



ABRASIVE CUT-OFF WHEELS

PSI Abrasive Cut-Off Wheels are used in the Metallographic Lab and general fabrication applications to cut sections of material of various thickness and hardness specifications. As with any type of sectioning, liquid lubrication with coolant is critical to successful operation. PSI offers a wide range of abrasive cut-off wheels in a variety of sizes from 4" diameter. Proper selection of the appropriate blade is dependent on the material to be sectioned. Relative hardness of the material is the most easily determined specification and a good starting reference.

Abrasive cut-off wheels are the most commonly used product on the higher speed sectioning equipment. PSI Abrasive cut-off wheels will work well on many materials of varying hardness, including ferrous, non-ferrous, and non-metallic materials. Abrasive cut-off wheels function by "cutting" material with abrasive particles bonded in a resin rubber or rubber matrix that wears away as the material is cut. This controlled wearing of the blade allows new, fresh, sharp abrasive particles to become exposed and continue to cut. PSI Abrasive Cut-Off Wheels are a carefully formulated combination of particle type, particle size, and wheel hardness to prevent burn and distortion, yet provide maximum useful life.

Abrasive Cut-Off Wheels are available in two mineral applications: Aluminum Oxide and Silicon Carbide. PSI Abrasive Wheels with aluminum oxide (Al_2O_3) as the cutting abrasive are generally used for the cutting of steel, most other metals, and alloys. PSI Abrasive Wheels with silicon carbide (SiC) as the cutting abrasive are used for cutting glass, some ceramics, other non-metallic materials and some exotic alloys.

Selecting the correct cut-off wheel is the absolute best method for minimizing time and costs due to producing a surface finish which requires fewer subsequent preparation steps and fewer consumable products. Therefore, producing specimens in a shorter time and at a lower cost.

PSI also stocks cutting accessories such as coolant/rust inhibitors for ferrous and non-ferrous materials and cut-off wheel dressing sticks for aluminum oxide and silicon carbide blades.

PSI stocks all of the items shown below plus many others. Because PSI works very closely with the manufacturer, all of the standard specifications can be altered to fit special metallographic applications. The most frequently altered specification is arbor hole size. Please contact us to discuss your specific need.



ORDER INFORMATION

PART #	DESCRIPTION	PART #	DESCRIPTION
PSI-110-12	Rc60+, 12inx.093in, A/O, 10/Box	PSI-111-12	Hard, 12inx. 105in, SiC, 10/box
PSI-112-10	Rc45-60, 10inx.075in, A/O, 10/Box	PSI-113-10	MedHard, 10inx.075in, SiC, 10/Box
PSI-116-9	Rc30-45, 9inx.075in, A/O, 10/Box	PSI-115-9	Soft, 9inx.075in, SiC, 10/Box
PSI-120-14	Rc20-35, 14inx.093in, A/O, 10/Box	PSI-118C-12	NFerrous, 12inx. 100in, SiC, 10/Box
PSI-125-7	7inx.03inx.5in, A/O, 10/box	PSI-126-7	7inx.03inx.5in, SiC, 10/box
PSI-125-4	4inx.03inx.5in, A/O, 10/box	PSI-126-4	4inx.03inx.5in, SiC, 10/box
PSI-151-BLK	Dressing Stick, .5x.5x6in, A/O	PSI-151-WHT	Dressing Stick, .5x.5x6in, SiC
PSI-166-4	FerrousCoolant/RustInhib, gal	PSI-167-4	NonFerrousCoolant/RustInhib, gal
A/O=Aluminum Oxide		SiC=Silicon Carbide	