

Sharp Blade Choices For Smooth Cuts

Our blade-buying advice cuts to the bottom line.

Not that many years ago, circular saw blades were simply steel discs with teeth ground around the rim. But today's blades feature tough carbide teeth that stay sharp much longer, and the body of the blade often has laser-cut slots that combat friction, noise, and heat-induced distortion. Special coatings are another friction-fighting feature.

Saw blade tech

All of the technological innovations made the blade's body more stable so that manufacturers could slim down the thickness of the blade, ushering in the era of thin-kerf blades. (The kerf is the blade's width of cut.)



Although a slightly thinner outline may not initially seem like a big deal, it generates an entire cascade of benefits. These include conserving stock and reducing dust, but perhaps the biggest benefit is boosting apparent cutting power at the same horsepower. Without modern blades, the present generation of cordless circular saws would probably still be a glimmer in a toolmaker's eye.

Bi-metal advances

Just as circular blades combine carbide teeth with a steel body, straight blades in reciprocating saws and jigsaws also employ a bi-metal technology. In these cases, though, teeth made from hard (but brittle) tool steel team up with a flexible backing through electron- or laser-welding. The resulting blades are far better than ones made from a single material. In fact, bi-metal blades typically outlast conventional ones by three to one. So you spend your time cutting material instead of fiddling with blade changes.

Just the facts, man

Blade production is a technical field, and it would be easy to get bogged down in the details. To keep things simple, here are our recommendations for blades throughout your shop.

Obtaining the results you want is a matter of balancing the need for speed against the quality of the cut. Fewer teeth generally mean more aggressive cutting at the sacrifice of a smooth surface. A high tooth count often means a smooth cut when the blade is sharp; but when allowed to dull, you soon see burned edges.

CIRCULAR SAW BLADES Equipped with the right blade, a portable circular saw can cut tough jobs down to size in a hurry. For rough cutting and framing jobs with a 7¼" corded saw, choose a carbide-

CIRCULAR SAW BLADES



tipped blade with 18 to 24 teeth. Those same tooth counts are also valid for the 5" and 6½" blades used on cordless saws.

For demolition jobs where you may encounter embedded fasteners, select a blade rated for nail-cutting. When you're building a deck with pressure-treated lumber that's still wet, reach for a special blade that resists bogging down. For finish cuts in both solid wood and plywood, reach for a 36-tooth blade. Steel blades may be in the rearview mirror of technology, but they're still useful for rough carpentry work.

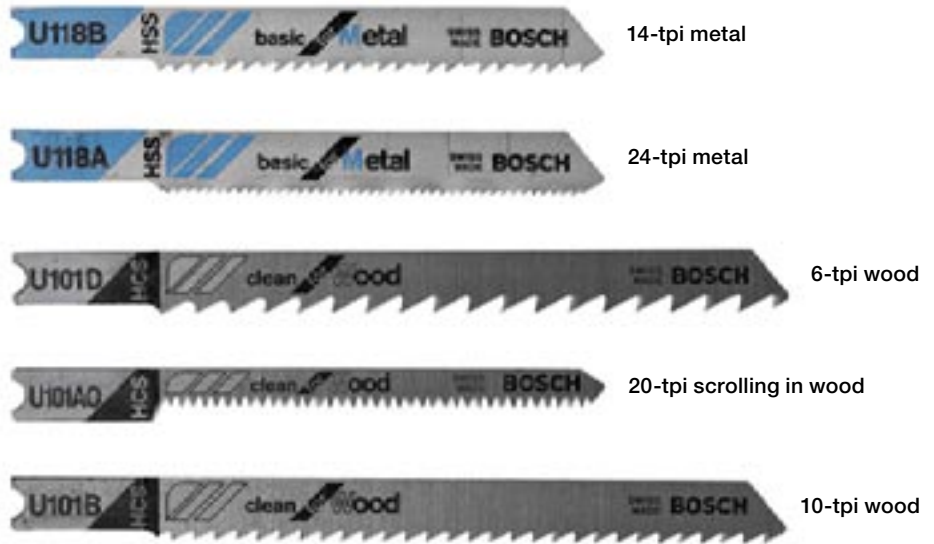
TABLESAW BLADES If you work primarily in veneered plywood, a good crosscut blade will serve you well. In the 10" size, the blade will have 80 teeth. Switch to a 40-tooth combination blade for solid stock.

If you work in both solid woods and sheet goods, making rips (with the grain) and crosscuts, buy two identical 40-tooth combination blades instead. Install one in your tablesaw, and set the other aside. At the first sign of dulling (burned edges and/or increased feed resistance), switch to the second blade and get the first blade cleaned and sharpened. That way, you'll always have a fresh blade ready for action.

For brick and landscaping block, a diamond blade is a better investment than the inexpensive abrasive blades, which dull quickly.

RECIPROCATING SAW BLADES This tough saw can be a remodeler's best buddy, rapidly chewing through demanding

JIGSAW BLADES



demolition tasks. A 6" blade shown *below* with 6 tpi (teeth per inch) is a good choice for most jobs because it combines ample capacity with fast cutting and ample rigidity. For demolition jobs, it pays to buy good-quality blades that will slice through nails without complaint.

Some now use a "progressive" tooth spacing, where teeth are close together near the tang for thick stock and wide near the end for thick stock.

For jobs where you're attacking thicker material, move to a longer blade such as the 10" blade (not shown). Like the shorter version, this blade also has 6 tpi.

A 10-tpi blade will yield a smoother surface, but you'll rarely use a reciprocating saw for finished cuts.

For metal cutting, select a blade that's engineered to handle the job. Choose a blade with 18 to 24 tpi depending on the thickness of the metal—the thinner the stock, the more teeth.

JIGSAW BLADES Recommendations for jigsaw blades (shown *above*) closely follow the advice for the reciprocating saw: 6 tpi for rough cuts and 10 tpi for smoother cuts. For cutting a tight radius, choose a blade that has a narrower body—this is typically called a "scrolling" blade.

If your jigsaw has a provision for switching from reciprocating to orbital action, you'll gain further control over your cut. A reciprocating (straight up and down) motion yields a smoother surface but requires more time. Orbital action gives a faster but rougher cut.

Switch to a new blade

Trying to coax additional cuts out of a dull blade is false economy. It wastes your time, wears out your arms, stresses your motor's bearings, and overheats your patience. In addition, a burned surface is nearly worthless from a gluing standpoint. Switch to a new blade as soon you sense that a cut requires additional effort. 🛠️

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RECIPROCATING SAW BLADES

