## AbrasiMet<sup>™</sup> M Manual Abrasive Cutter

AbrasiMet M

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Strong Partner, Reliable Solutions

# AbrasiMet<sup>™</sup> M

## EASY to USE DURABLE VERSATILE

## AbrasiMet M is Designed for Demanding Environments

**AbrasiMet M** 

The AbrasiMet M 10" [254mm] / 12" [305mm] benchtop manual cutter provides consistent and repeatable cut quality for medium-sized samples. The ease of use, robust design and expanded chamber make this machine ideal for quick and easy sectioning in demanding environments.



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• Cut large and/or high-strength materials with the best-in-class 5.5hp [4kW] motor



• Utilize the expanded cutting chamber that can fit parts up to a 25″ [635mm] width



- Quickly empty the NEW high-capacity recirculation system of debris without the use of consumables
- Save Time, Have More Power and Flexibility, Trust the Reliability



## Easy to Use

### Exert Less Force to Make Your Cut

The AbrasiMet M design features a motor that is separated from the cutting arm which reduces the force required to perform a cut. This also allows the user to better feel the resistance and more accurately gauge the correct force to apply.

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#### Change Blades without Tools

Buehler's Quick Lock Nut comes standard on every AbrasiMet M and allows the user to loosen and tighten the blade by hand. Save time preparing the cut and reduce the risk of injury when changing blades.

### Adjustable Cutting Handle

**AbrasiMet M** 

Quickly adjust the cutting handle height, angle, and length to optimize the machine for any user. Better ergonomics allow users to perform the sectioning process with ease and the simple design makes it quick to adjust for different users.

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### Quick Recirculation Tank Cleaning

The high capacity tank (30gal, 110L) features a nested tank design which filters debris from coolant. By regularly cleaning out the inner tank, which traps large debris, users can extend the lifetime of their coolant. This allows users to spend less time cleaning the full system and spend more time cutting samples or on other processes.



# Durable

## **Powerful Cutting**

The AbrasiMet M comes with a class-leading, powerful 5.5hp [4kW] motor allowing it to cut through highstrength materials quickly, saving the user time in the sectioning process.



## Protected Motor

The motor-cutting arm system, separated from the chamber by a drive belt, is protected by a metal housing. This housing increases the reliability of the system by keeping coolant and debris out.







## **Consistent Cooling System**

The system comes equipped with a powerful pump to consistently deliver a strong coolant flow to the part thus ensuring a high quality cut.



## Versatile

## Dual-Blade Cutting

Introducing Buehler's new abrasive cutting feature, Parallel Dual Blade Sectioning. Coming standard with every machine, the dual blade accessory kit allows users to perform two parallel cuts in a single cycle. Simply load two blades at the desired spacing and perform the cut.



## Expanded Chamber

The AbrasiMet M offers a large chamber that can hold a wide variety of parts and offers easy access for the user to secure parts to the table. The maximum part size for this expanded chamber is 25in W x 13in D x 4.3in H [636 x 330 x 109mm].





## **Technical Specifications**

### AbrasiMet M

Operation		
Cut Operation	Manual	
Units	English and Metric	
Blade Movement Axis	Vertical (Z)	
Cut Type	Chop	
Controls	Manual Chop Handle, Control Panel with Buttons	
Cutting Bay Lighting	2 LEDs	
Hood Door Design	Rising hood (slides open upwards)	
Exhaust Port	Located in back of machine	
Flush Hose	Yes	
Other Features	Adjustable cutting arm handle; Dual blade cutting; Set RPM setting per blade size	

#### Dimensions

Maximum Sample Width	Up to 26in [660mm]	
Cooling System Capacity	30gal [113.6L]	
T-Slot Table Dimensions	L: 7.1in x 9.8in [180mm x 250mm] R: 4.5in x 9.8in [115mm x 250mm]	
Machine Dimensions	Width: 31.3in [795mm] Depth:27.3in [693mm] Height : 25.7in [653mm]	
Weight	309lbs [140kg]	
Blade Sizes	10in [254mm]	12in [305mm]
Blade Table Clearance	6.9in [175mm]	5.9in [150mm]
Cut Capacity	3.3in [84mm]	4.3in [109mm]
Blade Speed	3000rpm	2600rpm

#### **Electrical**

Motor Power	5.5Hp [4kW] (5Hp [3.7kW] for CSA)
Main Power	380-480VAC, 3 Phase, 50/60Hz 180-240VAC, 3 phase, 50/60Hz
Main Current	200V: 26A 400V: 13A
Safety Features	Interlock Hood Switch, Emergency Stop
Compliance	CE Directives



## Ordering Information



## AbrasiMet M

#### Includes:

Quick Lock Nut, Dual Blade Spacers, and Dual Blade Spindle Extension

Part Number	Description
10-10107-200	AbrasiMet M (200-240V, 50/60Hz)
10-10107-200C	AbrasiMet M (200-240V, 50/60Hz) CSA
10-10107-400	AbrasiMet M (380-460V, 50/60Hz)
10-2166-200	Advanced Recirculation Tank for AbrasiMet M (200-240V, 50/60Hz)
10-2166-400	Advanced Recirculation Tank for AbrasiMet M (380-460V, 50/60Hz)
10-2166-205	Standard Recircualtion Tank for AbrasiMet M (200-240V, 50/60Hz)
10-2166-405	Standard Recirculation Tank for AbrasiMet M (380-460V, 50/60Hz)

## **Required Consumables**



Abrasive Blades Range in sizes from 10in [254mm] to 12in [305mm]



Cool 3 10-6010 Water miscible fluid concentrate (2.6gal, 10L)

## Vising Options

Medium Speed Clamping Vise

10-3545 (Right) 10-3544 (Left)

Max Opening: 2.75" [70mm] Clamping Plate: 3.2" x 1.4" [80 x 35mm]



Small Vertical Clamping Kit 10-3531

Provide a strong clamp for parts up to 2.3in [58mm] in diameter





MetKlamp VIII

95-C1822 (Right) 95-C1821(Left) Holds specimens up to 1.5in [38mm] from 2 point



Small Riser Blocks 10-3532

Increase the height of the Small Vertical Clamps 2.4in [60mm].



Medium Sliding Vise Kit

10-3541 (Right) 10-3540 (Left) Holds parts of any width.



Vee Blocks Clamp Kit 10-3527 Raise samples above the table



### **Buehler Worldwide Locations**



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