

## Ordering Information

The Delta AbrasiMet includes a 4-piece assortment of abrasive wheels, instruction manual and power cord. The recirculating coolant system, vises, TechMet table and abrasive wheels are all sold separately.

**The Delta AbrasiMet 2155 Series** incorporates a hood safety lock to prevent the hood from being opened while the motor/cutting wheel is rotating and mechanical brake to immediately stop the blade rotation. CE marked.

**10-2155-260 Delta® AbrasiMet®**, 220-240 VAC, 60 Hz, 3-phase

**10-2155-460 Delta® AbrasiMet®**, 440-480 VAC, 60 Hz, 3-phase

**10-2155-250 Delta® AbrasiMet®**, 200-220 VAC, 50 Hz, 3-phase

**10-2155-400 Delta® AbrasiMet®**, 380-415 VAC, 50 Hz, 3-phase

## Accessories

**10-2165-260 Recirculating Coolant System**, 230 VAC, 60 Hz

**10-2165-250 Recirculating Coolant System**, 230 VAC, 50 Hz

**16-1497 Cart with wheels**, for Recirculating System

**10-2170 Sliding Vise**, Left Hand

**10-2171 Sliding Vise**, Right Hand

**95-C1821 MetKlamp Cam-Lock Vise**, Left Hand

**95-C1822 MetKlamp Cam-Lock Vise**, Right Hand

**95-C1821-CT Close Tolerance Vise**, Left Hand, for Small Samples

**95-C1822-CT Close Tolerance Vise**, Right Hand, for Small Samples

**95-C1823 Speed Vise Kit**, for Holding Irregular Specimens

**10-3532 Riser Blocks**, for Speed Vise Kit (pair)

**95-C1702 Fastener Vise**

**16-1498 TechMet® Table**, 30" (762mm) High  
(includes 16-1497 cart)

**16-1499 TechMet® Table**, 36" (920mm) High  
(includes 16-1497 cart)

**10-4330-128 CoolMet® 2 Fluid**, 1 gallon (3.8 liter)

## Abrasive Blades, 1¼" (31.75mm) arbor

| Recommended Use   | Diameter     | Thickness      | Catalog Number |
|---|--------------|----------------|----------------|
| Tool Steels HRC60 and above, Carburized steels, RR/AI203        | 10" (254 mm) | 0.075" (1.9mm) | 10-9210-010    |
| Hard Steels HRC50, RR/AI203                                     | 10" (254 mm) | 0.075" (1.9mm) | 10-9212-010    |
| Medium Hard Steels HRC35-50                                     | 10" (254 mm) | 0.075" (1.9mm) | 10-9216-010    |
| Soft or Annealed Steel HRC15-35, HRB46-90                       | 10" (254 mm) | 0.036" (1.6mm) | 10-9220-010    |
| Ultra-thin blade for delicate cutting                           | 10" (254 mm) | 0.040" (1.0mm) | 10-9227-010    |
| Hard Non-Metallics, Glass, Rocks, and other Hard Materials      | 10" (254 mm) | 0.036" (1.6mm) | 10-9240-010    |
| Medium Hard Non-Ferrous Materials, Uranium, Titanium, Zirconium | 10" (254 mm) | 0.036" (1.6mm) | 10-9245-010    |
| Soft Non-Ferrous Materials, Aluminum, Brass, etc.               | 10" (254 mm) | 0.036" (1.6mm) | 10-9250-101    |

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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# **BUEHLER®**

## **Delta® AbrasiMet®**

### **MANUAL ABRASIVE CUTTER**

- **10" (254mm) Abrasive Cut-Off Wheel Capacity**
- **3.75" (95mm) Round Cutting Capacity**
- **High-Torque 4 Hp (3 kW) Direct Drive Motor**
- **Manually Controlled Cutting Lever**
- **Easy-To-Use 2-Button Control Panel**
- **Corrosion Resistant Protective Fiberglass Hood**
- **Clean-Out Spray Hose for Washing**
- **Side Ports Accommodate Long Specimen Sizes**
- **Two T-Slot Beds with Stainless Steel Facings**
- **Quick Operation- Just Secure Sample, Close Hood and Go!**



# Reliable and Easy-to-Use



## **Delta® AbrasiMet®**

The Delta® AbrasiMet® Abrasive Cutter is a manually operated bench-top cutter designed for use with a wide variety of materials in both production and laboratory environments. It provides the operator the ability to manually control the cutting operation, producing burn free cuts quickly and consistently. It is engineered to minimize cutting times by maintaining simplicity.

## **Rugged and Simple**

Superior cutting power is provided by the powerful 4 Hp (3kW) motor. The durable cast aluminum base has a stain and chip resistant finish for a long lasting, "like new" appearance. The hood is secured in a raised position with two externally mounted gas springs which provide reliability by eliminating exposure to the harsh cutting environment. Quick and easy abrasive wheel changing is accomplished with the wheel guard quick-release and open/close pivoting design.

The Delta AbrasiMet's compact footprint size is designed to fit into confined

spaces on any counter-top. The motor's counter-balanced design and controlled pivot cutting action allows the operator to "feel" the cutting action. This enables the operator to control the feed rate of the abrasive wheel into the work piece, adjusting for changes in sample shape or hardness. The large viewing window and bright fluorescent light allows easy observation of the sample and cutting action.

The dual nozzle coolant flow ensures a consistent burn-free cut. Left and right hood side ports with rubber splash guards will accommodate extra long samples. The T-slots beds with stainless steel facings have four 12mm T-slots to accommodate two vises for sample securement. The rubber feet help to isolate any vibration. A fume extractor knockout is incorporated, allowing easy connection to separate ventilation system to remove any cutting fumes and vapors.

The easy-to-use front control panel is designed with a durable start push-button and large stop/emergency-stop button.

## **Safety**

Designed with a priority in safety, the Delta AbrasiMet Cutter is constructed of a protective fiberglass hood and clear protective window. The large emergency-stop button can be quickly accessed and pressed in case of any emergency. A safety switch prevents power to the motor and cutting wheel while the hood is in an open position. If, for any reason, the hood is opened during the cutting operation, the switch will immediately remove power to the motor/cutting wheel. For increased safety, an optional hood lock safety switch is available which will prevent the hood from being opened unless the stop button has been depressed. This option also incorporates a mechanical brake to immediately stop the motor/cutting wheel rotation. A master disconnect switch removes power to the entire machine. Low voltage (24-volt) controls ensure operator safety. Overload protection deactivates the motor in any overload condition, and will automatically reset the controls.

## Accessories

### Recirculating Coolant System and Cart

Effective sample cooling is a key factor in producing high quality burn-free cuts. Wet cutting is critical in producing a quality cut and prevents excessive surface damage caused by overheating and improper wheel breakdown. The Delta AbrasiMet coolant system is automatically activated when the cutting wheel starts, or can be manually activated for use of the clean-out hose. A triple baffle tank design isolates the sludge from the liquid coolant. The Delta AbrasiMet Recirculating Coolant System (sold separately) includes a 1/10 Hp (75 W) pump and a 7-gallon (27 liter) tank with a flow control valve and drain hose. The roller-cart makes moving and cleaning the tank quick and easy.

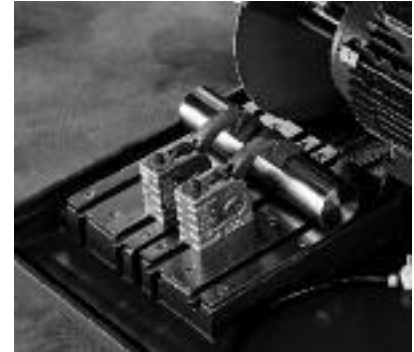
### Vising



Sliding Vises are versatile quick release vises for routine clamping.



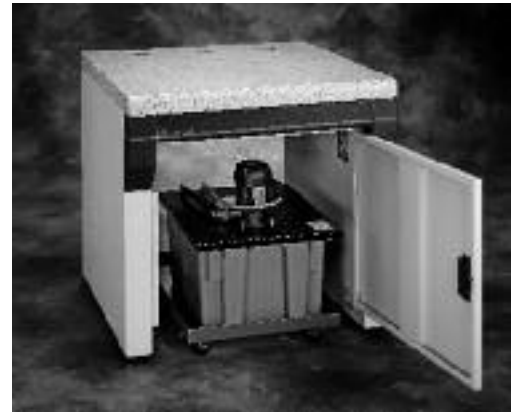
MetKlamp Cam-lock vises.



Irregular Specimen Vises provide vertical clamping forces for large and irregular shaped samples.

### TechMet® Table

The TechMet® Abrasive Cutter Table is designed to accommodate the Delta AbrasiMet and recirculating system. The heavy gauge steel cabinetry can be configured with a left or right opening door. The high-strength solid acrylic top provides wear-resistant long-lasting color. It is also waterproof, stain/mold resistant and scratches can easily be buffed away. Three pre-drilled drain holes (left, center, right) allow the recirculating system to be configured differently depending on the user's preference.



TechMet Table accommodates Delta AbrasiMet Cutter and Recirculating Coolant System.

## Specifications

### Voltage

200-480 VAC (selectable)

### Power Consumption

3 kW

### Frequency

3 phase

### Current

13 amps @ 230 VAC

6.5 amps @ 460 VAC

7.5 amps @ 400 VAC

### Cutting Wheel Diameter

10" (254mm) maximum

### Cutting Wheel Arbor

1¼" (31.75mm)

### Motor Power

4 Hp (3 kW)

### Cutting Wheel Speed

3400 rpm @ 60 Hz; 2830 rpm @ 50 Hz

### Lighting

17-watt fluorescent

### Sound Rating

61 dBA

### Fume Extractor Size

2⅞" (70mm) cut-out diameter

### Coolant Tank Capacity

7 gallons (27ℓ)

### Dimensions

24" W x 17" H x 26.5" D  
(600mm W x 425mm H x 655mmD)

### Weight

200 lbs (91 kg)

### Approvals

CE