

Information on Southern Carbide saws

Southern Carbide Specialists offers carbide slitting saws in a variety of styles, sizes, and tooth configurations. We also offer our slitting saws in coarse pitch, fine pitch, or microfine pitch to accommodate your needs. In order to maintain maximum precision and symmetry during repetitive machining, blade thickness and axial radius are kept to strict tolerance figures. Slitting saws can be used for machining cast iron, steel, and high temp alloys such as stainless steel and other related steel alloys. Applications include non-ferrous machining such as aluminum, brass, bronze, magnesium, zinc, plastics, and non-metals.

If you're working with non-ferrous metals (metals which don't contain iron), Southern Carbide suggests a Coarse Pitch, and we also offer various levels of finer pitch saws for ferrous metals.

In addition to our various sizes, styles and pitches, Southern Carbide can also meet your needs for blade thickness. Our slitting saw thickness tolerance is $+.0002''$ to $-.0000''$. Saw widths from .005 to .750. We also offer our saws in metric sizes.

Why Carbide?

Carbide metal saw blades provide longer tool life and decreased cycle times; thus making them highly effective in long production runs. In addition, carbide is a harder material than steel and so is also more resistant to wear.

Optimum performance can be achieved by following a rigid set up with accurate feed and speed, proper tooth geometry, and coolant use.

Southern Carbide Engineering

At Southern Carbide we have a solid engineering background and are also able to design saws based on your job characteristics, tooling sketches, and drawings. Contact our team of highly qualified engineers to assist you.

JEWELER'S SAWS:

Jeweler's saws are precision cutting tools designed for slotting and grooving thin material in which minimum tooth engagement is desired. Applications include cutting wire, delicate tubing, sheeting and extrusions. The larger diameter results in a higher surface cutting speed even at lower revolutions per minute. Coolant is recommended for the ground teeth. Southern Carbide offers a range of Jeweler's slotting saws with OD ranging from 1 to 4 inches and thickness options between .008-.140. Metric sizes are also available.

KEYWAY CUTTERS:

Southern Carbide keyway cutters are made of premium quality sub-micron grain tungsten carbide. This enables them to make faster, cleaner cuts compared to high-speed steel. They are super finished to reduce cutter drag. Keyway cutters are available in straight tooth configurations for working with harder materials such as high carbon steel. Applications include machining of keyway grooves including re-cut of worn keyways, cutting slots, live tooling, and radius work. Finishes are comparable to a ground surface. Southern Carbide Keyway Cutters are American Standard with OD ranging from 0.25 to 1.5 inches and a 6 to 16 range of flutes. Metric sizes are also available upon request.

CONVENTIONAL & CLIMB MILLING:

In conventional milling the cutter rotation is opposite to the direction of the table feed. In this scenario the width of the chip starts at zero and increases at the end of the cut. This type of cut requires lower force and is preferred for roughing cuts. A disadvantage is accelerated tool wear.

In climb milling, the cutter revolves in the same direction as the table feed resulting in a better surface finish, longer tool life, lower power consumption, and ease of fixturing. A disadvantage is the possibility of backlash depending on the machinery.

