

TIMBER WOLF

Silicon Steel Blades

Supplied by
The Suffolk Machinery Corp.
Carolina Welding Center

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Timber Wolf Index

Page 1 - Cover

Page 2 - Index

Page 3 - A Letter From the CEO

Page 4 - What Is A Set Tooth Narrow Band Saw Blade?

Page 5 - Important “Did You Know” A, B & C

Page 6 - Important “Did You Know” D, E & F (part 1)

Page 7 - Important “Did You Know” F (part 2)

Page 8 - Important Information for Vertical Wood Cutting

Page 9 - Blade Description

Page 10 - Proper Blade Tension

- **For Turn Screw & Spring Tensioning Machines**
- **For Hydraulic Tension**
- **For Air Bag Tension**

Page 11 - Choosing the Proper Band Saw Lubrication

Page 12 - Always Detension Your Bands / What is Appropriate Set?

Page 13 - What is Hook Articulation?

Page 14 - WARNING / Gullet Procedure Sharpening

Page 15 - There are 4 Parts to a Band Saw Blade

Page 16 - Silicon Steel Tooth Pitches Available

Page 17 - BiMetal Tooth Pitches Available

Page 18 - Silicon Steel Blade Selection Chart (Part 1)

Page 19 - Silicon Steel Blade Selection Chart (Part 2)

**Page 20 - Urethane Band Saw Tires / How to choose correct length
of blade**

A Letter From the CEO.

Hello,

Thank you for your interest in our company's products. We've been in the woodworking business since 1976 and are very proud of our evolution over the years. We feel it is our job to help our customers achieve the maximum production and life from our products whether that is done by offering the best blades on the market or through education.

Thanks to my father, I first fell in love with band saws and woodworking when I was 8 years old and that appreciation has only grown through the years. As a young apprentice, I saw my father's frustration when trying to re-sharpen and reset blades, in his own primitive way, to make them cut better. And they did! Many years later, when researching and developing the best woodcutting blades possible with our partners in Sweden, I was reminded of the trials and errors of my father. For that reason, Timber Wolf® band saw blades have been a tremendous personal investment.

The manufacturer in Sweden that we have teamed up with many years ago is the granddaddy of band saw blade technology. They invented the applied science of Electro-heat induction hardening (known as high-frequency hardening) in Sweden in 1946. This technology breakthrough was a closely held secret for 40 years and has given them and us a big advantage over our competition.

Our exclusive use of low tensioned, high ductile Swedish silicon steels, working in combination with our unique geometric gullet designs and sets, has resulted in our having many of the finest band saw blades in the world. All of our teeth are milled, not stamped or crush-ground. Our quality control is unsurpassed in the business. In fact, we are considered a leader in the manufacturing of specialized set tooth, high performance blades.

Our reputation and service is excellent. We guarantee all orders to be shipped within 48 hours, courteous personnel, and an awesome Technical Service Department.

Give us a try, you have nothing to lose. Everything we sell has an unlimited time and performance guarantee. We guarantee all of our welds except on blades shorter than 65" in length or any blade that has been improperly sharpened. We do not, however, guarantee blades that are run on any three-wheel machine. If you do not like our blades we will refund your money and pay the freight upon their return. This also gives us a second chance... the opportunity to analyze the blades in order to determine why they did not meet your satisfaction.

Sincerely,
Art Gschwind
CEO and Founder

WHAT IS A SET TOOTH NARROW BAND SAW BLADE? WHAT MAKES THEM GOOD, BETTER OR BEST?

FIRST: The band is a strip of steel, whose quality and dimensions are controlled by the blade manufacturer. The more malleable and flexible the steel, the higher the price. Quality, flexible steel dramatically increases band blade body life.

SECOND: The tooth gullet and pitch are either milled, crush ground or stamped out. Milling is the ultimate way to produce a finished tooth configuration with a smooth, frictionless surface and superior sharpness. Crush grinding is much quicker and cheaper than milling, but produces only a 55% finish. Stamping, even after tip filing or kiss grinding, produces at best, a 23% finish. A dedicated gullet geometry, geometrically designed for the work it is intended to do, not only increases cost in its manufacturing time but also dramatically increases the tooling cost necessary to produce the tooth configuration. The gullet and its geometry make or break the overall life of the band.

THIRD: The setting of the teeth is done next. Although setting is universal, how accurately and where you set the tooth again influences band saw blade life.

FOURTH: Heat treating and straightening of the tooth and band body is done. This process can run the gamut from state of the art full service electro heat induction hardening all the way down to the antiquated flame hardening process. As you can imagine full service, state of the art induction hardening cost a lot more than the cheaper methods of electro induction tip hardening or flame hardening.

FACTS

1. The more flexible and malleable the steel the more dramatically lower the tension applied to the body of the band must be. This intentional use of low tension, high quality steel gives you increased band body life and proportionally increases the overall life of your machine's bearings, shafts and wheel surfaces. The horse power needed to run a special low tension band averages 30% less
2. A milled, dedicated tooth geometry lasts at least 50% to 75% longer in total service time, over any other method of manufacturing.
3. State of the art heat treating does dramatically increase overall band body life.
4. To my knowledge there is only one manufacturer of Band Saw Blades made on Earth that IS all of the ABOVE!!! **GSCHWIND GROUP!**

IMPORTANT "DID YOU KNOW"

- A. WARNING: We manufacture a very special series of LOW TENSION, HIGH DUCTILE, SILICON STEEL BAND SAW BLADES for wood cutters and sawyers. At the present time from 1/8" through 2". Our blades run purposely with 35% to 50% less tension than our competitor's carbon blades. Being very stable at low tension, over 70% of the rotation fatigue effect is eliminated, increasing blade body life (flex life) dramatically, and 20% LESS HORSEPOWER IS REQUIRED. Please read "THE 6 RULES OF SAWING" for proper tensioning.
- B. Check your tires and guides. Our Silicon Steel Blades like all other narrow carbon band saw blades 2" and under, run best on a cushion of urethane or rubber. The shock absorbing quality of resilient tires around metal band saw wheels, extend blade body life dramatically. Modern band saw wheels have a crown machined across the face of the metal wheel. This crown can be as little as .010 thousandths, for tracking 3/4" and narrower bands, or as much as .030 thousandths for tracking 2" bands. This crown causes the effect of self-tracking. This is the same principle used for tracking sanding belts on a belt sander. Age, over tensioning and not detensioning the blade after use, compress and flatten the crown out of the tire. This compression will also make the tires hard and brittle. Old tires cause band breakage!
- C. How do you know when the time has come to replace your tires? Simply by looking at them. When the crown in the tire has flattened out equal to 1/2 the width of the blade you are using, the time has come to replace them. At this point the tension you apply must increase in order to stabilize the blade. Always try to keep 6 to 8 teeth in the cut at all times; this is for metal or wood cutting. It will give you stability and more of an accurate cut when scrolling or straight-line cutting. This rule does not apply when resawing or milling logs and cants. With a constant pitch, the appropriate set of the teeth and the articulation of the hook angle become the most important factors when using 1 1/4" to 2" resharpenable and resettable blades. Please read "THE SIX RULES OF SAWING".

- D. Fatigue Ratio of a Band Saw Blade: The stress being applied to the blade body; due to wheel diameter, blade length, thickness, speed (surface feet per minute-S.F.P.M.) and tension.

Blade Body life diminishes rapidly when put into any one or more of the stressful situations listed above. You will find some stress built into the band saw by the manufacturer, either by mistake or by design.

- E. Band Saw Mills running 1 1/4" and larger blades by .042 thick on wheel diameters smaller than 19" will also experience decreased blade body life (flex life) due to the smaller wheels. The blade as it travels around the wheel is compressed on the inside of the body, which is closest to the wheel and stretched on the outside of the body. Blades are designed to absorb repeated compression and expansion of the body as long as the compression and expansion does not exceed the steel's capabilities. Small band saw wheels exceed the steel's capabilities. Two wheel machines, with smaller than 14" wheels, using 1/8" to 3/4" blades will encounter 20% to 50% less blade life. With machines 14" and larger, you will see blade life increase proportionally. You will encounter decreased blade life with any three-wheel band saw even if the wheels are larger than 14".

- F. Examples of optimum Surface Feet Per Minute on **vertical band saws** running 1/8" to 1" wide blades. It is not considered wise to exceed these values.

WHEEL DIAMETER	S.F.P.M.	WHEEL DIAMETER	S.F.P.M.
12"	= 2,800	24"	= 4,000
14"	= 3,300	26"	= 4,000
16"	= 3,800	28"	= 4,000
18"	= 4,000	30"	= 4,000
20"	= 4,000	36"	= 4,000

As you exceed the S.F.P.M. for a specific wheel diameter, you greatly increase the centrifugal force applied to the body of the blade traveling around the two wheels. This causes you to over-tension your blades in order to make them run stable. This WILL cause premature and excessive blade breakage. There is also a minimum speed you should run a band saw blade. (EXAMPLE: Timber Wolf® band SAW blades should not run under 2,400 S.F.P.M. and Timber Wolf® band MILL blades should not be run under 4,000 S.F.P.M.)

Example of Surface Feet Per Minute on a **band mill or power feed resaw** running 1" to 2" wide mill blades:

Blade Width	Tooth Pitch	Gullet Depth	S.F.P.M.
1" & 1 ¼"	¾"	¼"	5,300
1 ¼" & 1 ½"	7/8"	9/32"	5,800
1 ½"	1"	5/16"	5,800
2"	1"	5/16"	6,300

THE FORMULA TO FIND S.F.P.M. IS:
 MOTOR R.P.M. X MOTOR PULLEY DIAMETER ÷ DRIVEN PULLEY DIAMETER X
 BAND SAW WHEEL DIAMETER X 3.1416 ÷ 12 = S.F.P.M.

IMPORTANT INFORMATION FOR VERTICAL WOOD CUTTING BAND SAWS

Now I would like to talk to the WOODWORKERS using, small to medium, vertical two wheel wood cutting band saws. MACHINES LIKE THE SEARS, DELTA, SHOP-SMITH, ROCKWELL, JET, GENERAL, POWER-MATIC, GRIZZLY, WILKE, MINI-MAX, YATES AMERICAN AND THE GOOD OLD WALKER TURNERS, TO NAME A FEW.

Maybe you can tell my age when a machine like the Walker Turner pops into ones mind so easily. It was the summer of 1951 and I was 8 years old. My father had drawn a duck profile on a piece of 3/4" pine. He proceeded in giving me a crash course, concerning the use and safety, for using his band saw. When he was satisfied I understood, he handed me the piece of pine, with the profile on it and said, "Cut it out," I did. From that moment woodworking was in my blood. Exactly how I ended up designing, manufacturing, and marketing band saw blades is another story. By the way, the band saw my father taught me on was a relatively new 14" Walker Turner band saw.

I hope you have taken the time to read the "IMPORTANT DID YOU KNOW" information. I cannot over stress the importance of proper blade TENSIONING, understanding the useful life of the tires and proper setting and adjusting for the blade guides. VERY IMPORTANT: If your machine is over 5 years old, DON'T overlook the shafts and wheel bearings, especially if you leave your bands on the saw UNDER TENSION, when not in use. They have a useful but limited life. Just because they TURN, does not mean they are good. Bad bearings can turn easier than NEW bearings. As a matter of fact, most small to mid-range machinery manufacturers, usually supply as original equipment, inexpensive standard bearings in their machines. When replacing your bearings, ask your dealer to supply you with the next grade or two higher in bearing quality, it is worth it. Bad bearings wobble. That is the easiest way to explain it, they wobble from wear. A SIMPLE RULE IS: If you can hear your bearings, they are VERY bad!

Unlike our 1 1/4" blades that need a bit of understanding, our 1/8" thru 1" wood cutting bands do not. They are ready to go. We do not make hook and skip tooth blades. The skip and hook designs that are used in carbon bands today, are 45 year old or older basic metal cutting designs. The fact that they cut wood is secondary. Our "PC" and "AS" series bands are true wood cutting band saw blades. They have well thought out approach angles and gullet symmetries; combined with unique set patterns.

It is very difficult to explain, in our catalogue, the "HOWS" and "WHYS" for each of the series of bands and tooth pitches we manufacture. Therefore, we ask you to please CALL OUR TECHNICAL SERVICE DEPARTMENT and let us help you pick the bands you are looking for. We can completely explain their functions. We unconditionally guarantee that these are the best wood cutting bands you have ever used. By the way, we have NO MINIMUM ORDER requirements. We accept Checks and Money Orders, we also ship C.O.D. We have worked very hard to write an INFORMATIVE and INTELLIGENT catalogue. We hope we are a VALUE to you.

If we can be of any further assistance, please give us a call at 1-704-460-9479.

Blade Descriptions

THE PC (Positive Claw): The PC design has sixty percent of the feed speed capabilities of a hook tooth, while at the same time giving you the great finish of a skip tooth. The depth and roundness of the gullet increases sawdust removal and cutting speed while the milled teeth help to reduce consumption of horsepower. Couple all this with our unique 6.5° rake angle and special 5 tooth set pattern and you have an awesome cutting blade that glides through the wood and produces an excellent finish and gives you great overall life. These blades are available in widths of 3/16" through 1" wide and the following teeth per inch... 2, 3, 4 and 6. These blades are mainly used in kiln dry wood.

NEW!! THE VPC (Variable Positive Claw): The blade is only available in 3/4" x 2/3 variable pitch. It is designed for straight-line resawing in small to large boards, green or dry, up to 12" wide. The variable pitch tooth design reduces resonance throughout the blade by using different size teeth, which produces a very clean finish almost polishing the wood as it cuts. It is only .025 thick with an overall kerf of .048 and incorporates the unique geometry of our PC tooth design.

THE AS (Alternate Set): These blades are only available in 3/8" x 3tpi, 1/2" x 3tpi and 1/2" x 2tpi. These blades are unique in their body thickness, set, and rake angle. They are .032 thick, have a full alternate set, a unique rake angle of 8.5° and also incorporate the unique geometry of our PC tooth design. These blades are primarily used by wood-turners and wood-carvers when roughing out blanks from burls and logs. Their performance is excellent if the thickness of your material exceeds 6 to 8 inches these blades are not meant to be used on three wheel band saws or any saw with less than 90" blade length or a wheel diameter of less than 14".

THE AS-S (Alternate Set Special): This blade is only available in 3/4" x 3tpi. Its uniqueness lies in the fact that it is only .025 thick with a unique set pattern. This blade also utilizes the unique geometry of our PC tooth. The total overall kerf is .048. This blade is specifically designed for straight-line veneer cutting. When you are resawing very expensive woods that are thick and you want as thin a kerf as possible, a supper finish, and you are not concerned with speed, this is the blade for you.

THE RK (Raker) & HP (High Performance): These blades have a very thin kerf and 0° rake angle and are specifically designed for detail work in 1" and smaller kiln dry wood when a very clean finish is required. They are also very effective in plywood, particleboard and other similar products where tear-out is a concern. These blades can also be used to cut soft metals. RK available in widths from 3/16" through 1" and 8, 10, 14, 18 and 24 teeth per inch. HP available in 1/8" x 14 teeth per inch only.

PROPER BLADE TENSION

FOR TURN SCREW AND SPRING TENSIONING MACHINES

1. Remove (Top & Bottom) guides -- you CAN'T run this test if the band saw blade is restricted in any lateral movement.
2. Make sure tire surfaces are in good condition--they cannot be hard, flattened out, cracked or brittle. On mills with loose fitting V-belts, replace them with the next size down so they are tight fitting. This will eliminate over 80% of the vibration in your mill and the blade.
3. Mount the blade on the machine and apply the tension to the band that the manufacturer recommends for other steels.
4. Close all covers for **safety** purposes.
5. Start the machine, engage the clutch into the high speed cutting mode. **NOTE:** You will not be cutting any wood.
6. Stand at the head of the machine, with your hand on the turn screw tensioner and your eyes on the band saw blade. **Very slowly** start detensioning by half turns at a time, keeping your eyes on the band saw blade. The object is to bring the tension of the blade down to a point that the blade starts to flutter. TAKE YOUR TIME. *This Flutter is a CONTINUES 1/4" side to side movement.
7. When you see the band start to flutter, you have hit ground "ZERO". Now start ADDING quarter turns of tension, SLOWLY, until the band stops fluttering and is running stable again. At this point ADD one-eighth to one-quarter turn of tension.
8. You have now tensioned our blade correctly. Shut off the machine and put your guides back in place. You are now ready to start sawing.
9. ALWAYS DETENSION YOUR BAND SAW BLADES. Since you do not know exactly where the proper tension is, it will be easier to remember if you take off 8, 9, or 10 full turns of tension until the band is completely relaxed. The next time you use our bands, add the same amount of turns of tension that were taken off. At this point, you will only have to run the flutter test one time.

FOR HYDRAULIC TENSION

Run the same test as above. With hydraulic tension you need to detension 20-25 lbs. at a time. After you have removed the flutter, add an extra 50 lbs. of pressure. Remember the pressure on your gauge. ALWAYS DETENSION YOUR BAND SAW BLADES. The next time you use our band, tension it to the same setting you found after running the flutter test.

FOR AIR BAG TENSION

Run the same test as above. With air bag tension, you need to detension 15 lbs. at a time. After you have removed the flutter, add an extra 15 lbs. of pressure. With the air bag tension you usually have a gauge and you will know exactly where low tension is by reading the gauge. ALWAYS DETENSION YOUR BAND SAW BLADES. The next time you use our band, tension it to the same setting you found after running the flutter test.

WARNING: IF YOU DO NOT RUN THE FLUTTER TEST ON OUR SPECIAL SILICON STEEL BLADES, YOU WILL NOT ACHIEVE THE ENDURANCE AND LONGEVITY THAT OUR HIGH DUCTILE BANDS ARE CAPABLE OF.

CHOOSING THE PROPER BAND SAW BLADE LUBRICATION

NEVER USE WATER as a lubricant on band saw blades. Water is NOT a lubricant and is the WRONG thing to use for many reasons.

1. For the woodworker using 1" and 1 1/4" bands, not only is water unacceptable as a lubricant, but it also rusts the bands causing deep pitting, and inappropriate chip swelling. This prematurely destroys the body of the band and its gullets. It also dry rots your tires or V-belts.

For proper lubrication mix HIGH ADHESION CHAIN SAW BAR OIL, with 50% kerosene or diesel fuel. Apply the solution with a spray bottle to BOTH sides of the band about once every four minutes, while the machine is running. When this lubrication is applied, the sound of cutting decreases over 50%. DO NOT APPLY AGAIN until the sound of cutting starts increasing. I guarantee you will be amazed! Longer life; No pitch buildup; No rusted or pitted bands! A great delivery system is the 12 volt windshield washer assembly out of an old car!

2. "Pam" spray-on vegetable shortening is a great lubrication for 3/4" WIDTH AND UNDER band saw blades on vertical saws. (EXAMPLE: Delta, Grizzly, Jet, etc.) Unplug the machine. Spray Pam vegetable shortening on a rag and wipe on both sides of the blade while turning the upper wheel by hand. You will hear a 50% sound reduction when cutting.

A band saw blade is a tool. You must lubricate both sides!

In both cases, we know for a fact that lubrication of the body of the band increases band life by over 30%. **Applied sparingly**, you can cut grade lumber with NO staining to your product.

ALWAYS DETENSION YOUR BANDS

When you are done cutting for the day, take the tension off your blade. Band saw blades, when warmed up from cutting, always stretch; and upon cooling shrink by tens of thousandths of an inch each cooling period. Therefore, blades, when left on the saw over tension themselves and leave the memory of the two wheels in the steel of the band, which will cause cracking in the gullet. When you leave the band on your saw under tension, not only do you distort the crown and flatten out the tires (which makes them very hard), but you also place undue stress on your bearings and shafts. Believe it or not; you can, and will damage your wheel geometry sooner or later and considerably shorten bearing life. You are also crushing your tires or V-belts.

WHAT IS APPROPRIATE SET?

Appropriate set is when you have a mixture of 65%-70% saw dust and 30%-35% air in the space between the body of the band and the wood you are cutting. The SIGN you are looking for, when you are running appropriate set, IS A GOOD 80%-85% SAW DUST EJECTION FROM THE CUT! If you are running too much set for the mass or thickness of the wood, you have too much air and not enough saw dust. You will leave **EXCESSIVE** loose saw dust and most likely it will be accompanied by tooth marks. If you are running under set, you will have no air flow pulling the saw dust out...The SIGN for this is excessive HOT **packed** down saw dust. This is the most damaging thing you can do to a band. You will have short cutting times and premature band breakage. The saw dust should be warm to the touch, not hot or cold. One last thing, a band that is excessively under set will cut in a wavy motion, and a band that has an improper HOOK ANGLE and is UNDER SET will cut a bow across the board every time! See "TROUBLE SHOOTING".

WHAT IS HOOK ARTICULATION?

Because of our deep gullets, we are able to use lower hook angles which generate less heat on the tip of the tooth. The Timber Wolf® series of bands uses a 10 degree rake or hook angle which is capable of penetrating most surfaces from medium-hard to medium-soft woods.

If you are cutting very hard wood like white oak, walnut, ash or anything frozen throughout, the blade will probably rise in the cut. This is called push-off. The hook angle must be brought back to 8 degrees. You will notice as the angle goes from 10 degrees to 8 degrees, the tooth becomes more perpendicular, thus INCREASING its penetration factor.

As the tip of the tooth goes from 10 degrees to 12 degrees the tip of the tooth starts pointing forward DECREASING penetration in hardwood. If you use 8 degrees on soft wood the blade may chatter because it's over feeding itself, unless it's very knotty. You need to use an 8 degree hook angle for hard knots. On the other hand, if you use a 12 degree hook angle on very hard wood, the tooth skips over the hard surface because the tip of the tooth is pointing too far forward.

Having a 12 degree hook angle in hardwood cutting causes push-off making the band ride up. The band locks itself in place, cuts straight across, and drops down at the end of the cut. This also burns up the band and over tensions it.

By articulating the proper hook angle, and having your gullet mathematically correct for the pitch, you will achieve straight grade cuts every time. YOU MUST UNDERSTAND APPROPRIATE SET AND HOOK ARTICULATION, THEY WORK TOGETHER. We manufacture for North America 5 appropriate sets with a 10 degree hook angle. 70% of the time this hook angle will be perfect for whatever you are cutting. See "TROUBLE SHOOTING".

WARNING: Again just as I have brought to your attention the short life of a dial indicator, you are also trusting the templates and gauges on your band saw blade sharpeners. They are hardly set at the exact angle that you think they are. The machines themselves wear out. The pins and the guides in the sharpener that the back of the band rides on, wear out. If a band starts riding on an angle a few degrees and you are unable to see it, you will know there's something wrong after running that resharpened band. To give you an idea of the amount of wear your sharpener will receive, think of this. Your band, if 14 ft. long, will travel around your sharpener a minimum of twice during each sharpening. You have sharpened 50 bands. 50 x 14 ft. twice or 28 ft. = 1,400 ft. or over a 1/4 of a mile with the back of the bands rubbing on the alignment pins and wearing them out. How do you determine if your hook angle is right, and see it. Simple: THERE IS A TOOL FEW OF YOU HAVE. There is a specific tool made especially to measure your hook angle and that's a PROTRACTOR. You must have a specific TYPE OF PROTRACTOR. Without it, you are blind and will never be able to articulate a band saw blade. Without a protractor, you are assuming the hook angles are right. I have analyzed over 4,000 band saw blades since 1992. Over half of the problems, were due to assuming the hook angle was right on. We have in stock precision **Starrett® band saw blade protractors**, at our cost. You must have one. **It's mandatory!**

GULLET PROCEDURE SHARPENING

THERE IS ONLY ONE WAY TO SHARPEN A BAND SAW BLADE. A stone must come down the face of the tooth, around the bottom of the gullet and up the back side of the tooth in ONE SWEEPING ACTION. You **MUST** maintain gullet integrity.

The gullet is NOT a trash can or dumpster for the saw dust. In fact, it is the second hardest working part of the band. A well defined gullet is like the inverted wing of an aircraft. It is responsible for the forced air flow, cooling the steel and removal of the saw dust.

If you are running appropriate set, the air is driven through the log by the gullet at the speed of the band. This causes the saw dust to be sucked out of the cut. The saw dust effectively cools the gullet by spinning around the inside and spilling over the back side of the next tooth. You **MUST** maintain a 40% gullet fill for proper cooling and extended cutting time.

If you sharpen just the face and the back side of the tooth, you ruin the gullet integrity and destroy the performance of the band.

**THERE ARE 4 PARTS TO A BAND SAW BLADE
AND THE IMPORTANCE OF EACH PART IS:**

1. **THE STEEL**--The steel is the hardest working part. Less expensive brittle steel not only wears harder but must be highly tensioned, thus decreasing overall run time no matter what you do.
2. **THE GULLET**--The gullet is the second hardest working part of the band. It is the highway for proper air flow, causing the cooling of the band and chip removal.
3. **THE TIP OF THE TOOTH**--The tip of the tooth is the third most important, and we all know what that does. By the way, always keep a 10 degree hook angle. NO more, NO less for good general sawing. Very hard, frozen or knotty wood uses an 8 degree hook angle. See "HOOK ARTICULATION pg 13".
4. **THE SET & HOOK ANGLE**--These valves bring the whole science of band saw blade physics and the ART of sawing together.

When all is said and done, the band saw, in all its shapes and sizes, is a fundamental machine. But, as you have just read, there is a lot to know in becoming the master of your machine. "The Sawyer".

TENSION

"The minimum amount of STRETCH you must apply to the body of the band to make it stable."

Always DETENSION the band immediately after use.

SILICON STEEL TOOTH PITCHES AVAILABLE

TEETH PER INCH

WIDTH OF BLADE	3/4"	7/8"	1"	2	2/3v	3	4	6	8	10	14	18	
	pitch	pitch	pitch										
	1/8*											HP	
	3/16						PC			RK			
	1/4						PC	PC	RK	RK	RK	RK	
	3/8						PC/AS	PC	PC	RK	RK	RK	
	1/2				AS		PC/AS	PC	PC	RK	RK	RK	RK
	5/8						MEAT	MEAT					
	3/4					VPC	AS-S/PC	PC	PC		RK	RK	
	1	MILL			PC		PC	PC	PC		RK		
	1 1/4	MILL	MILL										
	1 1/2		MILL	MILL									
2			MILL										

PC = POSITIVE CLAW, **AS** = ALTERNATE SET, **AS-S** = ALTERNATE SET SPECIAL,
RK = RAKER, **VPC** = VARIABLE POSITIVE CLAW,
HP = HIGH PERFORMANCE, **HK** = HOOK, **MILL** = BAND MILL

BI-METAL TOOTH PITCHES AVAILABLE

TEETH PER INCH

WIDTH OF BLADE	TEETH PER INCH													
	1" pitch	13/16" pitch	2/3	3/4	4	4/6	5/8	6	6/10	8/12	10	10/14	14	18
1/4"								HK				RK	VARI	
3/8												RK	VARI	
1/2*					HK			HK	VARI	VARI	RK	VARI	RK	RK
5/8												VARI		
3/4						VARI	VARI		VARI	VARI		VARI	RK	
1			VARI	VARI		VARI	VARI		VARI	VARI		VARI	RK	
1 1/4		CBLT	VARI	VARI		VARI	VARI		VARI	VARI				

CBLT = COBALT BAND MILL BLADE, **VARI** = VARIABLE TOOTH PITCH,
HK = HOOK, **RK** = RAKER

* 1/2" x 14 & 18 raker set blades are also available in .020 for portabands.

[Return to index](#)

Silicon Steel Blade Selection Chart (1/8" to 1" Wide)

Blade Type Width x Teeth Per Inch	Blade Thickness	Hook Angle	Set Pattern	Thickness of Material			Radius of Cut
				Kiln Dry Wood (Unless Specified) H = Hardwood S = Softwood	Plywood, MDF & other Composites	Metal & Plastic	
1/8" x 14HP	.025"	0°	5 Raker Set	H 0" - 2" S 0" - 1 1/4"	1/4" - 1"	1/4"	7/32"
3/16 x 4PC	.025	6.5	5	H 0" - 6" S 0" - 4"			3/8
3/16 x 10RK	.025	0	5	H 0 - 2 1/2 S 0 - 1 1/2	1/4 - 2	1/2	3/8
1/4 x 4PC	.025	6.5	5	H 2 1/2 - 6 S 1 1/2 - 4			5/8
1/4 x 6PC	.025	6.5	5	H 3/4 - 2 1/2 S 1/2 - 1 1/2			5/8
1/4 x 8RK	.025	0	5	H 3/4 - 1 1/2 S 1/2 - 1	1 - 2		5/8
1/4 x 10RK	.025	0	5	H 0 - 3/4 S 0 - 1/2	1/4 - 1	1/2	5/8
1/4 x 14RK	.025	0	5		1/8 - 1/4	1/4	5/8
1/4 x 18RK	.025	0	3		1/16 - 1/8	1/8	5/8
3/8 x 3PC	.025	6.5	5	H 6 - 10 S 5 - 8			1 1/4
3/8 x 3AS	.032	6.5	Alternate Set	H & S 6 - 12 (Green)			1 1/4
3/8 x 4PC	.025	6.5	5	H 2 1/2 - 6 S 1 1/2 - 4			1 1/4
3/8 x 6PC	.025	6.5	5	H 3/4 - 2 1/2 S 1/2 - 1 1/2			1 1/4
3/8 x 8RK	.025	0	5	H 3/4 - 1 1/2 S 1/2 - 1	1 - 2		1 1/4
3/8 x 10RK	.025	0	5	H 0 - 3/4 S 0 - 1/2	1/4 - 1	1/2	1 1/4
3/8 x 14RK	.025	0	5		1/8 - 1/4	1/4	1 1/4
1/2 x 2AS	.032	6.5	Alternate Set	H & S 6 - 12 (green wood)			2 1/2
1/2 x 3PC	.025	6.5	5	H 6 - 10 S 5 - 8			2 1/2
1/2 x 3AS	.032	6.5	Alternate Set	H & S 6 - 12 (green wood)			2 1/2
1/2 x 4PC	.025	6.5	5	H 2 1/2 - 6 S 1 1/2 - 4			2 1/2
1/2 x 6PC	.025	6.5	5	H 3/4 - 2 1/2 S 1/2 - 1 1/2			2 1/2
1/2 x 8RK	.025	0	5	H 3/4 - 1 1/2 S 1/2 - 1	1 - 2		2 1/2
1/2 x 10RK	.025	0	5	H 0 - 3/4 S 0 - 1/2	1/4 - 1	1/2	2 1/2

Silicon Steel Blade Selection Chart (1/8" to 1" Wide)

Blade Type	Blade Thickness	Hook Angle	Set Pattern	Thickness of Material			Radius of Cut
Width x Teeth Per Inch				Kiln Dry Wood (Unless Specified) H = Hardwood S = Softwood	Plywood, MDF & other Composites	Metal & Plastic	
1/2 x 14RK	.025	0	5		1/8 – 1/4	1/4	2 1/2
1/2 x 18RK	.025	0	3		1/16 – 1/8	1/8	2 1/2
This blade has been discontinued							
3/4 X 2PC	.032	6.5	5	H 8 – 12 S 6 – 10 (green wood)			5 7/16
Please use the 3/4 x 2/3 VPC below							
3/4 x 2/3 VPC	.025	6.5	5	H 8 - 12 S 6 - 10 (green & dry)			5 7/16
3/4 x 3AS-S	.025	6.5	5	H 6 - 10 S 5 - 8			5 7/16
3/4 x 3PC	.032	6.5	5	H 6 - 10 S 5 - 8			5 7/16
3/4 x 4PC	.032	6.5	5	H 2 1/2 - 6 S 1 1/2 - 4			5 7/16
3/4 x 6PC	.032	6.5	5	H 3/4 - 2 1/2 S 1/2 - 1 1/2			5 7/16
3/4 x 10RK	.032	0	5	H 0- 3/4 S 0- 1/2	1/4 – 1	1/2	5 7/16
3/4 x 14RK	.032	0	5		0 – 1/4	1/4	5 7/16
1 X 2PC	.035	6.5	5	H 8 – 12 S 6 – 10 (green wood)			7 1/8
1 X 3PC	.035	6.5	5	H 6 - 10 S 5 - 8			7 1/8
1 X 4PC	.035	6.5	5	H 2 1/2 - 6 S 1 1/2 - 4			7 1/8
1 X 6PC	.035	6.5	5	H 3/4 - 2 1/2 S 1/2 - 1 1/2			7 1/8
1 X 10RK	.035	0	5	H 0- 3/4 S 0- 1/2	1/4 – 1	1/2	7 1/8

Urethane Band Saw Tire Price List

DIAMETER	WHEEL WIDTH	PRICE
BST-10"	3/4"	\$18.75
BST-12"	1"	\$20.25
BST-14"	1"	\$23.50
BST-16"	1 1/4"	\$28.90
BST-18"	1 1/2"	\$31.95
BST-20"	1 1/2"	\$33.05

Custom Length's are available upon request.

Please call for price @ 704-460-9479

** Price Subject to change without notice.

HOW TO CHOOSE CORRECT LENGTH OF BLADE

1. Put the pulleys or wheels in working position.
2. Determine distance from center of hub on upper and lower wheels (letter C on chart).
3. Determine radius of upper and lower wheels (R1 & R2 on chart).
4. Apply formula as follows, for correct length of band saw blade:
$$(R1 \times 3.1416) + (R2 \times 3.1416) + (2 \times C) = \text{Length}$$

