

Bandsaw Safety

Jeff Langsner and the TCWT assume no responsibility for your woodworking safety. The rules and guidelines listed on these pages are only informational reminders.

You must read familiarize yourself with applicable safety rules, read and understand any safety manuals and operate machinery in a safe manner.



Safety Rules

- Disconnect power to the bandsaw whenever you work on it.
- Keep the area around saw clean. Keep your bandsaw clean.
- Always wear safety glasses, hearing protection and a dust mask
- Never remove the guard
- Wear gloves when you handle a naked blade
- Never cut materials containing nails, screws or other metallic objects.
- Make all cuts under power, not while the blade is coasting.
- Never adjust the saw or set up while the saw is running.
- Never cross arms. Don't reach across the blade.
- Always follow the 4" rule. Keep your hands at least 4" away from the blade when the saw is running.
- Never push on back of the workpiece with your fingers or thumb. Keep your fingers out of the path of the cut.
- Do not force a wide blade on a cut of small radius. Use relief cuts when cutting sharp curves.
- Never back out of a curved cut. If the blade is pinched bring the saw to a stop to back out of the cut.
- Never clear small pieces from the table while the blade is moving.
- If blade breaks stand clear and stop the saw.
- If machine is malfunctioning, STOP IMMEDIATELY.



Operation of the Bandsaw

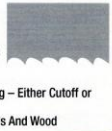
- Put on your safety glasses, hearing protection and other PPE
- Make sure the blade is properly tensioned.
- Use the proper blade for the task at hand.
- Adjust the guard about to $\frac{1}{4}$ " to $\frac{1}{2}$ " above work piece. Keep the naked blade area to a minimum.
- Use dust collection
- Wait for the blade to reach full speed before cutting.
- Plan your cuts. For long curves allow yourself to exit the piece in a forward direction if necessary. For small radius cuts, bore a turning hole or make relief cuts.
- Hold stock firmly against table.
- Use a jig to cut very small items or to cut cylindrical or irregular stock.
- Feed stock at a rate appropriate for the cut. **Don't force the cut.**
 - Don't overheat the blade.
 - Cutting too fast will damage motor and may cause injury.
 - Cut only as fast as the blade can properly remove material.
- Use a push stick for cuts that would bring your hands close to blade (within 4" of blade).
- While cutting, keep fingers and hands from passing through the plane of the saw blade. When moving hands, pick them up and bring them into you first. Never slide or swing arms around saw.
- If it is necessary to remove scrap or small pieces away from the blade, **BRING IT TO A COMPLETE STOP** and use a stick or brush to remove it. Don't use your hands.



BANDSAW BLADE SELECTION FOR BOWL BLANKS

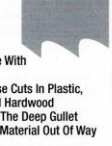
REGULAR BLADES

- Most Common Type
- Straight Faced Teeth With Even Spacing And Deep Gullets
- Straight Or 0° Rake
- Use For General Purpose Cutting – Either Cutoff or Contour Sawing In Thin Metal
- Used To Cut Most General Metals And Wood



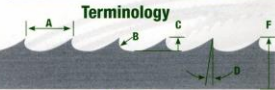
HOOK BLADES

- Deep Gullet With Larger Teeth Widely Spaced
- Often Feature An Undercut Face With Positive 10° Rake Angle
- Use To Make Faster, More Coarse Cuts In Plastic, Metal, Thicker Wood Pieces And Hardwood
- Used In Making Longer Cuts As The Deep Gullet And Rake Angle Help Move Cut Material Out Of Way

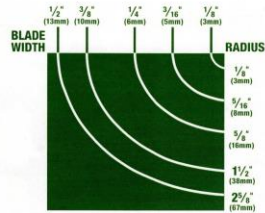


SKIP BLADES

- Shallow Gullet And Widely Spaced Teeth
- Feature A 90° Tooth And 0° Rake
- The Sharp Angle At The Tooth Gullet Allows Chips To Come Out Cleanly
- Used For A Variety Of Woodworking Applications And Used To Reduce Clogging
- Use For Softwoods, Plastics, Or Nonferrous Metals That Could Gum Up The Blade



- Terminology**
- A. Tooth Spacing
 - B. Gullet
 - C. Tooth Height
 - D. Hook Angle
 - E. Tooth Set
 - F. Blade Width
 - G. Blade Thickness



PROPER BLADE WIDTH

- When Cutting Curves, The Width Of The Blade Will Determine The Smallest Radius That May Be Cut
- Wide Blades Are Most Often Used For Resawing Or Straight Line Cuts
- Smaller Width Blades Are Used For Smaller Radius Cuts

PROPER BLADE TEETH PER INCH (TPI) OR PITCH

- To Achieve A Smoother, More Refined Cut, Choose A Blade That Has More TPI
- The More TPI, The Finer The Cut Will Be; The Fewer Teeth Per Inch, The Rougher The Cut Will Be
- High TPI Configurations Should Be Used On Thinner Materials And May Require A Reduced Material Feed Rate
- Low TPI Configurations Should Be Used On Thicker Materials And May Require A Higher Feed Rate

Section Size (Inch)	Constant Pitch (TPI)
5/16" - 3/8"	32 or 24
1/4" - 1/2"	18 or 14
1/2" - 3/4"	14 or 10
3/4" - 1"	10 or 8
1" - 1 1/2"	8 or 6
1 1/2" - 3 1/2"	6 or 4
3 1/2" - 7"	4 or 3
7" - 10"	3

Blades for Roughing Bowl Blanks or Milling Green Logs – Timberwolf Blades

Blade Width x Teeth Per Inch	Blade Thickness	Thickness of Work Material to be cut					Tooth Hook Angle	Tooth Set Pattern
		Kiln Dry Wood (Unless Specified) (H) = Hardwood (S) = Softwood	Plywood, MDF & other Composites	Metal & Plastic	Radius of Cut			
<u>3/8" x 3AS</u>	.032	(H) & (S) 3" – 12" (green wood)			1 1/4"	6.5°	Alternate Set	
<u>1/2" x 2AS</u>	.032	(H) & (S) 6" – 15" (green wood)			2 1/2"	6.5°	Alternate Set	
<u>1/2" x 3AS</u>	.032	(H) & (S) 3" – 12" (green wood)			2 1/2"	6.5°	Alternate Set	

Woodturner's 3/8 inch Bandsaw Blade (Highland Hardware)

Creating bowl blanks from green wood on the bandsaw can be taxing for standard blades. Our 3/8 inch wide WoodTurner's Bandsaw Blade, with its 3 TPI, alternate set tooth pattern & stout band thickness of .032 inch, is just the blade for the task. The significant tooth set of this blade provides ample room to keep the blade zipping along through dripping wet, kerf-closing, growth-tensioned logs. The deep, rounded, hook-toothed gullets allow chips to be easily removed from the kerf enabling quick, aggressive cuts. The hardened teeth (RC64-65) stand up to dulling bark & log grime (we recommend removing as much grit as possible from your stock before cutting with any blade). The 3/8 inch wide band allows a cutting radius as small as 1-1/2 inch.