

# BUEHLER®

## AcuThin™

### Cut-off Wheels

- Improved Material Sectioning
- Cooler Cutting Action Across a Wide Range of Materials
- Reduction of Kerf Loss
- Easier Sectioning of Small, Delicate Parts
- Minimal Structural Damage to the Specimen
- Reduced Cutting Costs



BUEHLER® AcuThin™ Cut-off Wheels have been specially developed to improve material sectioning.

**Key Benefits:**

- Cooler cutting action across a wide range of materials
- Reduction of kerf loss
- Easier sectioning of small, delicate parts
- Minimal structural damage to the specimen
- Reduced cutting costs

BUEHLER's AcuThin™ Cut-off Wheels have been formulated for fast sectioning of small, delicate specimens, as well as large, sturdy specimens. These wheels give the user a versatile cutting option that proves effective over a variety of specimen types.

A key feature of the Cut-off Wheels is their ability to reduce kerf loss. Due to the thin design of these blades, surface contact is minimized, resulting in less heat generation and easier cutting during the sectioning process.

An additional benefit of the Cut-off Blade design is that less pressure is needed for proper sectioning. This requirement for less pressure reduces the chances of burning the specimen or altering its inherent structure. In turn, quality, cost-effective sectioning is achieved with a reduction of sub-surface damage to specimens.

Cut-off Wheels have been specially designed to cut a multitude of materials of varying hardness levels. There are two wheels for each diameter size, one for specimens of HRC 45 and above, and another for specimens with hardness levels below HRC 45. When cutting specimens of varying hardness, the user does not have to change the Wheels as frequently and can conveniently cut his specimens with ease.

Cut-off Wheels offer a new cutting technology that can be utilized for sectioning a spectrum of specimen types. Their efficient design makes them ideal for material sectioning in production applications as well as standard laboratory use.

**Ordering Information**

**AcuThin™ Abrasive Wheels**

Catalog Number	Diameter Size Inches (mm)	Arbor Size Inches (mm)	Recommended Use Material, Hardness Level	Thickness Inches (mm)	Bond*/Abrasive
10-4060-010	5" (127mm)	.500" (12.7mm)	Tool, hard steel; HRC45 and above	0.019" (.480mm)	R/Al <sub>2</sub> O <sub>3</sub>
10-4061-010	5" (127mm)	.500" (12.7mm)	Med. hard, soft steel; HRC45 and below	0.019" (.480mm)	R/Al <sub>2</sub> O <sub>3</sub>
11-4207-010	7" (178mm)	.500" (12.7mm)	Steels and Stainless Steel	0.030" (.762mm)	R/Al <sub>2</sub> O <sub>3</sub>
11-4217-010	7" (178mm)	.500" (12.7mm)	Hard or soft; non ferrous materials	0.030" (.762mm)	R/SiC
10-4160-010	9" (229mm)	1.25" (31.75mm)	Tool, hard steel; HRC45 and above	0.025" (.635mm)	R/Al <sub>2</sub> O <sub>3</sub>
10-4161-010	9" (229mm)	1.25" (31.75mm)	Med. hard, soft steel; HRC45 and below	0.025" (.635mm)	R/Al <sub>2</sub> O <sub>3</sub>
10-4260-010	10" (250mm)	1.25" (31.75mm)	Tool, hard steel; HRC45 and above	0.030" (.762mm)	RR/Al <sub>2</sub> O <sub>3</sub>
10-4261-010	10" (250mm)	1.25" (31.75mm)	Med. hard, soft steel; HRC45 and below	0.030" (.762mm)	RR/Al <sub>2</sub> O <sub>3</sub>
10-4360-010	12" (300mm)	1.25" (31.75mm)	Tool, hard steel; HRC45 and above	0.032" (.813mm)	R/Al <sub>2</sub> O <sub>3</sub>
10-4361-010	12" (300mm)	1.25" (31.75mm)	Med. hard, soft steel; HRC45 and below	0.032" (.813mm)	R/Al <sub>2</sub> O <sub>3</sub>

\* R = Rubber  
RR = Resin Rubber

**AcuThin™ Abrasive Wheels**

Number	Fluid	Application	Quantity
11-1193-032	IsoCut® Fluid	IsoMet™ LSS	1 qt. (0.95l)
11-1193-128	IsoCut® Fluid	IsoMet™ LSS	1 gal. (3.8l)
11-2293-016	IsoCut® Plus Fluid	IsoMet™ LS, 1000, 2000, 4000, 5000	1 pt. (0.476l)
10-4330-095	CoolMet 2	Abrasive Cutters	1 qt. (0.95l)
10-4330-128	CoolMet 2	Abrasive Cutters	1 gal. (3.8l)
10-4330-640	CoolMet 2	Abrasive Cutters	5 pt. (19l)

IsoCut® Fluid and IsoCut® Plus Fluid are the two recommended cutting solutions for all precision sectioning saws. IsoCut® Fluid is an oil-based coolant which can reduce cutting times significantly on many types of materials and should be used on any saw sectioning samples which partly consist of a water soluble phase.

IsoCut® Plus Fluid was developed for use on high speed, higher load saws like the IsoMet™ 1000, 2000, 4000 and 5000. This fluid is waterbased.

Buehler continuously makes product improvements; therefore, technical specifications are subject to change without notice. For a complete listing of Buehler consumable supplies, please refer to our Consumables Buyers Guides.

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