

IsoMet™ 1000

Precision Sectioning Saw



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Designed for those who demand sample integrity and rapid sectioning capabilities, the IsoMet 1000 is a fully enclosed, precision sectioning saw designed for cutting various types of material with minimal deformation. Its great versatility in chucking allows for holding all types of sample shapes and configurations giving today's laboratory a precision sectioning tool capable of cutting virtually any material including brittle or ductile metals, composites, cements, laminates, plastics, electronic devices, and biomaterials.

Diamond Wafering Blades

- Accepts 4" – 7" blades
- HC, LC, and CBN blades available

Gravity-fed Specimen

- Loads with sliding weight scale
- Reproducible cutting

Easy Sample Positioning

- Quickly adjust sample cut length
- Allows for adjustment after chucking

Simple Controls

- Membrane touch-pad control panel
- LED display allows operator to quickly set cutting parameters

Versatile Chucks

- Optional rotating chuck to reduce contact area and frictional heat
- Dressing chuck available
- Irregular specimen chucking

Sample Arm

- Holds a variety of chucks
- Can be set to stop a certain position

Enclosed Cutting Chamber

- Transparent hood protects user
- Optional table attachment for larger parts

Dressing Stick Feed

- Manual dial feeds dressing stick into blade
- Allows for blade dressing during a cut

Coolant Tank

- Easy to clean and change coolant
- Easy removal of cut samples



At a Glance

- A wide selection of chucks, fixtures, and rotating vises guarantee proper fixturing
- Gravity feed design allows for reproducibility and minimal sample deformation
- Can be set to turn off at a predetermined cutting depth
- Optional rotating chuck decreases heat from cutting
- Table saw attachment enables manual sectioning of larger parts
- Removable coolant tray for fast cleaning and easy removal of cut samples
- Blade dressing device available for rapid dressing during cutting
- Accepts 4in, 5in, 6in, and 7in diameter blades



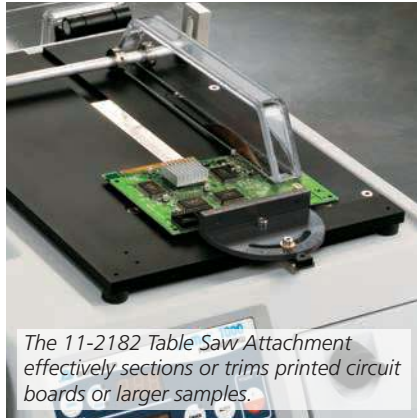
The 11-2181 Rotating/Oscillating Chuck Accessory is available for sectioning difficult materials.



11-2484 Glass Slide Chuck holds petrographic samples for resectioning



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



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



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

Specifications

Voltage/Frequency/Phase	85-264V, 50/60Hz, Single Phase
Weight	56 lbs [25kg]
Dimensions	15.5 W x 21 D x 12in 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

IsoMet 1000

- Simple to operate, gravity fed membrane panel controls
- Rotating vise for larger samples
- Optional table saw attachment
- 0.17Hp motor
- 100-975rpm

(Includes 6in [152mm] IsoMet Blade for sectioning electronic substrates, assorted weights, dressing stick, Cool 2 Fluid, flanges and the following chucks: single saddle, bar & tube, wafer and irregular specimen)



Single Saddle Chuck, 11-1187



Bar & Tube Chuck, 11-1184



Wafer Chuck, 11-1186



Irregular Specimen Chuck, 11-1185



Approx. Weight: 56 lbs [25kg]

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

*Refer to regional maps in footer for product availability

IsoMet™ 1000 Accessories

Small, Double Saddle Chuck

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



11-1183

Table Saw Attachment

Transforms gravity fed IsoMet 1000 into convenient table saw



11-2182

Rotating Chuck Assembly

Rotates specimen chuck to increase the maximum cutting depth of the blade



11-2181

Mount Chuck

Aluminum chuck holds mounted samples



11-1189 1-1.25in [25-32mm]

Glass Slide Chuck

Holds 27 x 46mm, 1 x 2in, or 1 x 3in glass slides



11-2484

Vacuum Chuck for Glass Slides

Holds specimens mounted to glass slides to chuck with vacuum force



11-1188 27 x 46mm

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]

Precision Sectioning Blades for IsoMet™ Saws, 0.5in [12.7mm] Arbor (qty 1)

Recommended Use	4in [102mm]	5in [127mm]	6in [152mm]	7in [178mm]	8in [203mm]	Dressing Stick*
IsoMet 30HC - Polymers Rubber, Soft Gummy Materials		11-4239 0.030in [0.76mm]		11-4241 0.03in [0.76mm]	11-4242 ^{SO} 0.035in [0.9mm]	Blade should not be dressed
IsoMet 20HC - Aggressive Sectioning of Metals		11-4215 0.020in [0.5mm]		11-4237 0.025in [0.6mm]	11-4238 0.035in [0.9mm]	11-1190 11-2490
IsoMet 15HC - Metal Matrix Composite, PCBs, Bone, Ti, TSC	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]	11-1190 11-2490
IsoMet 20LC - Hard tough Materials, Structural Ceramics		11-4225 0.02in [0.5mm]		11-4227 0.025in [0.6mm]	11-4228 0.035in [0.9mm]	11-1190 11-2490
IsoMet 15LC - Hard Brittle Materials, Glass, Al ₂ O ₃ , Zr ₂ O ₃ , 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]	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]	11-4288 ^{SO} 0.045in [1.1mm]	11-1290 ^{SO}
IsoMet 5LC - Soft, Friable Ceramics, Composites with Fine Reinforcing, CaF ₂ , MgF ₂ , Carbon Composites		11-4295 0.015in [0.4mm]				11-1290 ^{SO}
IsoCut™ CBN LC - Fe, Co, Ni based alloys and superalloys	11-4264 0.012in [0.3mm]	11-4265 0.015in [0.4mm]	11-4266 0.02in [0.5mm]	11-4267 0.025in [0.6mm]	11-4268 0.035in [0.9mm]	11-1190 11-2490
IsoCut CBN HC - Fe, Co, Ni based alloys and superalloys	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]	11-1190 11-2490

SO - Special Order. Items may have long lead times and minimum orders.

* All Blades come with a Dressing Stick included. The Part Numbers shown in the table can be used for re-ordering the Dressing Sticks.

For a complete listing of consumables, visit our website at www.buehler.com or refer our Product Catalogue. Buehler continuously makes product improvements; therefore technical specifications are subject to change without notice.

Sectioning
AbrasiMet • AbrasiMatic • IsoMet

Mounting
SimpliMet

Grinding & Polishing
EcoMet • AutoMet • MetaServ

Imaging & Analysis
OmniMet

Hardness Testing
Wilson®



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