 1" specimens
- 60-10061**, 4 x 1¼" specimens
- 60-10062**, 4 x 1½" specimens
- 60-10063**, 4 x 25mm specimens
- 60-10064**, 4 x 30mm specimens
- 60-10065**, 4 x 40mm specimens
- 60-1022**, Retaining rings for 1" or 25mm holders
- 60-1023**, Retaining rings for 1¼" or 30mm holders
- 60-1024**, Retaining rings for 1½" or 40mm holders
- 60-9005**, Driver Adapter, *Required*
- 69-1583**, 1x2" Slide holder, *requires 60-10062*

Vector® Single Force Specimen Holders

This power head will supply forces of 0-15 lbs (0 -75N) per specimen, accommodating 1-4 specimens at a time.

- 60-3001**, 4 x 1" specimens
- 60-3002**, 4 x 1¼" specimens
- 60-3003**, 4 x 1½" specimens
- 60-3000**, Specimen holder for slides
- 60-3004**, 4 x 25mm specimens
- 60-3005**, 4 x 30mm specimens
- 60-3006**, 4 x 40mm specimens
- 69-1584**, 1x2" Slide holder, *requires 60-3000*
- 60-1022**, Retaining rings for 1" or 25mm holders
- 60-1023**, Retaining rings for 1¼" or 30mm holders
- 60-1024**, Retaining rings for 1½" or 40mm holders

Vector® Central Force Specimen Holders

This power head will supply forces of 4-60 lbs (20 -300) per holder, accommodating 3-6 specimens at a time.

- 60-2482**, 6 x 1" (25mm)
- 60-2483**, 6 x 1¼" (32mm)
- 60-2585**, 3 x 1½" (38mm)
- 60-2486**, 6 x 30mm specimens
- 60-2487**, 3 x 40mm specimens
- 60-2408**, Blank Holder
- 60-2499**, Drive Adapter, *Required*

**One drive adapter and loading plate required for each holder*

For a complete listing of consumables, please refer to our Consumables Buyer's Guide. Buehler continuously makes product improvements; therefore technical specifications are subject to change without notice.



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