

Recirculating Systems



Recirculating System 30 gal [113L]

For AbrasiMet™ M
27 W x 26 D x 24in H
686 W x 660 D x 610mm H

10-2166-200 [Adv 200-240VAC, 50/60Hz]
10-2166-205 [Std 200-240VAC, 50/60Hz]
10-2166-400 [Adv 380-460VAC, 50/60Hz]
10-2166-405 [Std 380-460VAC, 50/60Hz]



Recirculating System 22 gal [90L]

For AbrasiMatic 300
26.5 W x 18.25 D x 26.5in H
674 W x 464 D x 674mm H
(22.5in [572mm]H w/o wheels)

10-2332-260 [200-240VAC, 60Hz]
10-2332-460 [440-480VAC, 60Hz]
10-2332-250 [200-240VAC, 50Hz]
10-2332-400 [380-400VAC, 50Hz]



Cool 3 Fluid

Water miscible fluid
concentrate. Dilute coolant to
1:25 to 2:25, with water.

10-6001 33.8oz [1L]
10-6004 1gal [4L]
10-6010 2.6gal [10L]



Base Cabinet

For AbrasiMet M and AbrasiMatic 300
36 W x 30 D x 36in H
[910 W x 760 D x 910mm H]

80-10001

Recirculating System

Part Numbers	Description
10-2431-400	42 gal [160L] with sloped filter for AbrasiMatic 300 and Delta 30 W x 25.5 D x 24in H 762 W x 648 D x 610mm H



Diamond & CBN Blades for Abrasive Cutters

[Blade Thickness is listed under Part Number] 1.25in [32mm] Arbor (Qty 1)

Recommended Use	Blade Type	8in [200mm]	10in [250mm]	12in [300mm]	14in [350mm]
General Use	Diamond	114608E 0.047in [1.2mm]	114610E 0.051in [1.3mm]		
Hard Materials	Diamond	114808E 0.047in [1.2mm]	114810E 0.047in [1.2mm]	103056 0.055in [1.4mm]	114814E 0.059in [1.5mm]
Ceramic and Petrographic samples	Diamond		114710E 0.047in [1.2mm]	103053 0.087in [2.2mm]	114714E 0.059in [1.5mm]
Plastics and Polymers	Diamond		102557 0.049in [1.25mm]		
General use, hardened steel, HRC55 and Up	CBN				103551 0.079in [2mm]

* 230mm Ø

Visit www.buehler.com for ordering information.



Abrasive Cutter Consumables



Abrasive Blades

Buehler's Abrasive Blades are designed to provide high quality sectioning results with no burning and minimal surface deformation. This can reduce the amount of grinding & polishing required later in the preparation process.

Efficient Cutting with Extended Life

An abrasive blade wears down during cutting to expose new abrasive particles and maintain efficient cutting. However, too fast of a wear rate leads to shortened blade life. Buehler's blades have been designed to balance this wear rate to maintain efficient cutting while extending blade life.

Resin Bond vs Rubber Bond

Buehler's line of abrasive blades includes both rubber bonded and resin bonded blades. While both provide high quality cutting, there are some differences between them. Rubber bonded blades may be thinner for some applications, but emit a burnt rubber odor while cutting. Resin bonded blades offer similar performance with a reduced odor.

Abrasive Blades Selection, 1.25in [32mm] Arbor (Qty 10)

[Blade Thickness is listed under Part Number] *Rubber Bond* = • *Resin Bond* = *

Recommended Use	10in [254mm] Chop/Linear	12in [305mm] Chop/Linear	14in [356mm] Chop/Linear	16in [406mm] Chop/Linear
Superalloys, General Steel, Non-Ferrous	12-4205-010• 0.051in [1.3mm]	12-4405-010• 0.055in [1.4mm] 10-31205-010 0.08in [2mm]	12-4305-010• 0.063in [1.6mm]	10-31605-010* 0.125in [3mm]
Ferrous materials >HRC60	10-4210-010• 0.083in [2.1mm] 102509P* 0.06in [1.5mm]	12-4110-010• 0.09in [2.3mm] 10-31218-010* 0.08in [2mm]	10-4310-010• 0.075in [1.9mm] 103509P* 0.098in [2.5mm]	10-31610-010 0.125in [3mm]
Ferrous materials HRC50-60	10-4212-010• 0.083in [2.1mm] 10-31014-010 0.06in [1.5mm]	10-4412-010• 0.105in [2.7mm] 10-31212-010* 0.08in [2mm]	10-4312-010• 0.09in [2.3mm] 103509P* 0.098in [2.5mm]	10-31612-010 0.125in [3mm]
Ferrous materials HRC35-50	10-4216-010• 0.083in [2.1mm] 10-31014-010* 0.06in [1.5mm]	12-4116-010• 0.105in [2.7mm] 10-31218-010* 0.08in [2mm]	12-4305-010• 0.063in [1.6mm] 103510P* 0.098in [2.5mm]	10-31616-010 0.125in [3mm]
Ferrous materials HRC15-35	10-4220-010• 0.067in [1.7mm] 102511P* 0.06in [1.5mm]	12-4120-010• 0.105in [2.7mm] 103011P* 0.079in [2mm]	12-4305-010• 0.063in [1.6mm] 103511P* 0.098in [2.5mm]	
High Speed Steel, Stainless Steel, Carburized Steel	102508P* 0.063in [1.6mm]	103008P* 0.079in [2mm]	103508P* 0.102in [2.6mm]	
Delicate Cutting	10-4227-010• 0.032in [0.8mm]			
Titanium Alloys, Zirconium Alloys, Ductile Materials	10-4245-010• 0.063in [1.6mm] 102507P* 0.06in [1.5mm]	12-4145-010• 0.087in [2.2mm] 103007P* 0.079in [2mm]	10-4345-010• 0.063in [1.6mm] 103507P* 0.098in [2.5mm]	
Non-Ferrous Materials (Aluminum, Copper, Brass), Very Soft Ferrous Materials	10-4250-010• 0.063in [1.6mm] 102512P* 0.06in [1.5mm]	103012P* 0.079in [2mm]	10-4350-010• 0.087in [2.2mm] 103512P* 0.098in [2.5mm]	10-31650-010 0.125in [3mm]

AcuThin™ Blades (Qty 10)



For certain applications, it is important to minimize the amount of damage done to the sample during sectioning. The AcuThin series offers thin blades that have been developed to minimize the area of cutting thus reducing the amount of damage to the sample. These blades utilize a rubber bond and allow for precise, delicate abrasive sectioning with minimal surface damage. [Blade Thickness is listed under Part Number]

Recommended Use	9in [230mm]	10in [254mm]	12in [305mm] Chop	14in [356mm] Chop
General Use <HRC45	102301 0.032in [0.8mm]	102501 0.04in [1mm]	10-4360-010 0.032in [0.8mm]	10-3501 0.063in [1.6mm]
Ferrous Materials >HRC45	10-4161-010 0.025in [0.635mm]	10-4261-010 0.025in [0.635mm]	10-4361-010 0.025in [0.635mm]	103502 0.105in [2.7mm]

Abrasive Blades Selection, 1.25in [32mm] Arbor (Qty 10)

[Blade Thickness is listed under Part Number] Rubber Bond = • Resin Bond = *

Recommended Use	12in [305mm] Orbital	14in [356mm] Orbital	16in [406mm] Orbital	18in [455mm] Orbital
Superalloys, General Steel, Non-Ferrous	12-4405-010• 0.055in [1.4mm]	12-4305-010• 0.063in [1.6mm]	12-5605-010• 0.075in [1.9mm]	12-5805-010• 0.1in [2.5mm]
Ferrous materials >HRC60	12-4410-010• 0.105in [2.7mm]	12-4310-010• 0.105in [2.7mm]	12-5610-010• 0.125in [3mm]	12-5810-010• 0.153in [3.8mm]
Ferrous materials HRC50-60	12-4410-010• 0.105in [2.7mm]	12-4310-010• 0.105in [2.7mm]	12-5612-010• 0.125in [3mm]	12-5816-010• 0.153in [3.8mm]
Ferrous materials HRC35-50	12-4416-010• 0.105in [2.7mm]	12-4316-010• 0.105in [2.7mm]	12-5616-010• 0.125in [3mm]	12-5816-010• 0.153in [3.8mm]
Ferrous materials HRC15-35	12-4420-010• 0.105in [2.7mm]	12-4320-010• 0.087in [2.2mm]	12-5616-010• 0.125in [3mm]	12-5816-010• 0.153in [3.8mm]
Titanium Alloys, Zirconium Alloys, Ductile Materials			12-5645-010• 0.075in [1.9mm]	12-5845-010• 0.1in [2.5mm]



See Blade Guide for More Information