

Best in Class:

Solutions For Flat Glass Processing



SUPER-CUT
GLASS & CERAMIC DIVISION



Super-Cut is known for pioneering glass and ceramic processing and various cutting-edge technologies supported by a wide range of products. Super-Cut excels at serving the needs of the flat glass industry with its total solutions approach, a team of professionals, and advanced technology.



Metal-Bonded Diamond Wheels

Embedded in a sintered metal matrix, these wheels are offered with segmented or continuous diamond sections. These long lasting wheels are best suited for rough grinding with coarser diamonds for higher material removal. Very fine diamonds are used for arris grinding.

Our Advantage: wear resistance results in higher material removal rate, high grinding efficiency and longer service life. Superior non-load bond systems draw fewer amps and require less stoning.



Resin-Bonded Diamond Wheels

Because the diamonds are bonded with relatively softer resins, these wheels are best suited for edge and arris finish grinding. Engineered for long life, they are able to run at high speeds to produce high quality luster and require low spindle amperage.

Our Advantage: the continuous self-sharpening property of high-quality diamonds produces smooth, chip-free edges and corners.



Peripheral Wheels

Peripheral wheels, with diamond section mounted at the periphery, are designed to deliver flat edge, flat and arris, pencil edge, waterfall, trapezoidal, cylindrical, ogee, bullnose, and many more shapes in a single process, reducing grinding time and increasing productivity. Offered with segmented or continuous diamond sections for CNC and non-CNC machines, they are available for all glass thicknesses and machine settings.

Our Advantage: longer form retention yields longer runs, translating into higher productivity.



Pencil Edging Wheels

Super-Cut manufactures pencil edging wheels for all straight line machines, double edgers, and edging spindles on beveling machines. Our new technologies enable us to offer wheels with free-cutting or longer-life bond.

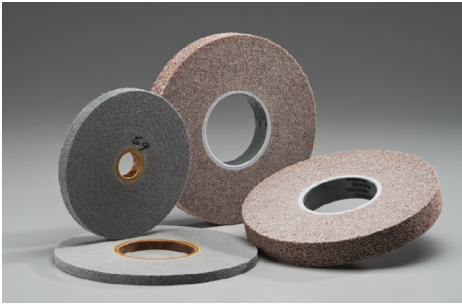
Our Advantage: high grinding speeds and excellent edge quality prevent chipping and promote long life and high productivity.



Polishing Wheels (S40 / S60 / R40 / R60 / R80 / SNBD / X3K / X5K / Felt)

Rubber bonded polishing wheels with aluminum oxide, silicon carbide, cerium oxide abrasives and felt are used after fine grinding for extra clarity and final finish, by sequentially polishing with S40 / S60 / R40 / R60 / R80 / SNBD wheels followed by X3K / X5K wheels. Felt wheel with cerium oxide are also used in the final polishing on glass.

Our Advantage: strong, resilient bond results in longer wheel life, better edge quality, and mirror finishes.



Edge-Deletion / Coat-Removal Wheels

These non-woven fiber wheels are used to remove low e-coatings (metal oxide, silver, silver protector, and other durable layers) that could affect adhesion with insulated glass sealants and eliminate corrosion from metal exposure to the environment.

Our Advantage: higher wear-resistance results in longer wheel life.



Diamond Core Drills, Seamers, Countersunk Tools, Routers, and Traps

For aesthetically pleasing chamfered edges on drilled holes, seamer rings are used with diamond core drills. These also increase furnace yields on tempered glass. Countersunk tools, routers and traps complete the offering. All tool mountings are available upon request.

Our Advantage: our free-cutting action creates lower cycle times and longer tool life, and prevents chipping.

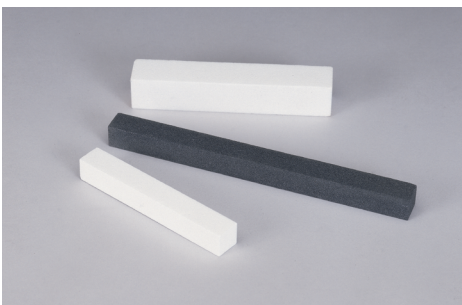


Coated Abrasive Flexibles: Diamond, Conventional, and Engineered

Belts: while conventional and engineered abrasive belts usually run dry, long-lasting diamond belts run wet on automated or manual belt grinders. Premium synthetic backings will not fray, shred, stretch, curl, or crack, and are offered with a strong single joint.

Available in all coated abrasive shapes, sizes, and a wide range of grit sizes from roughing to finishing.

Our Advantages: synthetic backing and friable grains result in high tear-resistance, and uniform and consistent grinding



Dressing Sticks

Dressing sticks are used on diamond tools to re-expose diamonds and optimize glass edge quality and tool feed speed. The dressing stick sharpens diamond worn (glazed) during grinding. A relatively softer abrasive is used to provide greater diamond exposure.

Our Advantage: highly friable grains allow quick and consistent re-sharpening, lower diamond wear, and longer tool life.



Glass Grinding Fluids

Super-Cut glass grinding coolant is a fully synthetic fluid, designed for demanding flat glass processing. Specifically designed to perfectly complement the Super-Cut range of products, our coolant promotes high-quality edge finish, increased line speeds, extremely low levels of energy at the grind zone, and low levels of foam potential, as well as increased product life.

Our Advantage: resistant to biological deterioration, it is formulated with a very efficient settling additive package. This package allows the glass fines to settle out of the solution in a controlled manner, eliminating build-up in return lines and on machine parts.

Product Availability

The most common tool sizes are shown in the table below for standard single-edger and double-edger machine models. With the correct machine make and model number, Super-Cut can custom design and manufacture wheels for any machine.

BOND TYPE	AVAILABILITY	DIAMETER (MM)	WIDTH/THICKNESS (MM)	DI (X IN MM)	BORE (H IN MM)
Metal Bonded Wheels	Diamond Cup, Segmented	175	15	10	Machine Specific
		175	12	10	
		150	15	10	
	Diamond Cup, Continuous	175	10	10	Machine Specific
		150	10	10	
		150	8	8	
		130	8	8	
Diamond Peripheral	For various glass thicknesses and profiles				
Resin Bonded Wheels	Diamond Cup, Continuous	175	10	10	Machine Specific
		150	15	10	
		150	10	10	
		130	10	10	
		130	8	8	
Polishing Wheels	S40/S60	150	40		70
	S40/S60	150	35		70
	S40/S60	130	35		60
	X3K/X5K	150	40		70
	R40/R60/R80	150	40		50
	Spiral Felt	150	40		70
	Spiral Felt	150	25		70
	SNBD Normal	100	20		22
	SNBD Normal	100	30		22
	SNBD Normal	150	15		22
	SNBD Normal	150	20		22
	SNBD (CNC-Water Holes)	100	15		22
Core Drills	Diamond	Diameter range: 5mm to 100mm with OAL 75mm and 95mm			
Grinding Belts	Coated Abrasive: Conventional Engineered (Layered) and Diamond	Machine Specific			
Edge-Deletion Wheels (Coating-Removal)	Non-woven	4-8 inch diameters in various widths			
Hand Pads	Diamond Coated: Flexible	Standard product: rectangular or round			

To expedite your wheel order, please provide the following information:

- ✓ Machine manufacturer, model name and number
- ✓ Arbor hole and mounting hole size
- ✓ Wheel height/thickness and diameter
- ✓ Total number of grinding spindles
- ✓ Grit (mesh) size if available
- ✓ Conveyor speed (inches/minute)

Super-Cut technical experts are available to assist in detail product design and application engineering support.

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