



SAWING PRODUCTS

Ordering the Right Blade

The part number you will use in ordering is a combination of the catalog number and six more digits that represent the band length to three decimal places. The following examples would be used to order blade 303 133 in various band lengths:

- 180 inches: 303 133**180.000**
- 132-1/2 inches: 303 133**132.500**
- 93-1/4 inches: 303 133**093.250**

Selecting the Optimum Blade Pitch

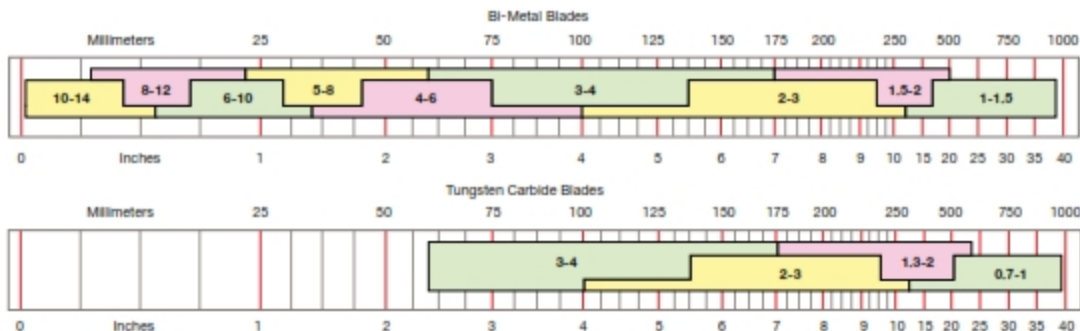
For best results a minimum of 3 teeth and maximum of 24 teeth should be in contact with the workpiece at any given time. Determining the proper pitch is based on the length of this contact.

For solids, this length is determined by measuring the diameter of a round or the side of a rectangle. For tubing, use two to three times the wall thickness. For structurals, use the contact length through most of the cut.

Find this length in the appropriate table below.

- The primary pitch recommendation is in the thicker section directly above or below that length.
- The secondary recommendation is in the thinner section.

Example: To cut 5-inch work using a bi-metal blade, 3-4 pitch is the primary recommendation. 2-3 pitch is the secondary recommendation.



Note: These pitch recommendations are based on typical applications. For more detailed recommendations, contact DoALL's Solutions and Applications Manager (SAM) at 888-362-5572 or www.doallsawing.com

Blade Break-in Procedure

Always break in a new band saw blade.

The blade break-in procedure dresses and strengthens new, ultra-sharp teeth. Proper break-in can increase band life by 25 to 50 percent.

Breaking in the blade









- Saw at the recommended band speed.
- Cut at 1/2 the normal feed rate. (Cuts should take twice as long).
- Cut for 20 minutes (40 minutes for DoALL Powder Metal blades), then increase feed force in steps until you attain the normal cutting rate.

To ensure penetration in very tough and work-hardening materials, you will need to apply more feed force and cut at a faster rate than described above.

Sawing after break-in

After break-in, as the blade gradually dulls, you will need to periodically increase the feed force to maintain cutting rate. When the blade is too dull and the feed force too high, excessive band deflection will cause the blade to cut out of square.

Chip Analysis

Chip Form								
Condition	Thick, Hard & Short	Thick, Hard & Brittle	Thick, Hard & Springy	Thin, Hard & Springy	Thin, Curly & Springy	Thin, Straight & Springy	Powdery	Thin, Tightly Curled
Color	Blue or Brown	Blue or Brown	Silver or Light Straw	Silver	Silver	Silver	Silver	Silver
Band Speed	Reduce	Reduce	OK	Reduce Slightly	OK	OK	Reduce	OK
Feed Rate	Reduce	Reduce	Reduce Slightly	Increase Slightly	OK	Increase	Increase	Reduce
Other	Check Cutting Fluid & Mix Ratio	Check Cutting Fluid & Mix Ratio	Check For Correct Blade Pitch	Check For Correct Blade Pitch				Use A Coarser Pitch Blade