

# MetaServ™ 250

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



**BUEHLER**

Solutions for Materials Preparation, Testing and Analysis

# MetaServ™ 250 Grinder-Polisher Family

## Semi-automatic Power Head

- Single and Central force operation
- Accommodates up to 6 specimens
- Control mode, force, time, rotation, water
- On/off control of the Burst Dispensing System

## Manual Power Head

- Single force operation
- Economical, mechanical loading for 1-4 specimens
- On/off control of the Burst Dispensing System



## Versatile

- Available in single or twin base
- Twin base available in two speed ranges: 50-500rpm or 50-1200rpm
- Manual polishing standard
- Optional semi-automatic polishing with Vector or Vector LC 250 Power Heads

## Cleanability

- Adjustable water flow nozzle provides cooling where needed
- Built-in drain and bowl wash minimize debris build-up

## Simple Operation

- Easy-to-use control panel
- Quick access to emergency stop

## Durable Housing

- Molded base provides long lasting corrosion and impact resistance



## MetaServ 250 Grinder-Polisher Family

The MetaServ 250 family of grinder-polishers offers performance, economy and reliability for low volume preparation applications. Transform the standard speed single or twin base to a semi-automatic system with the addition of the Vector™ LC 250 power head or purchase the MetaServ 250 with Vector power head.

## Features and Benefits

- Available in single or twin base, accommodating 8in [203mm] or 10in [254mm] platens with an operating range of 50-500 rpm

- High speed twin base, with an operating range of 50-1200 rpm for manual high speed grinding applications only
- Single or central force polishing options available with the Vector and Vector LC 250 Power Heads\*
- Built-in drain and bowl wash flush away debris before it can build up
- Adjustable water flow nozzle keeps specimens cool during grinding
- Compatible with the Burst Dispensing System and Stadium Seating in manual and semi-automatic modes

\*Vector LC 250 Power Head, single force only



|                       | MetaServ™ 250                                                                  | MetaServ 250 Twin                                                               | MetaServ 250 with Vector™ Power Head         |
|-----------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------|
| Platen Size / Qty.    | 8in [203mm]<br>10in [254mm]                                                    | 8in [203mm]<br>10in [254mm]                                                     | 8in [203mm]<br>10in [254mm]                  |
| Controls              | 1 Platen                                                                       | 2 Platens                                                                       | 1 Platen                                     |
| Preparation Style     | Membrane                                                                       | Membrane                                                                        | Membrane                                     |
| Power Heads Available | Manual,<br>Semi-Automatic                                                      | Manual,<br>Semi-Automatic                                                       | Manual,<br>Semi-Automatic                    |
| Motor                 | Vector LC 250                                                                  | Vector LC 250*                                                                  | Vector Power Head                            |
| Platen Speed          | 300 Watt                                                                       | 332 Watt                                                                        |                                              |
| Base Power            | 50-500rpm                                                                      | 50-500rpm or 50-1200rpm†                                                        | 50-500rpm                                    |
| Water Supply Pressure | 85-264VAC, 50/60Hz, 1 phase                                                    |                                                                                 |                                              |
| Water Supply Flow     | No greater than 100psi [6.8bar]                                                |                                                                                 |                                              |
| Dimensions (WxDxH)    | 0.5gpm [2lpm]                                                                  |                                                                                 |                                              |
| Weight                | 17.8 x 28.9 x 9.5in<br>[452 x 735 x 242mm]<br>24.5in [662mm] H with power head | 31.7 x 28.9 x 10.2in<br>[805 x 735 x 260mm]<br>24.5in [662mm] H with power head | 17.8 x 28.9 x 23.25in<br>[452 x 735 x 591mm] |
| Compliance            | 44 lbs [20kg]<br>82 lbs [37kg] with power head                                 | 119 lbs [54kg]<br>157 lbs [71kg] with power head                                | 82 lbs [37kg]                                |
|                       | CE and EC Applicable Directives                                                |                                                                                 |                                              |

\* Vector LC 250 Power Head not available for MetaServ 250 Twin High Speed

† 50-1200rpm for MetaServ 250 Twin High Speed Only

|                   | Vector LC 250 Power Head             | Vector Power Head                                      |
|-------------------|--------------------------------------|--------------------------------------------------------|
| Head Speed        | 60rpm                                | 60rpm                                                  |
| Voltage/Frequency | 115/230VAC, 50/60Hz, 1 phase         | NA                                                     |
| Sample Force      | Single: 0-11 lbs [0-50N]             | Single: 0-15 lbs [0-75N] / Central: 4-60 lbs [20-300N] |
| Sample Sizes      | 1in, 1.25in, 1.5in, 25mm, 30mm, 40mm |                                                        |
| Sample Capacity   | Single: 1 - 4                        | Single: 1-4 / Central: 3-6                             |
| Air Supply        | NA                                   | 55-85psi [3.8-5.8bar]                                  |
| Drive Adapter     | Single: 60-9005                      | Single: 60-9005 / Central: 60-2499                     |

### MetaServ 250 Grinder-Polisher

- Single or Twin Platens, 8in [203mm] or 10in [254mm]
- Manual use or upgrade with Vector LC 250
- Compatible with Burst Dispensing System and Stadium Seating in manual and semi-automatic modes
- Twin version available in 50-500rpm or 50-1200rpm
- Twin High Speed for manual applications only

| Part Number |                   | Voltage/Frequency  |
|-------------|-------------------|--------------------|
| 49-10055    | Single            | 85-264VAC, 50/60Hz |
| 49-10057    | Twin              | 85-264VAC, 50/60Hz |
| 49-10057HS  | Twin - High Speed | 85-264VAC, 50/60Hz |

### Vector™ LC 250 Power Head

| Part Number  | Voltage/Frequency |
|--------------|-------------------|
| 60-10059-115 | 115VAC, 50/60Hz   |
| 60-10059-230 | 230VAC, 50/60Hz   |

### Vector LC 250 Single Force Specimen Holders

|          |                            |
|----------|----------------------------|
| 60-10060 | 4 x 1in                    |
| 60-10061 | 4 x 1.25in                 |
| 60-10062 | 4 x 1.5in                  |
| 60-10063 | 4 x 25mm                   |
| 60-10064 | 4 x 30mm                   |
| 60-10065 | 4 x 40mm                   |
| 60-9005  | Single Force Drive Adapter |

## MetaServ™ 250 with Vector Power Head

- Available only with Vector Power Head
- Central force applies forces of 4-60 lbs [20-300N] per holder, accommodating 3-6 specimens at a time
- Single force applies forces of 0-15 lbs [0-75N] per specimen accommodating 1-4 specimens at a time
- Compatible with Burst Dispensing System and Stadium Seating in manual and semi-automatic modes

### Part Number

49-10056

### Voltage/Frequency

85-264VAC, 50/60Hz

## Specimen Holders



Round/Barrel



Rectangle



Slides



Teardrop

### Single Force

For use with 60-9005 Drive Adapter.

| Part Number | Style | Size   | Capacity |
|-------------|-------|--------|----------|
| 60-3001     | ○     | 1in    | 4        |
| 60-3002     | ○     | 1.25in | 4        |
| 60-3003     | ○     | 1.5in  | 4        |
| 60-3004     | ○     | 25mm   | 4        |
| 60-3005     | ○     | 30mm   | 4        |
| 60-3006     | ○     | 40mm   | 4        |
| 60-3000     |       | 1 x 2  | 4        |

### Central Force

For use with 60-2499 Drive Adapter.

| Part Number | Style | Size                        | Capacity |
|-------------|-------|-----------------------------|----------|
| 60-2482     | ○     | 1in                         | 6        |
| 60-2483     | ○     | 1.25in                      | 6        |
| 60-2484     | ○     | 1.25in                      | 3        |
| 60-2422     | ∇     | 1.25in [32mm]               | 6        |
| 60-2485     | ○     | 1.5in                       | 3        |
| 60-2486     | ○     | 30mm                        | 6        |
| 60-2487     | ○     | 40mm                        | 3        |
| 60-2409     | □     | 1 x 1.25in [25.4 x 31.75mm] | 4        |
| 60-2408     | Blank |                             |          |

## MetaServ 250 Accessories

40-4061 8in [203mm] Aluminum Platen

40-0500 10in [254mm] Aluminum Platen

16-2071 8in [203mm] Apex™ MagnoDisc with MagnoFix

16-2571 10in [254mm] Apex MagnoDisc with MagnoFix

30-2008 8in [203mm] Paper Holding Band

95-2825 10in [254mm] Paper Holding Band

## Burst Dispensing System

The optional Burst Dispensing System can be connected to the MetaServ Grinder-Polishers for manual and semi-automatic dispensing during preparation. This product improves both productivity and consistency by dispensing suspensions at fixed intervals and configurable rates.

40-10005 Burst Dispensing Module (shown)

See our Product Catalogue for more information on the Burst Dispensing System.



For a complete listing of accessories and consumables, please refer to our Product Catalogue. Buehler continuously makes product improvements; therefore technical specifications are subject to change without notice.

### Sectioning

AbrasiMet • AbrasiMatic • IsoMet

### Mounting

SimpliMet

### Grinding & Polishing

EcoMet • AutoMet • MetaServ

### Imaging & Analysis

OmniMet

### Hardness Testing

Wilson® Hardness



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