

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
- Motor Brake Quickly Stops Wheel Rotation - Allowing Quick Sample Retrieval
- 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

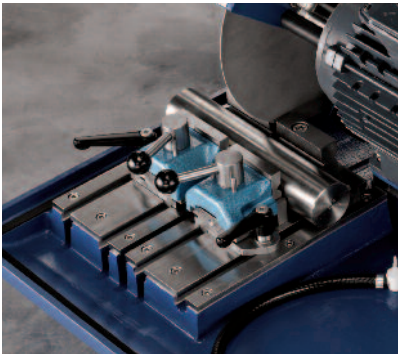
Designed with a priority in safety, the Delta AbrasiMet Cutter is constructed of a protective fiberglass hood and clear protective window. The large emergency-stop button can be quickly accessed and pressed in case of any emergency. A safety switch prevents power to the motor and cutting wheel while the hood is in an open position. For increased safety, a hood lock safety switch prevents the hood from being opened unless the stop button has been depressed. This 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

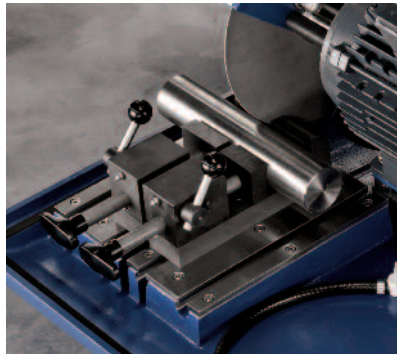
Recirculating Coolant System and Cart

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.

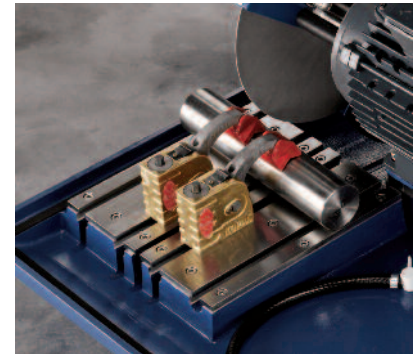
Vising



Sliding Vises are versatile quick release vises for routine clamping.



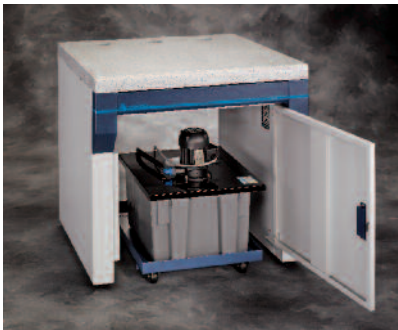
MetKlump Cam-lock vises.



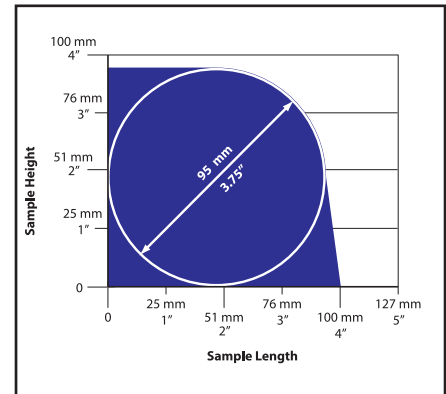
Irregular Specimen Vises provide vertical clamping forces for large and irregular shaped samples.

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.



AbrasiMet® cutting envelope with new 10" (254mm) blade

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