

IsoMet[®] 1000

Precision Sectioning Saw



Designed to provide consistency and superior cut surface quality.



 **BUEHLER**
Strong Partner, Reliable Solutions

IsoMet[®] 1000 Precision Sectioning Saw

Designed for those who require consistency and versatility in cutting, the IsoMet 1000 is a fully enclosed, precision sectioning saw designed for cutting various types of material with minimal deformation, using blades ranging from 4"-7" [102-178mm]. The various compatible vising options allow for holding all types of sample shapes and sizes, allowing the user to section a wide variety of materials, brittle or ductile, including metals, composites, cements, laminates, plastics, electronics, and biomaterials.

1 Achieve Great Surface Quality

Control the feed rate with the gravity-fed arm and minimize deformation. Adjust the arm weight and counterweight to achieve the optimal combination of speed and surface quality.

2 Intuitive Control

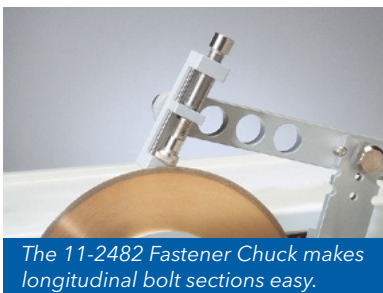
Easily control the sample cut length with the manual wheel, which can be adjusted before or after vising. Control the cutting wheel speed and measurement scale using the membrane touch-pad panel.

3 Extensive Vising Options

The sample arm can hold a variety of compatible vises, and can also be set to stop at a specific adjustable height.

4 Easy Cleaning and Dressing

The coolant tank is easy to remove for sample retrieval and cleaning. It also has a manual dressing stick feed knob for dressing the blade.



The 11-2482 Fastener Chuck makes longitudinal bolt sections easy.



11-2484 Glass Slide Chuck holds petrographic samples for resectioning



The 11-2489 Mount Chuck is ideal for cutting small, cylindrical samples up to 1.5in [40mm] in diameter



Weight arm and micrometer controls are conveniently located outside the cutting compartment.



The 11-2182 Table Saw Attachment effectively sections or trims printed circuit boards or larger samples.

Technical Specifications

Operations

Voltage/Frequency/Phase	85-264V, 50/60Hz, Single Phase
Weight	56 lbs [25kg]
Dimensions	15.5 W x 21 D x 12 in H [394 x 533 x 305mm]
Motor Power	1/8 Hp [90W]
Sound Rating	70dB - no load
Blade Diameter & Arbor	up to 7in [178mm] blade & 0.5in [12.7mm] arbor
Wheel Speed	Adjustable 100-975rpm



Approx. Weight: 56lbs [25kg]

Ordering Information

IsoMet 1000

Includes:

6in [152mm] IsoMet 15LC Blade for sectioning hard, brittle materials, assorted weights, dressing stick, 3in [76mm] flanges and the following chucks: single saddle, bar & tube, wafer and irregular specimen

Part Number	Voltage/Frequency
11-2180	85-264VAC, 50/60Hz



IsoMet® 1000 Accessories

Single Saddle Chuck

11-1187

Sample Max: 0.75in [19mm]



Bar & Tube Chuck

11-1184

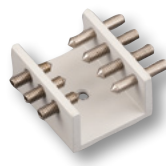
Sample Max: 0.5in [13mm]



Irregular Specimen Chuck

11-1185

Sample Max: 1in [25mm]



Wafer Chuck

11-1186

1.125 x 2in [29 x 51mm]



Vacuum Chuck for Glass Slides

11-1188

1.06 x 1.8in [27 x 46mm]

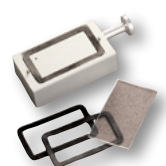


Table Saw Attachment

11-2182

Transforms gravity fed IsoMet 1000 into convenient table saw



Table Saw Splash Guard

11-2186

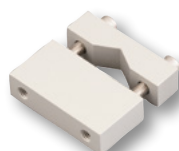
Catches splashing lubricant



Single Saddle Chuck

11-2487

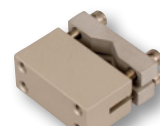
Medium Single Saddle Chuck holds up to 1in [25mm] specimen



Small, Double Saddle Chuck

11-1183

Securely holds specimen up to 0.875in [22mm] from 2 points



Aluminum Flange Set

11-1191 1.75in [44mm]
 11-1192 1.38in [35mm]
 11-2678 2in [50mm]
 11-2679 2.5in [64mm]
 11-2282 3in [76mm]
 11-2283 4in [102mm]
 11-2284 5in [127mm]



Ordering Information

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

[Blade Thickness is listed under Part Number]

Recommended Use	4in [102mm]	5in [127mm]	6in [102mm]	7in [102mm]	Dressing Stick*
IsoMet 30HC - Polymers Rubber, Soft Gummy Materials		11-4239 0.030in [0.76mm]		11-4241 0.03in [0.76mm]	Blade should not be dressed
IsoMet 20HC - Agressive general sectioning of ferrous and non-ferrous materials		11-4215 0.020in [0.5mm]		11-4237 0.025in [0.6mm]	11-1190 11-2490
IsoMet 15HC - Blades for routine use, metal matrix composites, PC boards, bone, titanium, thermal spray coatings	11-4244 0.012in [0.3mm]	11-4245 0.015in [0.4mm]	11-4246 0.02in [0.5mm]	11-4247 0.025in [0.6mm]	11-1190 11-2490
IsoMet 20LC - Hard tough materials, structural ceramics, boron nitride, silicon nitride		11-4225 0.02in [0.5mm]		11-4227 0.025in [0.6mm]	11-1190 11-2490
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]	11-1190 11-2490
IsoMet 10LC - Medium to Soft Ceramics, Glass Fiber Reinforced Composites		11-4285 0.015in [0.4mm]		11-4287 0.02in [0.5mm]	11-1290
IsoMet 5LC - Soft, Friable Ceramics, Composites with Fine Reinforcing, CaF ₂ , MgF ₂ , Carbon Composites		11-4295 0.015in [0.4mm]			11-1290
IsoCut CBN - Ferrous materials, nickel, cobalt, lead-based alloys and super alloys	11-5264 0.012in [0.3mm]	11-5265 0.015in [0.4mm]	11-4266 0.02in [0.5mm]	11-4267 0.025in [0.6mm]	11-1190 11-2490
Cup Grinder for Ceramic & Geological Materials		11-2740			

* All Blades (Except 30HC) come with a Dressing Stick included.

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