



AbrasiMet™ M

Manual Abrasive Cutter

AbrasiMet M

AbrasiMet™ M



EASY to USE

DURABLE

VERSATILE

AbrasiMet M is Designed for Demanding Environments

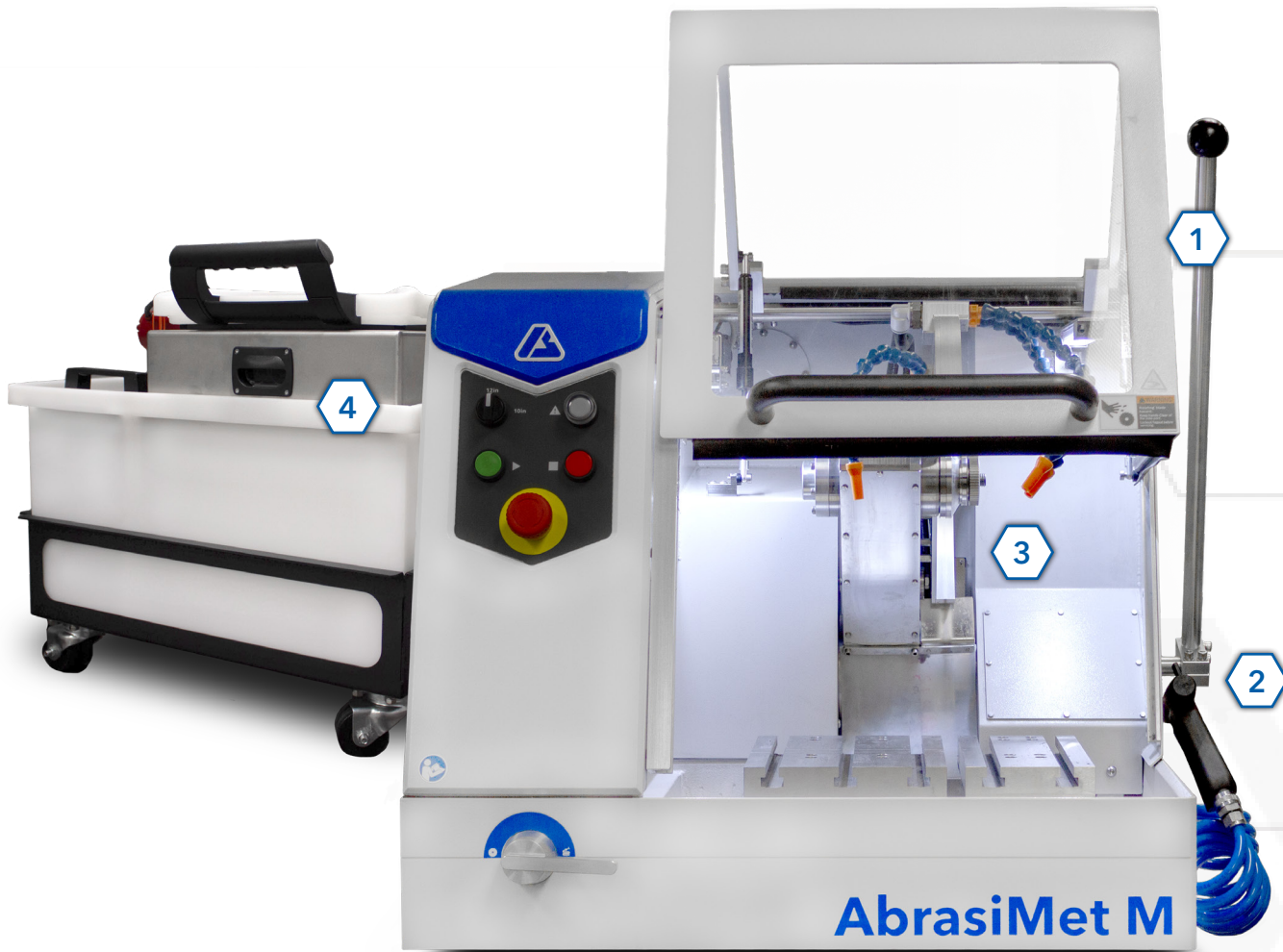
The AbrasiMet M 10" [254mm] / 12" [305mm] benchtop manual cutter provides consistent and repeatable cut quality for medium-sized samples. The ease of use, robust design and expanded chamber make this machine ideal for quick and easy sectioning in demanding environments.



- 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



1

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.

2

Adjustable Cutting Handle

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.

3

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.

4

Quick Recirculation Tank Cleaning

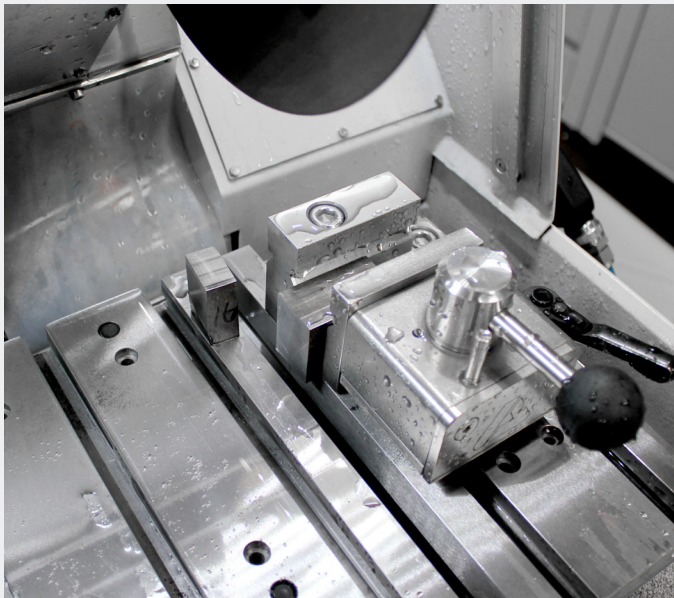
The high capacity tank (30gal, 110L) features a nested tank design which filters debris from coolant. By regularly cleaning out the inner tank, which traps large debris, users can extend the lifetime of their coolant. This allows users to spend less time cleaning the full system and spend more time cutting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



Durable

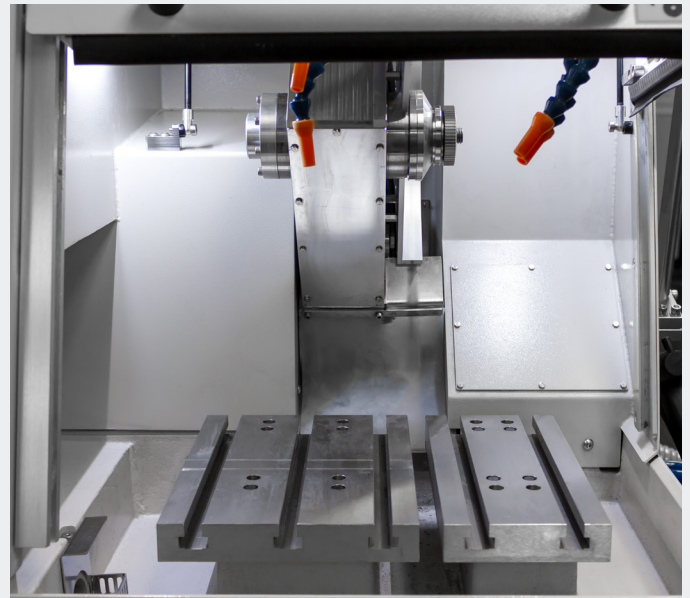
Powerful Cutting

The AbrasiMet M comes with a class-leading, powerful 5.5hp [4kW] motor allowing it to cut through high-strength 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.





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.



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.



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 Recirculation 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]



MetKlamp VIII

95-C1822 (Right)
95-C1821 (Left)

Holds specimens up to 1.5in [38mm] from 2 point



Medium Sliding Vise Kit

10-3541 (Right)
10-3540 (Left)

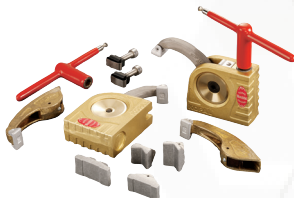
Holds parts of any width.



Small Vertical Clamping Kit

10-3531

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



Small Riser Blocks

10-3532

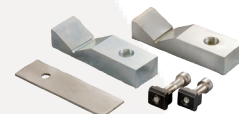
Increase the height of the Small Vertical Clamps 2.4in [60mm].



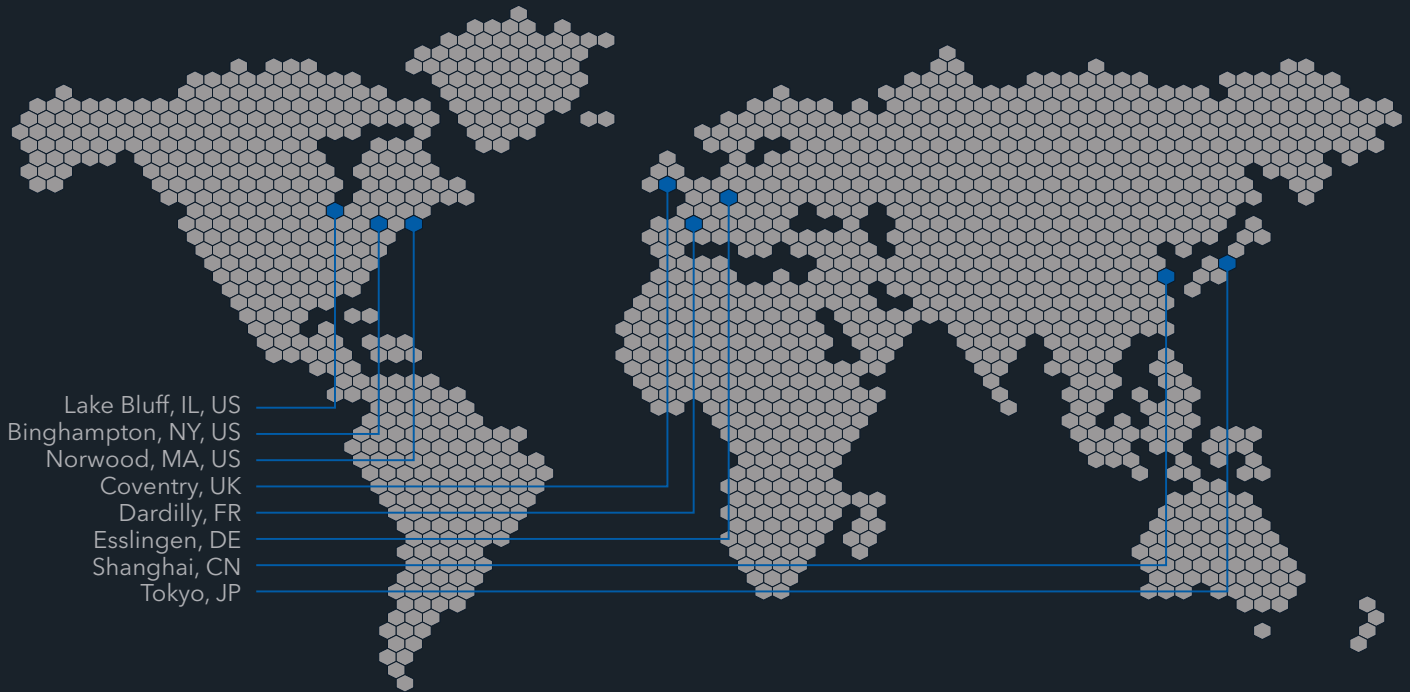
Vee Blocks Clamp Kit

10-3527

Raise samples above the table



Buehler Worldwide Locations



BUEHLER

Solutions for Materials Preparation, Testing and Analysis

BUEHLER Worldwide Headquarters

BUEHLER North and South America

41 Waukegan Road, Lake Bluff, Illinois 60044

P: +1 847 295 6500 | 800 BUEHLER (800 283 4537)

W: www.buehler.com | **E:** info@buehler.com
shop.buehler.com

European Headquarters

BUEHLER Germany - Esslingen

ITW Test & Measurement GmbH

P: +49 (0) 711 4904690-0

W: www.buehler-met.de | **E:** info.eu@buehler.com
www.metallographie.biz

BUEHLER France - Dardilly

P: +33 (0) 800 89 73 71

W: www.buehler.fr | **E:** info.eu@buehler.com
www.metallographie.fr

BUEHLER United Kingdom - Coventry

P: +44 (0) 800 707 6273

W: www.buehler.co.uk | **E:** info.eu@buehler.com
www.metallography.biz

Asia Headquarters

BUEHLER China - Shanghai

ITW Test & Measurement (Shanghai) Co., Ltd.

P: +86 400 111 8683 | **F:** +86 21 6410 6671

W: www.buehler.cn | **E:** info.cn@buehler.com

BUEHLER Asia-Pacific

P: +86 400 111 8683

E: info.asia@buehler.com

BUEHLER Japan

P: +81 03 5439 5077 | **F:** +81 03 3452 7220

W: www.buehler.jp | **E:** info.japan@buehler.com



CELEBRATING
75 YEARS
OF PARTNERSHIP

