BUEHLER®
ECOMET® 4
VARIABLE SPEED
GRINDER/POLISHER

The ECOMET® 4 is an all new variable speed 12” grinder/polisher that delivers the power you need for either manual or automated sample preparation applications. This table top machine utilizes a heavy-duty 1 HP (740W) DC motor to provide variable speeds from 50 to 500 rpm. A heavy duty gear-box ensures years of trouble-free service. The unit also features a digital LED readout that displays wheel speed, and a digital LED bar graph for monitoring motor load. Each unit is equipped with a 12” (30.5cm) low profile, non-conductive, chemically inert PVC wheel with a new universal BUEHLER mount. The ECOMET® 4 is easy to operate and utilizes a low maintenance, easily serviced design layout.

All ECOMET® 4 units also incorporate the following state-of-the-art features:

- Space-age corrosion and impact resistant reaction-injection-molded (RIM) cabinet
- Molded-in bowl and drain to eliminate water leakage; bowl is pitched to promote drainage
- Bowl flush jet to prevent build-up of grinding/polishing residue
- Reliable high-tech electronic circuitry operated through touch-pad switches to control motor operation, speed and water supply
- New drive system which maximizes wheel support and eliminates wheel instability
- Parameter memory which retains the last speed setting after the Motor switch is turned off
- Ability to interface with AUTOMET® 2 Power Head and METLAP™ 1 Programmable Fluid Dispensing System
- Accepts entire spectrum of new BUEHLER® Polishing Wheels and METLAP™ Platen

For the ultimate in table top sample preparation, from manual to high-volume applications, the 12” ECOMET® 4 Grinder/Polisher is the right choice for the discerning microstructural analyst.
Specifications

No. 49-1775-160 ECOMET® 4 Variable Speed Grinder/Polisher, 12" (30.5cm), table-top corrosion and impact resistant RIM cabinet with molded-in bowl and drain, bowl flush jet, pop-up swing faucet with electrically operated flow control valve, variable speed from 50-500 rpm in 10 rpm increments, maintains constant speed under all load conditions, digital LED speed display, LED bar graph motor load indicator, touch-pad controls including illuminated Power on/off switch, Motor Speed control, Motor run/stop switch with built-in memory for returning to previous speed setting and Water on/off switch, cover and removable splash ring, 1 HP (740W) variable speed gear driven DC motor, cord and plug. Complete with No. 49-1776 non-conductive PVC wheel, samples of CARBIMET® Paper and polishing cloths. Operating instructions. For 115V/60Hz/1 phase operation.

No. 49-1775-250 ECOMET® 4 Variable Speed Grinder/Polisher, same as No. 49-1775-160, but for 220-240V/50Hz/1 phase operation.

Dimensions: 17\(\frac{1}{2}\)" W × 28\(\frac{3}{4}\)" D × 9" H
(43.5 cm × 73.2 cm × 22.9 cm)

Shipping Weight: 80 lbs. (36.4 kg)

Accessories

No. 46-2012 Cloth Clamp, for 12" (30.5cm) dia. wheels.
No. 46-2013 Paper Holding Band, for 12" (30.5cm) dia. wheels.
No. 49-1776 PVC Wheel, 12" (30.5cm) dia., extra.
No. 49-1777 Aluminum Wheel, 12" (30.5cm) dia.
No. 49-1778 Bronze Wheel, 12" (30.5cm) dia.

AUTOMET® 2 Power Head

Turn your ECOMET® 4 into a high volume sample preparation system with the addition of an AUTOMET® 2 Power Head, which permits automatic preparation of from 3 to 9 specimens simultaneously. A range of specimen holders is available to accommodate a variety of specimen sizes and shapes.

METLAP® 1 Programmable Fluid Dispensing System

If your sample preparation application requires automatic dispensing of abrasive slurries and lubricant/extenders, the METLAP® 1 Programmable Fluid Dispensing System is the accessory for you. Its microprocessor control lets you dispense two fluids in timed sequence or up to 8 fluids with the addition of METLAP® 1 Expansion Modules.

METLAP® Platens

To prepare your samples using the revolutionary new BUEHLER DIALOG® concept of sample preparation, specify METLAP® Platens. With METLAP® Platens you will get top quality results with virtually all engineering materials in less time than it takes to prepare them by conventional methods.

Consumable Supplies

For a complete listing of BUEHLER® Consumable Supplies for use with the ECOMET® 4 Variable Speed Grinder/Polisher, refer to BUEHLER ANALYST®, Section 7: Cutting, Grinding, Mounting and Polishing Supplies for Microstructural Analysis.