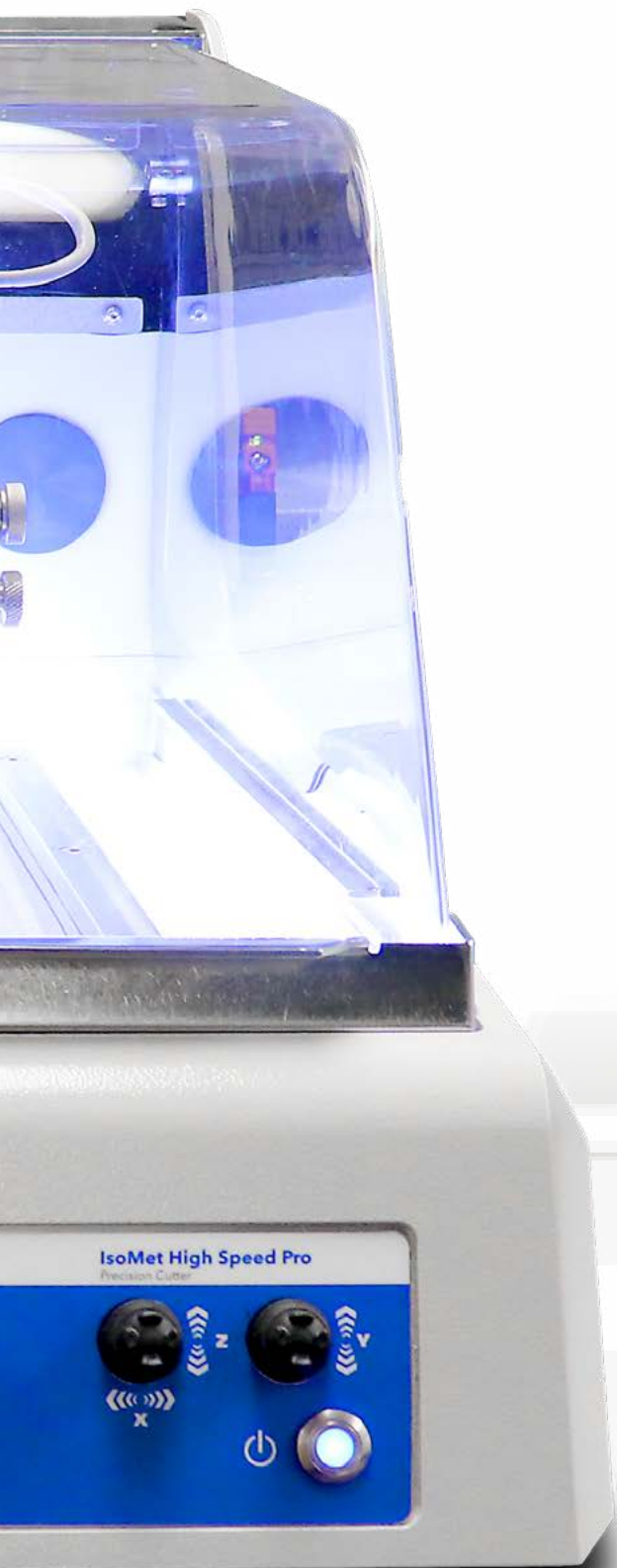




IsoMet[®] High Speed Pro Precision Cutter

IsoMet[®] High Speed Pro



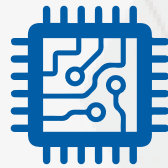


IsoMet High Speed Pro Features

The IsoMet High Speed Pro 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.

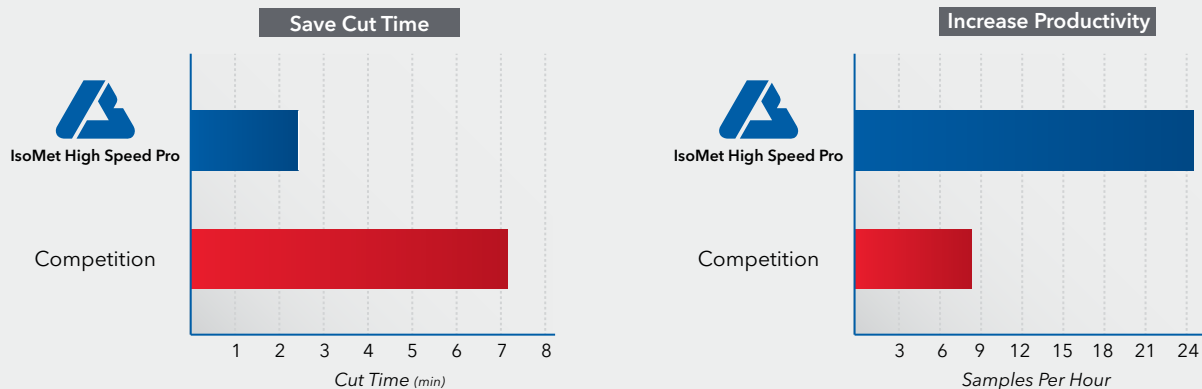
EFFICIENT
CONSISTENT
PRECISE



Efficient

Save Time

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



These real time results were collected by a leading Aerospace company.





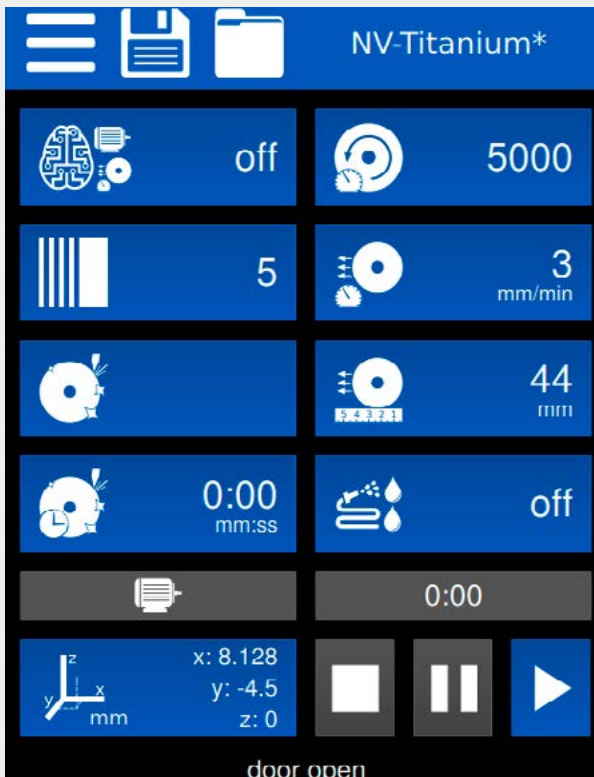
Minimize Setup



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

Easy to Use

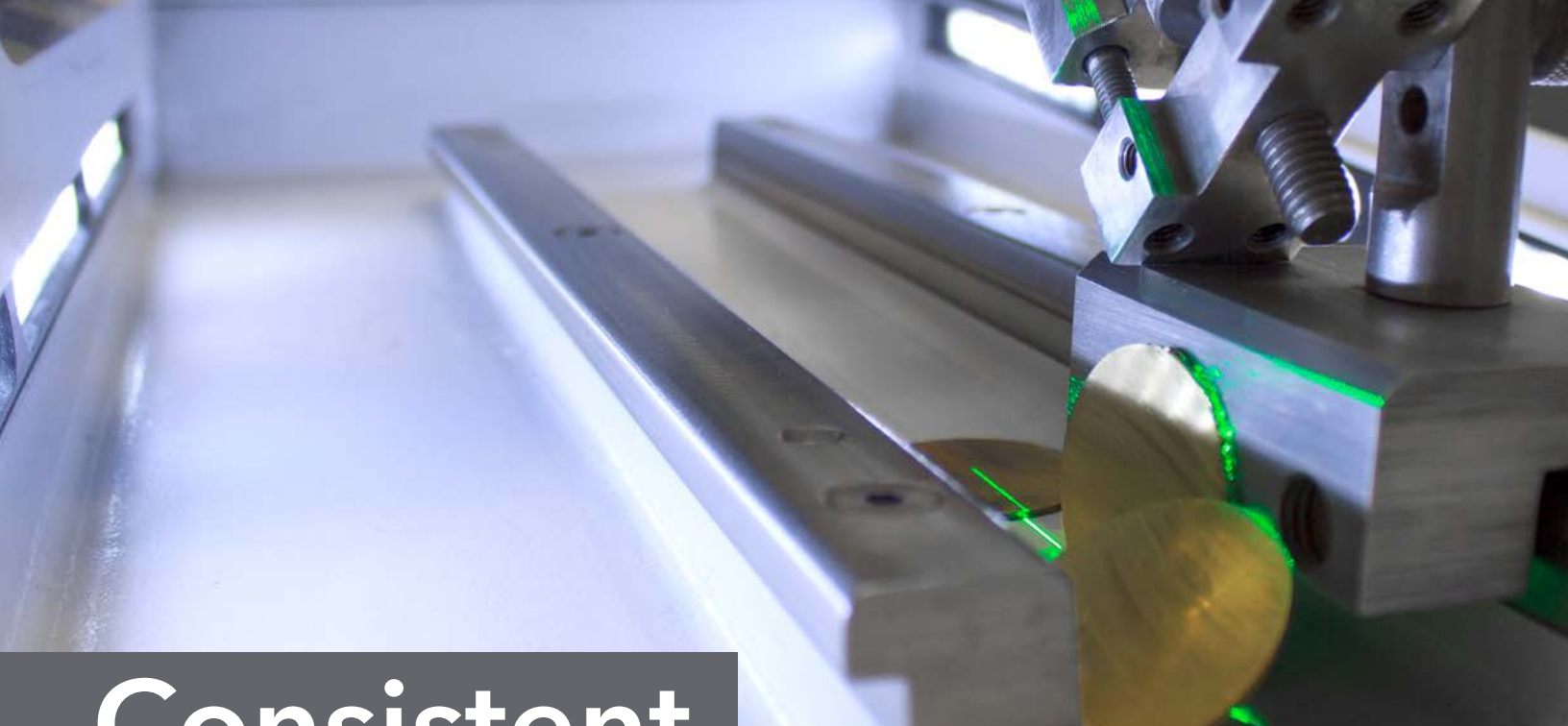
The IsoMet High Speed Pro has a variety of programmable capabilities. The simple user interface keeps the most important and frequently used features within one touch from the home screen.



Available in 10 different languages



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



Consistent

Smart Cut

SmartCut™ 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

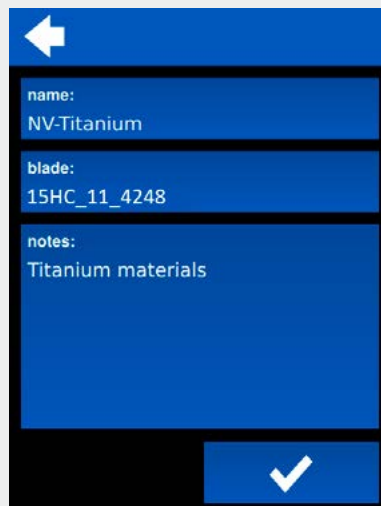
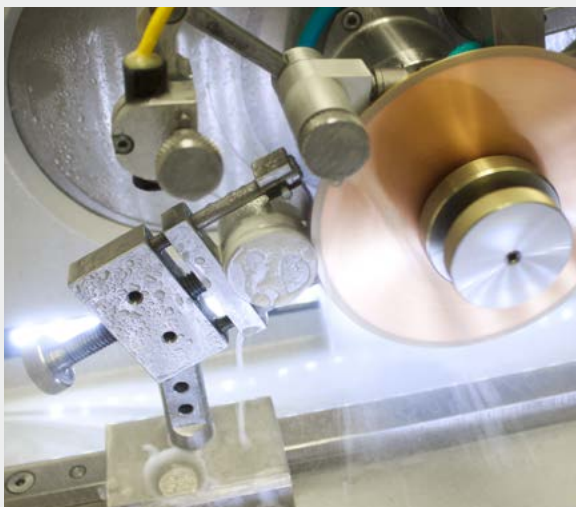


Repeatable Cut

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

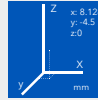


From the Home screen, either save or recall methods by pressing the "Saved Method" or "Method" button.



Precise

Alignment



The precision of the machine is all in the blade movement reducing the potential to revise and manually move samples. This machine has an accuracy of one micron in the X-direction. Adjust cut location with Z-axis movement for further optimization.

Serial Sectioning



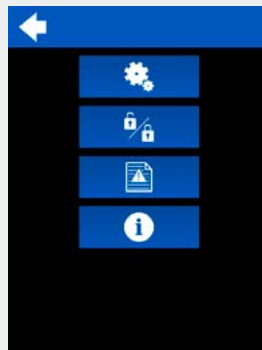
With precise X movement of the blade, make multiple cuts on one sample all within one programmed cut. For the versatile lab, cut location can either be uniformly or placed individually.

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.

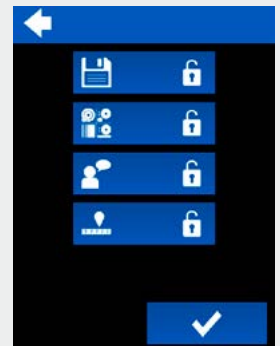


Automatic blade dressing can be directly accessed through the Home screen.



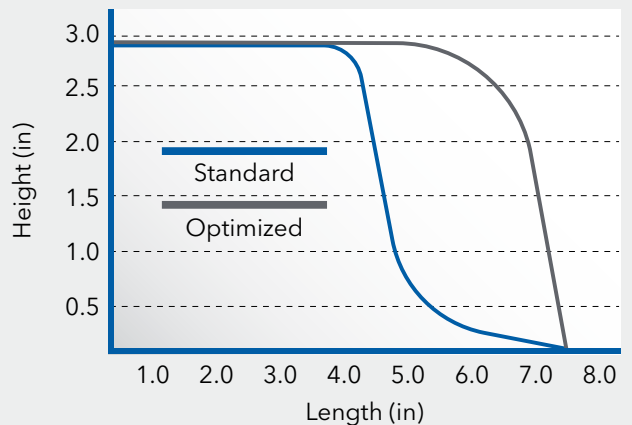
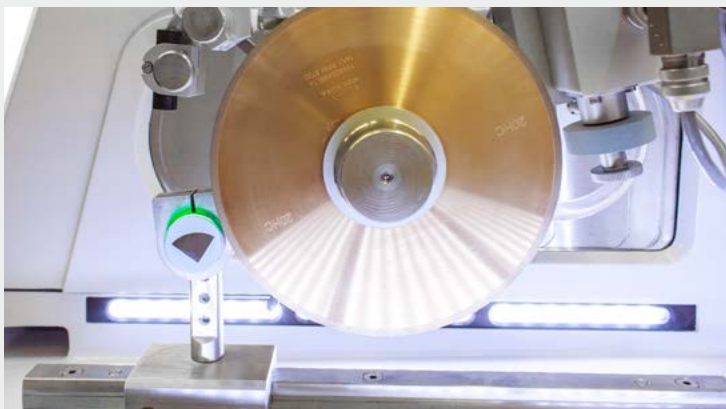
Multiple features of the machine can be locked during standard operation.

First, press the "Menu" button from the Home screen to view additional settings. Then, select the "Lock" button



Cut Capacity

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



Ordering Information

IsoMet High Speed Pro (11-2800)

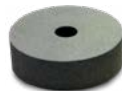
Includes:

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

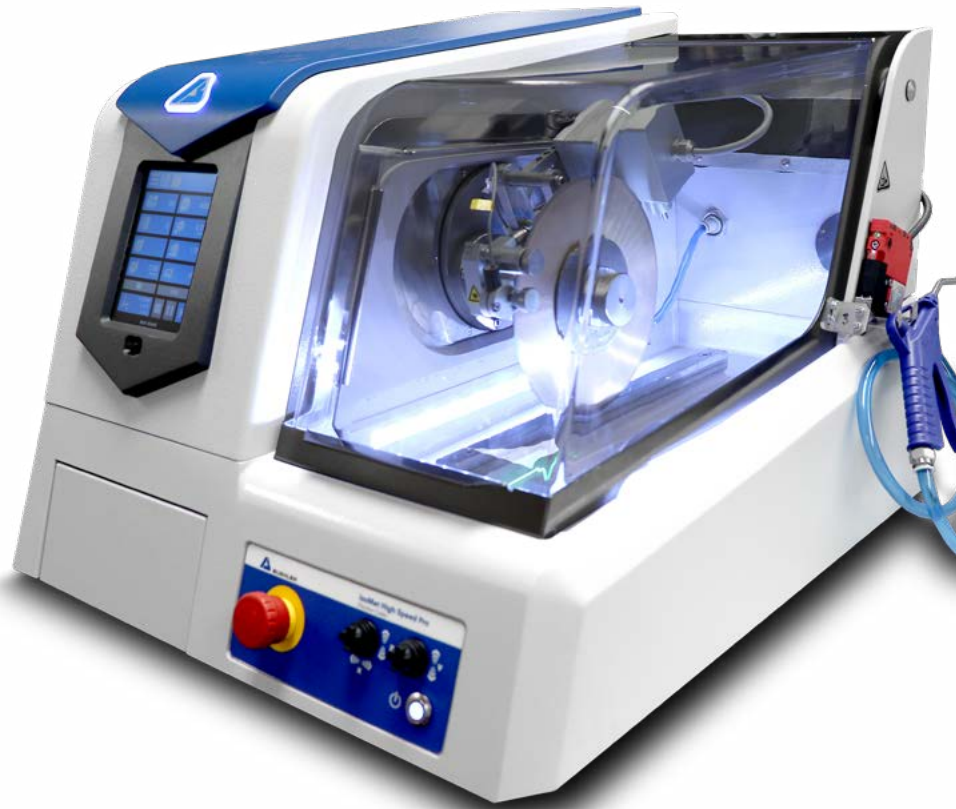
Single Saddle Chuck



Dressing Wheel



Rapid Rail Vise Holder



Required Accessories

Diamond blades for common applications are shown on page 9.



Precision Blades

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

-or-

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

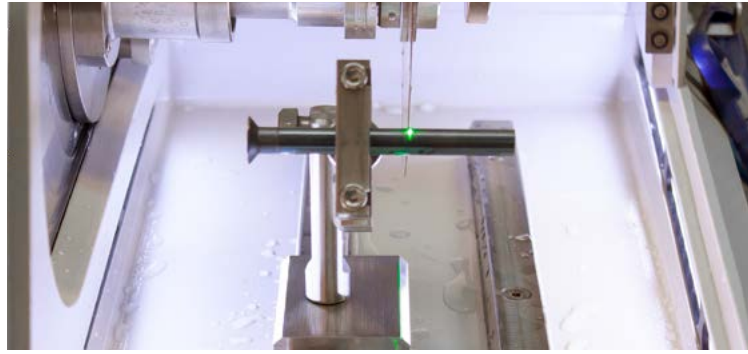


Additional Vising Options

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 (11-2661)

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



Double Saddle Chuck (11-2662)

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



Quick Clamp Vise

Stainless steel chuck holds mounted samples



Part Number:
11-2666 1.25in[30mm]
11-2667 1.5in[40mm]

Fastener Chuck (11-2687)

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



Large Bone Chuck (11-2494)

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



Irregular Specimen Chuck (11-1185)

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

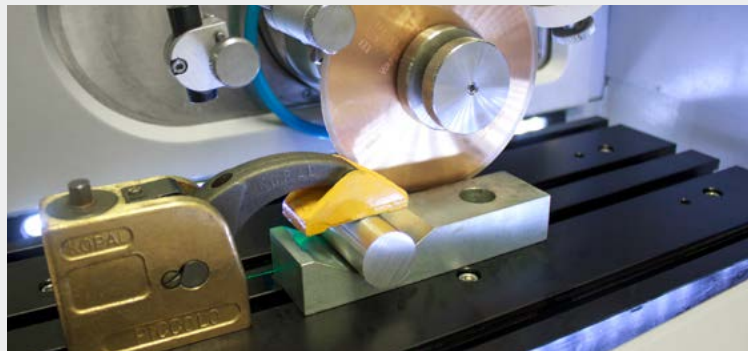


T-Slot Bed Accessory

Enhance the capabilities of the IsoMet High Speed Pro by incorporating a T-slot bed. This addition extends your vising options, offering a personalized foundation to firmly secure clamps and fixtures with high accuracy and repeatability.

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



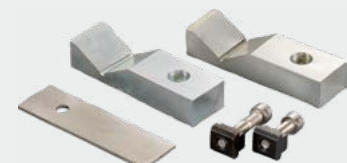
Sliding Vise (11-2669)

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



Vee Blocks Clamp Kit (10-3527)

Raise samples above the table



Highlighted Precision Blades

Precision Sectioning Blades for IsoMet® Cutters, 0.5in [12.7mm] Arbor (Qty 1)

[Blade Thickness is listed under Part Number]



View Options

Recommended Use	4in [102mm]	5in [127mm]	6in [152mm]	7in [178mm]	8in [203mm]
Use with Saws	All	All	1000 IsoMet High Speed Pro	1000 IsoMet High Speed Pro	IsoMet High Speed Pro
IsoMet 20HC - Aggressive general sectioning of non-ferrous materials		11-4215 0.020in [0.5mm]		11-4237 0.025in [0.6mm]	11-4238 0.035in [0.9mm]
IsoMet 15HC - Blades for routine use, metal matrix composites, PC boards, bone, titanium, thermal spray coatings, otoliths	11-4244 0.012in [0.3mm]	11-4245 0.015in [0.4mm]	11-4246 0.02in [0.5mm]	11-4247 0.025in [0.6mm]	11-4248 0.035in [0.9mm]
IsoMet 20LC - Hard tough materials, structural ceramics, boron nitride, silicon nitride		11-4225 0.02in [0.5mm]		11-4227 0.025in [0.6mm]	11-4228 0.035in [0.9mm]
IsoMet 15LC - Hard and brittle materials, structural ceramics, glass, electronic substrates, alumina, zirconia, concrete	11-4254 0.012in [0.3mm]	11-4255 0.015in [0.4mm]	11-4276 0.02in [0.5mm]	11-4277 0.025in [0.6mm]	11-4279 0.045in [1.1mm]
IsoCut CBN - Ferrous materials, nickel, cobalt, lead-based alloys and super alloys	11-5264 0.012in [0.3mm]	11-5265 0.015in [0.4mm]	11-5266 0.02in [0.5mm]	11-5267 0.025in [0.6mm]	11-5268 0.035in [0.9mm]
Cup Grinder for Ceramic & Geological Materials		11-2740			

All Blades (Except 30HC) come with a Dressing Stick included. The Part Numbers shown in the table can be used for re-ordering the Dressing Sticks.
* Use an IsoMet 30HC blade for cutting a PWB when using Table Saw Attachment



Preventative Maintenance

ISO 9001 - ISO 14001 Registered & ISO 17025 Accredited

Preventative maintenance ensures consistent performance of equipment and extends your machine's lifetime, reducing risk of production downtime and costly repairs. Our highly trained Buehler technicians will perform a scheduled general cleaning of your machine, change wear parts as needed, and provide a thorough mechanical inspection along with any necessary electronic calibrations to factory specifications.

Contact Us!

To find out more, contact Buehler Service at 847-295-6500 or Support@Buehler.com. Visit www.buehler.com to learn more about our preventative maintenance offers.



Technical Specifications

IsoMet High Speed Pro

Operation

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

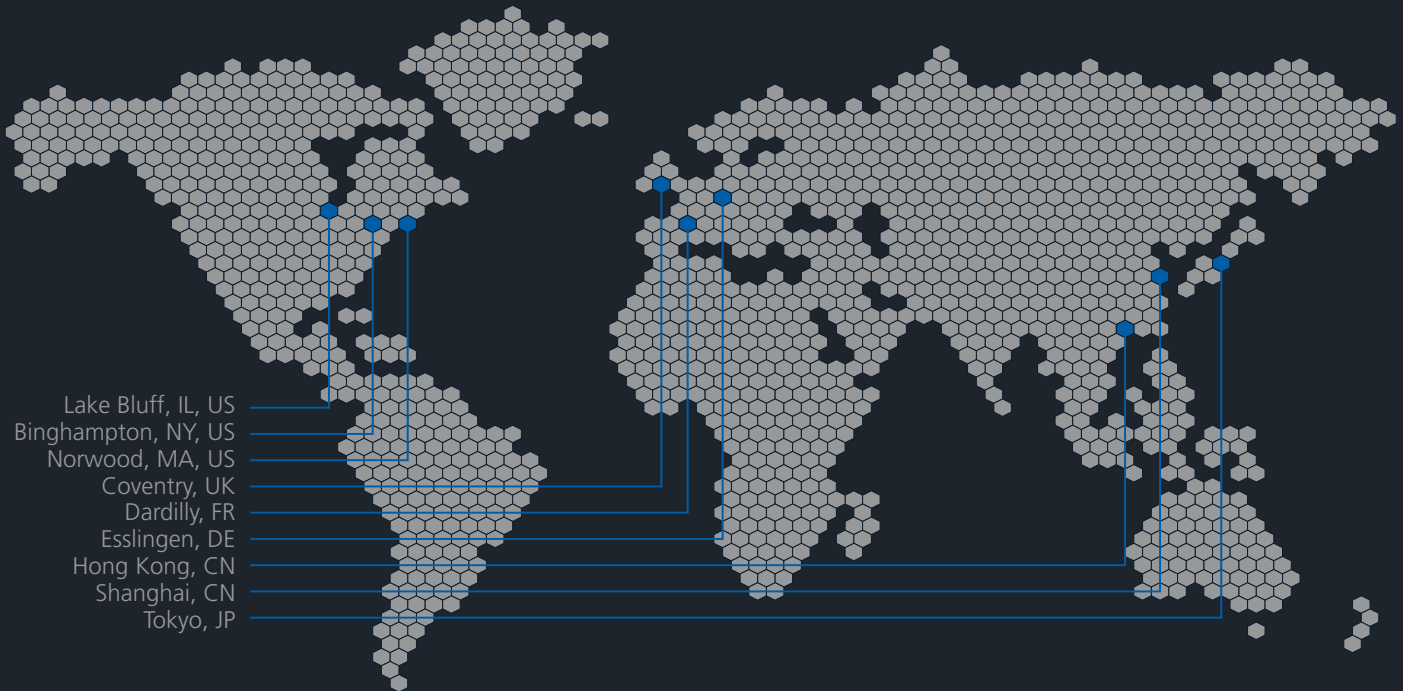
Dimensions

Blade Position Settings	Horizontal: 0 - 2in [0 - 50mm] Vertical: 0 -2in [0 - 50mm]
Cut Length Range	0.01 - 7.25 in [1mm - 184mm]
Cut Length Increment	0.01 in [1mm]
Feed Rate Range	0.04 - 1 in/min [1 - 25mm/min]
Feed Rate Increment	0.01in increments [1mm increments]
Blade Speed	1000-5000rpm
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 [76-203mm]
Abrasive Blade Diameters	5 - 8in [127 - 200mm]
Cut Chamber Size	9in x 20in [228mm x 508mm]
Machine Dimensions	Width: 24in [610mm] Depth: 30in [762mm] Height (Hood Opened): 36in [915mm] Height (Hood Closed): 19in [483mm]
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

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