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.

- Accepts 4” – 7” blades
- HC, LC, and CBN blades available
- Loads with sliding weight scale
- Reproducible cutting
- Quickly adjust sample cut length
- Allows for adjustment after chucking
- Membrane touch-pad control panel
- LED display allows operator to quickly set cutting parameters
- Holds a variety of chucks
- Can be set to stop a certain position
- Transparent hood protects user
- Optional table attachment for larger parts
- Manual dial feeds dressing stick into blade
- Allows for blade dressing during a cut
- Easy to clean and change coolant
- Easy removal of cut samples
- 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

Sample Arm

Enclosed Cutting Chamber

Dressing Stick Feed

Coolant Tank

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

The 11-2484 Glass Slide Chuck holds petrographic samples for resectioning

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

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.

Specifications

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

**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)*

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Voltage/Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-2180</td>
<td>85-264VAC, 50/60Hz</td>
</tr>
</tbody>
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*Refer to regional maps in footer for product availability.
## IsoMet™ 1000 Accessories

### Small, Double Saddle Chuck
Securely holds specimen up to 0.875 in [22 mm] 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 1-1.25 in [25-32 mm]

### Glass Slide Chuck
Holds 27 x 46 mm, 1 x 2 in, or 1 x 3 in glass slides

11-2484

### Vacuum Chuck for Glass Slides
Holds specimens mounted to glass slides to chuck to chuck with vacuum force

11-1188 27 x 46 mm

### Aluminum Flange Set

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

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

### Recommended Use

**4 in [102 mm]**

- **IsoMet 30HC - Polymers Rubber, Soft Gummy Materials**
  - Blade: 11-4239
  - Arbor: 0.030 in [0.76 mm]

- **IsoMet 20HC - Aggressive Sectioning of Metals**
  - Blade: 11-4215
  - Arbor: 0.020 in [0.5 mm]

- **IsoMet 15HC - Metal Matrix Composite, PCBS, Bone, Ti, TSC**
  - Blade: 11-4244
  - Arbor: 0.012 in [0.3 mm]

- **IsoMet 20LC - Hard tough Materials, Structural Ceramics**
  - Blade: 11-4225
  - Arbor: 0.02 in [0.5 mm]

- **IsoMet 15LC - Hard Brittle Materials, Glass, Al₂O₃, Zr₂O₃, Concrete**
  - Blade: 11-4254
  - Arbor: 0.012 in [0.3 mm]

- **IsoMet 10LC - Medium to Soft Ceramics, Glass Fiber Reinforced Composites**
  - Blade: 11-4285
  - Arbor: 0.015 in [0.4 mm]

- **IsoMet 5LC - Soft, Friable Ceramics, Composites with Fine Reinforcing, CaF₂, MgF₂, Carbon Composites**
  - Blade: 11-4295
  - Arbor: 0.015 in [0.4 mm]

- **IsoCut™ CBN LC - Fe, Co, Ni based alloys and superalloys**
  - Blade: 11-4264
  - Arbor: 0.012 in [0.3 mm]

- **IsoCut CBN HC - Fe, Co, Ni based alloys and superalloys**
  - Blade: 11-5264
  - Arbor: 0.012 in [0.3 mm]

### Dressing Stick*

- **Blade should not be dressed**

*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.