

Precision Cutter



IsoMet[™] High Speed and High Speed Pro







IsoMet High Speed Features

The IsoMet High Speed is a versatile table top precision saw that provides efficient and precise cuts for any application. The innovative machine and vise designs make setup quick and simple by using the precision laser. Align cuts quickly by using three axis blade movement, and tool-less vising adjustment. Optimize cut quality through out the blade life with the automatic dressing system.



Precision cutting is vital for thermal spray coatings analysis. The diamond blade minimizes the damage to a cut surface for analysis.



A challenge of micro-sectioning is to create a planar surface at a specified location. Precision alignment to an accuracy of one micron is crucial for analysis.



Specialized materials are valuable and minimizing scrap is important. Confidence in sectioning equipment to perform the same process every time.

EFFICIENT CONSISTENT PRECISE





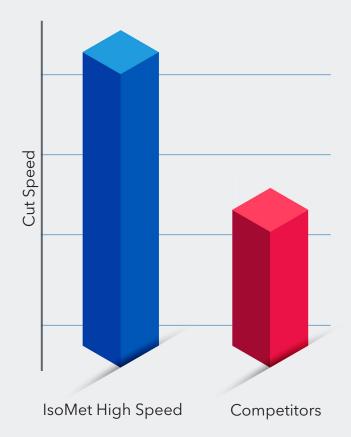
Save Time

The IsoMet High Speed has a blade motor power of 2kW, which is the strongest motor on the market. This motor power ensures the blade will minimize the deformation of the sample surface, saving you time later in the material preparation process.

Users can see exactly where the cut will travel along the sample with the precision laser.

2.5x Faster

Reduce the cut time without impacting the surface quality. In a side by side comparison, IsoMet High Speed cut over 2.5X faster than leading competitors with the same or better cut quality.







Easy to Use

The IsoMet High Speed has a variety of programmable capabilities. The simple user interface keeps the most important and frequently used features within one touch from the home screen.



Available in 10 different languages

BUEHLER

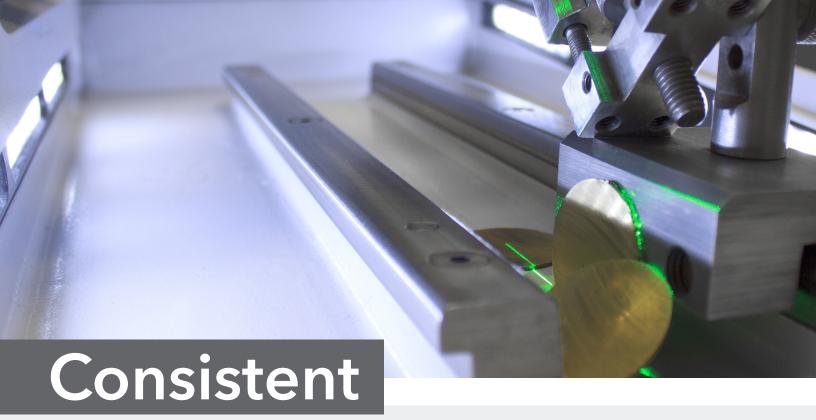
Minimize Setup



Buehler's Rapid Rail System allows users to secure samples in the cutting chamber and begin the next cut within seconds.



The new vise system has reduced the need for tools and allows for rapid changing of samples and sample types with the same vise.



Smart Cut

 $SmartCut^{\text{\tiny{TM}}} \ adjusts \ the \ cut \ speed \ in \ real \ time \ to \ ensure \\ the \ cut \ quality \ is \ not \ compromised \ while \ maintaining \\ the \ efficiency \ of \ a \ powerful \ cut.$



From the Home screen,
Press the "Smart Cut" button.



Watch the "Motor" icon adjust to optimize the cut







Repeatable Cut

Improve consistency with saved methods that load preprogrammed parameters from the home screen. Methods remove the need to remember cut parameters.



From the Home screen, either save or recall methods by pressing the "Saved Method" or "Method" button.





4	
name: NV-Titanium	
blade: 15HC_11_4248	
notes: Titanium materials	



Precise

Alignment

The machine has an accuracy of one micron in the X direction. The precision of the machine is all in the blade movement reducing the potential to revise and manually move samples.

Serial Sectioning

With precise X movement of the blade, make multiple cuts on one sample all within one programmed cut. For the versatile lab, cut location can either be uniformly or placed individually.

High Quality Cut

Consistent cuts are vital to sample analysis. The IsoMet High Speed allows features to be locked on the machine to ensure the same parameters are used every time. Program the automatic dressing system to maintain consistent cut quality and extend diamond blade life. Reduce the frequency of changing the dressing stick with the new optimized dressing wheel design.



From the Home screen, press the "Menu" button.

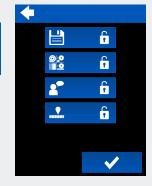




From the Menu screen, press the "Lock" button.



This screen allows for multiple features of the machine to be locked during standard operation.





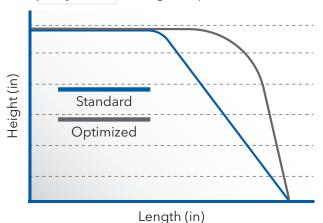
Match Versatility with the IsoMet High Speed

The IsoMet High Speed is a quality machine with the focus on efficiency, consistency, and precision. The IsoMet High Speed Pro has all the benefits of the IsoMet High Speed with added features to enhance the user experience.

		IsoMet High Speed Pro	IsoMet High Speed
	Smart Cut Automatically optimize cuts		
	Serial Cut Cut multiple samples in one program		
6	Passcode Lock Selectively lock out machine settings		
	Saved Methods Save programmed cut parameters		
O	Automatic Dressing System Dress blades automatically during cuts		
Z x: 8.128 y: -4.5 z:0 X	Z Axis Movement Adjust cut location for optimization		
	Green Laser Easy alignment of cut on sample		

Cut Capacity

The IsoMet High Speed has the benefits of precision with the versatility of sample size. To achieve optimal cut capacity, creative vising is required.







Technical Specifications

Operation

Cut Operation	Automatic, Manual, or Smart Cu	Automatic, Manual, or Smart Cut control Linear Blade Feed		
Units	English and Metric	English and Metric		
Blade Movement Axis	Horizontal and Linear (X, Y)	Horizontal and Linear (X, Y) Horizontal, Linear, Vertical (X, Y,		
Display	6.5in LCD Display with LED Back lighting			
Controls	Touch Screen; Precision Controllers;			
Lighting	2 LED Strip, Adjustable brightne	2 LED Strip, Adjustable brightness		
Programming	Retains Last Settings Serial Sectioning	Retains Last Settings Customizable Methods Serial Sectioning		
Laser		Green Laser		

Dimensions

Blade Position Settings	Horizontal: 0 - 2in [0 - 50mm]	Horizontal: 0 - 2in [0 - 50mm] Vertical: 0 -2in [0 - 50mm]
Cut Length Range	0.01 - 7.25 in [0.25mm - 184mm]	
Cut Length Increment	0.01 in [0.25mm]	
Feed Rate Range	0.04 - 1 in/min [1.2 - 25.4mm/min]	
Feed Rate Increment	0.01in increments [0.25mm increments]	
Blade Speed	200-5000rpm	
Cut Capacity Diameter	2.8in [71mm]	
Coolant Systems	Built-in Recirculating System, 1gal [4L]	
Flow Rate Wash Down Hose	2L/min	
Flow Rate on Blade	2.5L/min	
Wafering Blade Diameters	3 - 8in [75 - 200mm]	
Abrasive Blade Diameters	eters 5 - 8in [125 - 200mm]	
Cut Chamber Size	9in x 20in [228mm x 508mm]	
Machine Dimensions	Width: 24in [609.6mm] Depth: 30in [762mm] Height (Hood Opened): 36in [914.4mm] Height (Hood Closed): 19in [482.6mm]	
Weight	157Lbs [71.2kg]	

Electrical

Motor Power at 220VAC	2.68Hp [2kW]	
Main Power	100 - 240VAC, 50-60Hz, 1 Phase	
Noise Level	58dB	
Safety Features	Interlock Hood Switch, Emergency Stop	
Compliance	CE Directives	



Ordering Information

Get Started

Choose the IsoMet High Speed model to best fit lab needs.



IsoMet High Speed (11-2600)

Includes

Rapid Rails, Rapid Rail Vise Holder and Single Saddle Chuck

Rapid Rail Vise Holder





IsoMet High Speed Pro (11-2700)

Includes:

Rapid Rails, Rapid Rail Vise Holder, Single Saddle Chuck and Dressing Wheel.

Rapid Rail Vise Holder





Dressing Wheel



Required Accessories

Visit www.buehler.com to select application specific blades and flanges.



Precision Blades
Range in sizes from
3in[76mm] to 8in[203mm]

Abrasive Blades

Range in sizes from 5in[127mm] to 7.87in[200mm]





Flange Sets

Range in sizes from 3in[76mm] to 6in[152mm]

Cooling Fluid



Water miscible fluid concentrate

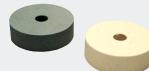
Optional Accessories

External Recirculating System Kit (11-2640)



Increases cutting fluid capacity to 7gal [26.5L] at 1.25gal/min [4.7L/min]

Dressing Wheel



Part Number:

11-2655 20 HC, 15HC, 20LC, 15LC, CBN HC, and

CBN LC blades

11-2656 10 LC and 5LC blades



Additional Vising Options The IsoMet comes with the Rapid Rails installed.

Rapid Rail Vise Holder (11-2660)

Increase productivity with additional rapid rail holders



Large, Single Saddle Chuck (11-661)

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



Fastener Chuck (11-2687)

Holds specimens up to 2in [50mm] for longitudinal sectioning



Double Saddle Chuck (11-2662)

Securely holds specimens up to 1.5in [38mm] from 2 points



Large Bone Chuck (11-2494)

Ideal for clamping bone, plastics, or other semi-rigid specimens up to 2in [50mm] in diameter



Quick Clamp Vise

Stainless steel chuck holds mounted samples



Part Number:

11-2666 1.25in[30mm]

11-2667 1.5in[40mm]

Irregular Specimen Chuck (11-1185)

Adjusts to hold irregular shaped specimens up to 1in [25mm] in diameter



T-slot bed (11-2707)

Add a T-Slot bed to the machine for additional vising options



Small Speed Vise (460022)

Clamps specimens up to 58mm in height



Sliding Vise (11-2669)

6in [152mm] maximum opening, use requires flange to be 2in [50mm] or less



Vee Blocks Clamp Kit (10-3527)

Raise samples above the table





Buehler Worldwide Locations



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