

TIMBER WOLF[®] BLADES

**Three NEW COBALT Blades
See Page 10**



**CATALOG
For 2016**

**THE WORLD'S ONLY
THIN KERF, LOW TENSIONED, SILICON STEEL
BAND SAW BLADES**

SUFFOLK MACHINERY CORP[®]

Gschwind Group

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. 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



SUFFOLK MACHINERY CORP.

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To purchase 1/8" to 1" blades visit www.timberwolfblades.com

To purchase 1.25" to 2" blades visit www.timberwolfbandmillblades.com

For general/technical information visit www.suffolkmachinery.com



Timber Wolf® Wood-Cutting Blades are setting a new standard in blade technology.

TIMBER WOLF® TECHNOLOGY

Suffolk Machinery Corp, has through the use of premium Swedish steels, proprietary induction hardening methods and exclusive tooth milling processes created some of the finest woodworking and saw mill blades in the world.

Milling the teeth of the blade into a piece of strip steel produces a finished, razor sharp edge without ever having to stamp or grind the teeth. Induction hardening allows for different but more precise hardness throughout the blade. These unique manufacturing techniques along with the use of Swedish Silicon steel set these blades apart from all other carbon based blades.

ENGINEERED FOR PERFORMANCE

A perfect balance of superior steel, blade width and thickness plus precision set teeth produce a superior cutting blade with exceptional overall life.

“IMPORTANT DID YOU KNOW”

- A. **WARNING:** We manufacture a very special series of **LOW TENSION, HIGH DUCTILE, SILICON STEEL BAND SAW BLADES** for the woodcutters and sawyers. At the present time from 1/8" thru 2". Our blades run purposely with 35% to 50% less tension than our competitors 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. Our Silicon Steel Blades, like all other carbon band saw blades 1 1/2" and narrower, run best on a cushion of urethane or rubber. The shock absorbing quality of resilient tires mounted on 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 much as .015 thousandths for tracking 3/4" and narrower blades on a coated wheel or as little as .008 on a steel wheel tracking a 2" blade. A blade will track towards the center of the wheel because that is where the most tension is applied. 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!**
- 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.

C. Always try to keep 6 to 8 teeth in the cut at all times; this is for metal or woodcutting. 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.

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, 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".

E. Examples of optimum S.F.P.M. on specific wheel diameters. It is not considered wise to exceed these values. Vertical Band Saws Only *ie*: Delta, Jet, Sears, etc...

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. on a specific wheel diameter, you are greatly increasing the centrifugal force applied to the body of the band traveling between the two wheels. This causes you to over tension your bands in order to make them run stable. This WILL cause premature and excessive blade breakage. Band saw blades cannot be tensioned properly if your S.F.P.M. exceeds the above chart. There is also a minimum speed you can 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.)

***When using 1", 1 1/4", 1 1/2", 1 3/4" & 2" band mill blades the tooth pitch being used determines how fast the blade should travel. See page 11 for a complete explanation.**

THE FORMULA TO FIND S.F.P.M. IS ...

$$\frac{\text{MOTOR R.P.M. x MOTOR PULLEY DIAMETER}}{\text{DRIVEN PULLEY DIAMETER x BAND SAW WHEEL DIAMETER x 3.1416}} \div 12 = \text{S.F.P.M.}$$



“THE 6 RULES OF SAWING”



1. THE “FLUTTER TEST” FOR PROPER SILICON STEEL BLADE TENSIONING

This test is a guideline and should be used whenever possible. By using less tension you will prolong blade life, consume approximately 20% less horsepower and increase the life of your wheel shafts and bearings. If a specific cutting application requires that more tension be applied to the blade, such as resawing large material or cutting extremely large diameter logs, the determined force can be increased by as much as 20%.

A. BAND SAWS & BAND MILLS EQUIPPED WITH TURN-SCREW SPRING TENSIONERS:

Note: You will not be cutting any wood during this test. Also, your band saw tires and wheels must be in good working order. This test will not provide you with useful results if performed on a saw with damaged, cracked or flattened band saw wheel tires/band mill pulley v-belts.

- 1) Remove the upper and lower band saw guides (the band saw blade body cannot be restricted on either side) and remove the table insert on your saw if equipped.
- 2) Mount and track a blade on the wheels as recommended by the band saw/band mill manufacturer.
- 3) Close all covers on the saw.
- 4) Apply the recommended tension for the specific width of blade as per the band saw/band mill manufacturer.
- 5) Start the motor or engine on your saw and bring the blade to full cutting speed.
- 6) Allow the blade to run for approximately 30 seconds.
- 7) Once you are satisfied that the blade is stable on the band saw wheels at full speed, very slowly reduce the tension on the blade while watching the blade between the wheels.
- 8) As you slowly reduce tension on the blade you will see the blade start to move laterally on a vertical saw/mill and vertically on a horizontal saw/mill.
- 9) Reduce tension until you see the blade develop a constant, not intermittent, flutter between the wheels. The amount of flutter will vary depending on the size of the saw and blade you are using, i.e., a 1/4” blade running on a vertical saw will move approximately 3/16” from side to side whereas an 1 1/4” blade running on a horizontal band mill will move 3/4” up and down.
- 10) Once you achieve the appropriate amount of flutter for a specific blade you have reached what we call “zero”.
- 11) At this point slowly increase the tension on the blade until the flutter is reduced to about 1/16 of an inch.
- 12) Shut the motor or engine off and wait until the blade comes to a full stop.
- 13) Add another 10% of tension to the blade by turning the screw-tensioner approximately 1/8 to 1/4 turn. **The “flutter test” is now complete and you are now at appropriate tension for that particular blade.**
- 14) If equipped, make note of where the tension indicator is on the scale at this time or measure the compression of the spring in your tensioning mechanism.
- 15) Re-install your band saw guides and if equipped re-install your table insert. Saws that use a pressure band saw guide will require you to release tension on the blade before re-installing the guides.
- 16) If necessary, re-track and re-tension the same blade to the desired tension. You are ready to saw.

NOTE: All band saw blades will grow by a few thousandths of an inch in length within the first few minutes of sawing due to heat/thermal expansion. If you notice degradation in cut quality increase the tension on your blade by 5%. Before moving to the next page please see the last paragraph below.

B. BAND SAWS & BAND MILLS EQUIPPED WITH HYDRAULIC TENSIONERS:

- 1) Follow the same procedure as indicated above for saws with a turn-screw tensioner but adjust your hydraulic tensioner by 25 lbs. when both decreasing and increasing tension on the blade.
- 2) Refer to page 9 for proper hydraulic tension on common band mills and resaws

NOTE: All band saw blades will grow by a few thousandths of an inch in length within the first few minutes of sawing due to heat/thermal expansion. Adjust your tension as necessary. You should not have to adjust tension continuously during a normal run cycle. Before moving to the next page please see the last paragraph below.

C. BAND SAWS & BAND MILLS EQUIPPED WITH AIR/ PNEUMATIC TENSIONERS:

- 1) Follow the same procedure as indicated above for saws with a turn-screw tensioner but adjust your air/pneumatic tensioner by 5 lbs. when both decreasing and increasing tension on the blade.
- 2) Refer to page 9 for proper air/pneumatic tension on common band mills and resaws.

NOTE: All band saw blades will grow by a few thousandths of an inch in length within the first few minutes of sawing due to heat/thermal expansion. Adjust your tension as necessary. You should not have to adjust tension continuously during a normal run cycle. Before moving to the next page please see the last paragraph below.

2. CHOOSING THE PROPER BAND SAW BLADE LUBRICATION

- A. For owners of band saw mills and high-production resaws using 1” to 2” blades – Using the correct lubricant will increase both the performance as well as the overall life of your blades. Most saws are only equipped with a gravity-feed lubrication system whereas more sophisticated saws are equipped with a pump-mist lubrication system which allows you to **lubricate both sides of the blade**. Gravity-feed lubrication systems are sufficient but pump-mist systems are preferred.

There are a number of factors that will determine which lubricant you should or can use while sawing, such as the species you are cutting, what climate you are in, what time of year it is, the type of mill you own as well as many others. Regardless of all those factors it is absolutely critical that your blade be kept free of sap/pitch/solid resin. If you allow a build-up to form on your blade it will both change the performance of the blade as well as the operating temperature.

Some saw manufacturers recommend using water as lubricant. Water is certainly better for the environment and should be used whenever possible but it is also corrosive to steel and by itself it is not a lubricant. If you choose to use water mix it with Pine-Sol® Brand cleaner. We recommend a few capfuls per each gallon of water.

For more difficult cutting applications wherein you require a stronger lubricant we recommend that you use a mixture of Diesel or Kerosene with High Adhesion Chain Saw Bar Oil. We suggest a ratio of 50% fuel to 50% bar oil but, you will have to determine what mixture best fits your cutting needs and lubrication system. When using petroleum-based lubricants you will normally need approximately 75% less fluid than that of water. **(Warning: there is an inherent risk of fire when using petroleum-based lubricants. If you choose to use them, keep the area surrounding your saw clear of sparks and open flames. Also, remove the sawdust from around your saw on a continuous basis.)**



- B. For owners of vertical wood-cutting band saws using 1/8” to 1” blades – it is not necessary that you lubricate your blade as it is much more difficult to accomplish on a vertical saw. If you are cutting wood that creates a sap/pitch/solid resin build-up on your blade we recommend that you apply PAM® Cooking Spray to your blade. To apply, turn off the saw, disconnect the power cord, spray some PAM® into a clean cloth and wipe both sides of the blade while spinning the upper wheel by hand. Use this fluid sparingly. If you use too much lubricant it will pool on your lower band saw wheel and could cause the blade to slip off the wheels.
3. **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.
4. **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 cool. 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 page 15 - “TROUBLE SHOOTING”

A VERY LOGICAL EXAMPLE : If you are cutting a 12" log and the saw dust is warm to the touch, and you also have a good feed rate, along with long cutting times plus you are sucking out at least 85% of the saw dust; You are running appropriate set. Then, you roll up a 24" log, logic should dictate you must **increase** the set when you increase the mass of wood by 100%, in fact in this case, you should increase the set by approximately 20%. My point is, you **cannot** expect to use the same set when cutting all different diameter logs, timber or cants. **You must start segregating your timber.** We have actually calculated that for every 8-10" of increases in dimensional size you **need** to increase the set by approximately 18% depending on whether the wood is hard or soft, green or dry. The only way to find appropriate set is by taking a specific log and making test cuts. Increase the set 2-3 thousandths per side until you start to see tooth marks. This means you are running at about 50/50 mix of dust and air. At this point drop the set down 3-4 thousandths per side, and you have achieved appropriate set. **VERY IMPORTANT: Only set the TOP HALF of the tooth. If you set too low on the tooth you will create excessive drag on the blade and disrupt the flow of air that is carried into the cut. This will cause the majority of your sawdust to spill out before it can be ejected from the log.**

*** SEE OUR DUAL TOOTH SETTER ON PAGE 13.**

One more thing, when you are cutting soft wood, green or dry, the chip expands 4 to 7 times larger than it was in the cellular structure. Hard wood, green or dry, only expands 1/2 to 3 times its size upon being released from it's cellular structure. This means if you are cutting 18" pine logs, you need about 20% more set than cutting 18" oak logs.

ALWAYS SET YOUR TEETH BEFORE SHARPENING. You want the tip of the tooth to be square or perpendicular to the body of the band. Over set your teeth by .001 to .002 thousandths of an inch and after sharpening your set will be right where you want it. You want to just "kiss" sharpen your blade, a minimum of two times! What is very important to understand, is that there is an actual formula for **APPROPRIATE SET. SEE PAGE 14**

5. 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 will ensure proper airflow, temperature and sawdust removal.

If you are running appropriate set, the air is driven through the log at the same speed the band is, causing the saw dust to be sucked down in to the gullet. 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.

You now have your dial indicator calibrated and precision set our teeth, .002 to .003 over what you want. You have double checked the approach angle of your sharpener with our special protractor and it is where you want it. Now, it's time to sharpen the blade.

6. **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 the hard knots. On the other hand, if you use a 12 degree hook angle on very hardwood, 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 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 your gullet is 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 Page 12 - "TROUBLE SHOOTING"

WARNING: You are also trusting the templates, dials 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, that the back of the band rides on in the sharpener, wears out. The band starts riding on an angle, just a few degrees and you are unable to see it, and you know there's something wrong after running a 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. Well that 50 times 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. And over half of the problems, was 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!**

TIMBER WOLF® BAND MILL & RESAW BLADES



We produce low-tension, Swedish Silicon steel and cobalt blades from 1 1/4" to 2 1/8" wide for many applications.

We are the only company that mills and induction hardens the teeth in every blade we make. Our blades are used on everything from the smallest to the largest band mills and resaws throughout the world.

- **NEW 2 1/8" x .063 Cobalt** - Specifically designed to cut 50" to 70" logs on mills with 36" or larger wheels with a minimum power plant of 70hp diesel. (Details below)
- **NEW 1 1/2" x .050 Cobalt** - Designed to cut extremely difficult and abrasive material on medium to large mills and resaws. Runs on average two to three times longer than our Silicon steel blades. (Details below)
- **NEW 1 3/8" x .042 Cobalt x 10° Hook** - Designed to cut extremely difficult and abrasive material on small to medium size mills and resaws. Runs on average two to three times longer than our Silicon steel blades. (Details below)

Silicon Steel and Cobalt Blades from 1 1/4" to 2 1/8" Wide

1 1/4" x 3/4" pitch x .042 & .045 Silicon steel

These blades run best at 5,300 S.F.P.M. on 18" or larger wheels. Expected production is 1,600 to 2,000 BF/Day. Available with .019(frozen), .021(resaw), .024(hardwood) and .029(softwood) set per side

1 1/4" x 7/8" pitch x .042 & .045 Silicon steel

These blades run best at 5,700 S.F.P.M. on 18" or larger wheels. Expected production is 1,800 to 2,200 BF/Day. Available with .019(frozen), .021(resaw & hardwood), .024 (softwood) set per side

1 3/8" x .042 Cobalt (8° & 10° Hook Angle)

These blades are made of a special alloy used for extreme applications such as recycling telephone poles, recycling beams, abrasive species, frozen logs and exotic hardwoods. Run best on 18" or larger wheels between 3,900 and 5,500 S.F.P.M. based on type of material being cut. Can be sharpened with both conventional and CBN grinding wheels.

1 1/2" x 7/8" & 1" pitch x .042 Silicon steel

These blades run best at 5,700 S.F.P.M. on 18" or larger wheels. Expected production is 2,500 to 3,000 BF/Day. Available with .019(frozen), .021(resaw & hardwood), .024(softwood) set per side.

1 1/2" x 7/8" pitch x .050 Cobalt

This blade is made of a special alloy used for extreme applications such as recycling telephone poles, recycling beams, abrasive species, frozen logs and exotic hardwoods. Runs best on 24" or larger wheels between 3,900 and 5,500 S.F.P.M. based on type of material being cut. Can be sharpened with both conventional and CBN grinding wheels.

1 1/2" x 7/8" & 1" pitch x .052 Silicon steel

These blades run best at 5,700 to 6,300 S.F.P.M. on 24" or larger wheels. Expected production is 4,000 to 8,000 BF/Day. Available with multiple sets for hardwood, softwood and frozen logs.

1 3/4" x 1" pitch x .052 Silicon steel

This blade runs best at 5,700 to 6,300 S.F.P.M. on 24" or larger wheels. Expected production is 6,000 to 10,000 BF/Day. Available with .018 (frozen/resaw) and .023 (grade/mill) set per side.

2" x 1" pitch x .042 Silicon steel

This blade runs best at 5,700 to 6,300 S.F.P.M. on 18" or larger wheels. Expected production is 2,500 to 3,000 BF/Day. Available with .021(hardwood/softwood) set per side.

2" x 1" pitch x .052 Silicon Steel

These blades run best at 5,700 to 6,300 S.F.P.M. on 30" or larger wheels. Expected production is 8,000 to 25,000 BF/Day. Available with .018 (pallet/frozen) and .023 (resaw/hardwood) set per side.

2 1/8" x 1" pitch x .063 Cobalt

This blade is made of a special alloy used for extreme applications cutting 50" to 70" logs. Runs best at 6,000 to 7,000 S.F.P.M. on 36" or larger wheels. Ten degree hook angle with .024 set per side. Can be sharpened with both conventional and CBN grinding wheels.

**If you would like to purchase blades visit us at www.timberwolfbandmillblades.com
If you require technical assistance use our blade selection tool online or contact
one of our blade specialists.**

Understanding Band Mill Blade Gullet Function

What is a band saw blade's gullet function? Every tooth pitch and gullet geometry has a specific surface feet per minute (S.F.P.M.) it runs best at. Think about this. For a band saw blade to be a success, just like table saws, milling cutters, router bits and all other types of tooling, there is a specific speed they must run at. A good general gullet on a band saw blade is usually about 33% as deep as its pitch. If your saw runs 20% higher than the specified gullet function you tend to override the gullet causing excessive heat and shorter run times. The tooth's penetration factor is compromised. If your band is running 20% slower than specified gullet function then you are in shearing mode. This causes excessive heat, shorter run times, and excessive gullet strain. This totally compromises the band's effectiveness.

This little known but extremely important function has not found its way into the consumer market. What sawyers don't realize is that first you match the blade to what you want to cut, then you match the band saw mill to the blade.

Examples of proper band mill blade gullet speeds with a general purpose gullet depth of 33%

BAND WIDTH	BAND PITCH	GULLET DEPTH	SURFACE FEET PER MINUTE
1" & 1 1/4"	3/4"	1/4"	5,300
1 1/4" & 1 1/2"	7/8"	9/32"	5,800
1 1/2" & 1 3/4"	1"	5/16"	5,800
2"	1"	5/16"	6,300



Note: BAND BODY TENSION

The band saw blade body stretches and compresses as it passes the wheels on your saw. There is a direct relationship between the size of a band saw wheel and the life expectancy of a blade. The smaller the wheel is the shorter the blade life will be.

For all sawyers that use vertical wood cutting band saws (such as Delta, Grizzly, etc.) using 1/8" though 3/4" wide bands the gullet function is a little more forgiving because you are hand feeding, not power feeding. The gullet functions of these bands are 3000 to 4000 S.F.P.M. To figure your band saw's surface feet per minute, please see the formula at the bottom of page 4. If you only know your band saw wheels shaft speed use the following formula:

$$\text{Wheel diameter} \times 3.1416 \div 12 \times \text{your shaft R.P.M.} = \text{S.F.P.M.}$$

NEW PATENTED URETHANE BAND SAWS TIRES FOR ALL VERTICAL SAWS AND URETHANE V-BELTS FOR BAND RESAWS & BAND MILLS – 5 TIMES THE LIFE OF CONVENTIONAL RUBBER.

IMPORTANT: SPECIAL PRICING ON TIMBER WOLF® BAND MILL BLADES.

Please see page 20 for pricing

E Mail - info@suffolkmachinery.com

web page-www.suffolkmachinery.com

(For Timber Wolf® 1 1/4", 1 1/2", 1 3/4" & 2" blades...see page 10)

MAINTENANCE TOOLS & ACCESSORIES FOR BAND MILL

A.	Heavy Duty Urethane V-Belts for Band Mill Wheels (SEE PAGE 13 FOR DETAILS).....	Call for Pricing
B.	DTS03 Dual Tooth Setter (SEE PAGE 13 FOR DETAILS).....	\$1,145.00
C.	Timber Wolf® WM and NW Guide Systems (SEE PAGE 13 FOR DETAILS).....	\$395.00
D.	5" and 8" CBN (Cubic Boron Nitride) Grinding Wheels for Wood-Mizer® Grinders	Call for Pricing
E.	5 1/4" x 3/8" x 1/2" Ruby Grinding Stone.....	\$18.95
F.	6" x 3/8" x 1/2" Ruby Grinding Stone.....	\$24.95
G.	Cams to sharpen Timber Wolf® blades	\$42.00
H.	Clamp-On Set Gauge.....	\$104.95
I.	Timber Wolf® Silicon Steel Templates.....	Free
J.	Diamond Dresser.....	\$29.95
K.	Starrett® Band Saw Blade Protractor (Measures tooth hook angle).....	\$85.00
L.	Bausch & Lomb® Sharpener Eyepiece (4X).....	\$17.95
M.	Maximizing the Use of your Set Tooth Band Mill Blades Video.....	\$12.95

PLEASE READ BELOW FOR FULL DESCRIPTION OF EACH ITEM

- A. Urethane V-Belts manufactured in many sizes that can run on Wood-Mizer®, Timberking, Norwood and all other mills using pulleys as band wheels. These V-Belts are tight fitting, which reduces vibration. They have a grooved face that will draw the sawdust from the face of the blade and eliminate all sawdust build-up on your wheels. They are made from patented industrial urethane giving you excellent performance and longer life.
- B. The Dual Tooth Setter is fast and accurate. This is an industrial setter scaled down for individual use. This tool can up-set and down-set the teeth of any blade from 1" to 2" wide. It sets both sides of the blade at the same time in about 2 to 3 minutes. Guaranteed to set the teeth within .002" per side. Clamp-On Set Gauge included as standard equipment. See picture on page 13 (Free demo DVD available)
- C. Timber Wolf® Guide Systems for Wood-Mizer®, Norwood and Custom Mill owners. The system supports the top, bottom and back of the blade with high quality bearings. Adjusts for both 1 1/4" and 1 1/2" wide blades. NW version can mount to any mill with 1 1/4" ID steel tubing.
- D. CBN (Cubic Boron Nitride) Grinding Wheels for our 3/4", 7/8", 13/16" and 1" Timber Wolf tooth profiles designed to be used on Wood-Mizer oil Cooled grinders. These grinding wheels are made of a super-abrasive that produces an incredibly sharp tooth. They are designed to sharpen thousands of blades and never require any dressing. Call for pricing.
- E. The 5 1/4" Ruby Grinding stone is our most popular stone for conventional sharpeners. It leaves a very clean finish and grinds much cooler than Aluminum Oxide stones. This stone fits the Cook and Wood-Mizer® Sharpeners.
- F. The 6" Ruby stone leaves a very clean finish and grinds much cooler than Aluminum Oxide stones.
- G. Timber Wolf® Cams- We currently offer 3/4", 7/8", 13/16" and 1" pitch CNC machined cams with the Timber Wolf® profile for Wood-Mizer® and Cook Sharpeners.
- H. The Clamp-On Set Gauge measures the amount of set in your blade. It is portable and fast to use.
- I. Blade Templates -we supply our Timber Wolf® templates in 8" and 12" sections at no charge.
- J. The Diamond Dresser is a must for cleaning and dressing Ruby and Aluminum Oxide grinding stones.
- K. The Starrett® Protractor is used for measuring the hook angle of the teeth. If you were a carpenter the Protractor would be your level.
- L. The Bausch & Lomb® Sharpener Eyepiece magnifies your blades by 4x. This allows you to closely inspect the top and outer edges of teeth after a blade has been run and after it has been sharpened. You will be able to see if your blade is truly sharp. It can also be used in conjunction with the Starrett® Protractor to verify your tooth hook angle.
- M. The first educational DVD produced that fully explains the proper selection and articulation of band mill blades. Through animation and real-time footage, an in-depth description of each blade component and its function. We guarantee this is your guide to becoming a better sawyer!

URETHANE V-BELTS

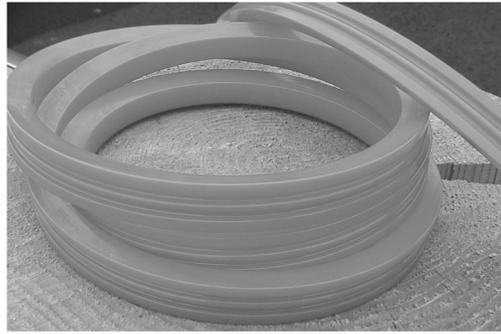
Designed for gas and diesel powered Band Mills equipped with 16" to 25" pulleys for band wheels

Urethane V-Belt Features:

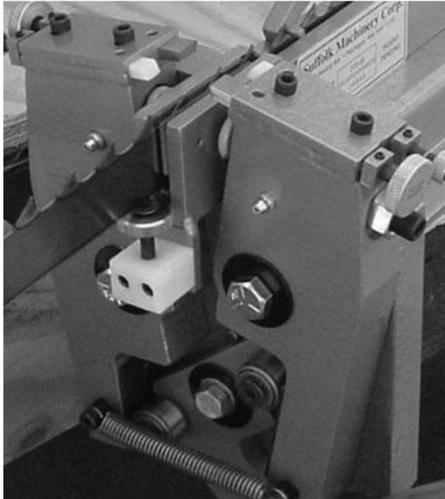
- Extremely durable and highly resistant to blade lubricants
- 85 Shore A Durometer
- Last 4 to 5x longer than standard automotive v-belts
- Extruded to within .002 of specified thickness

Urethane V-Belt Benefits:

- Creates a more stable platform than a standard automotive v-belt which can deviate as much as .020 in thickness
- Multi grooved face design which draws saw dust away from the blade body resulting in a smoother operating blade
- Made 10% shorter than pulley circumference which creates a tighter fit , reduces vibration in the head and prolongs the life of your blade
- Non-Stick surface which never requires cleaning



Starting at \$34.45-Demo DVD Available



DUAL TOOTH SETTER

First introduced in 1996, retooled in 2003 and still the most accurate Dual Tooth Setter on the market...guaranteed or your money back.

- Sets teeth to within .002 per side.
- Sets from 1" to 2" wide blades.
- Sets from 1/2" to 1-1/4" pitch.
- Capable of both increasing and decreasing tooth set.
- Equipped with Cobalt up-setting tool bits.
- Equipped with both Delrin plastic & mild steel down-setting tool bits.
- Hand held Clamp-On Set Gauge included.
- 3 Blade Stanchion Rollers included.

Model DTS03 Only \$1145

Demo DVD Available

GUIDE SYSTEMS

This system offers better support to the blade through the use of bearings above and behind as well as support under the blade with an Oilite bronze insert. This system will increase lumber quality, reduce blade stress, increase blade life and productivity.

- NW Version (pictured left) is a light duty system that fits Norwood mills up to model year 2000
- WM Version (pictured right) is a medium duty system that fits various Wood-Mizer® mills and Custom mills
- Adjusts for 1-1/4" and 1-1/2" blades.
- Lubricates top and bottom of blade through gravity feed.

Note: The system requires compressed air on site during use.



Only \$395.00 for the set
Demo DVD Available

RECOMMENDED APPROPRIATE SETS AND HOOK ANGLES FOR BAND MILL & PRODUCTION RESAW BLADES

1-1/4" x 3/4" pitch x .042 & .045	Soft Wood	Soft Wood Very Knotty	Medium Hard Wood	Hard Wood	Very Hard or Frozen* Wood
Recommended Hook Angle	10°	8°	10°	10°	8°
Thickness of Cut	Set Per Side		Set Per Side		
0" through 6"	.021		.019		.016
7" through 12"	.024		.021		.019
13" through 22"	.029		.024		.021
23" through 30"	.032		.029		.024
1-1/4" x 7/8" pitch x .042 & .045	Soft Wood	Soft Wood Very Knotty	Medium Hard Wood	Hard Wood	Very Hard or Frozen* Wood
Recommended Hook Angle	10°	8°	10°	10°	8°
Thickness of Cut	Set Per Side		Set Per Side		
0" through 6"	.019		.017		.015
7" through 12"	.021		.019		.017
13" through 22"	.024		.021		.019
23" through 30"	.027		.024		.021
1-1/2" x 7/8" pitch x .052	Soft Wood	Soft Wood Very Knotty	Medium Hard Wood	Hard Wood	Very Hard or Frozen* Wood
Recommended Hook Angle	10°	8°	10°	10°	8°
Thickness of Cut	Set Per Side		Set Per Side		
0" through 12"	.021		.019		.017
13" through 22"	.025		.021		.019
23" through 30"	.029		.025		.021
1-1/2" x 1" pitch x .052	Soft Wood	Soft Wood Very Knotty	Medium Hard Wood	Hard Wood	Very Hard or Frozen* Wood
Recommended Hook Angle	10°	8°	10°	10°	8°
Thickness of Cut	Set Per Side		Set Per Side		
0" through 12"	.018		.018		.016
13" through 22"	.023		.023		.018
23" through 30"	.026		.026		.023
1-3/4" & 2" x 1" pitch x .052	Soft Wood	Soft Wood Very Knotty	Medium Hard Wood	Hard Wood	Very Hard or Frozen* Wood
Recommended Hook Angle	10°	8°	10°	10°	8°
Thickness of Cut	Set Per Side		Set Per Side		
0" through 12"	.018		.018		.016
13" through 18"	.023		.023		.018
19" through 30"	.026		.026		.023

***Note: Some species, when frozen, will require set as low as .015 set per side to force sawdust out of the cut before it refreezes.**

See page 10 for a complete list of all Timber Wolf blade widths, sets and tooth pitches.

TROUBLE SHOOTING

ARTICULATING THE HOOK & SET OF THE TIMBER WOLF® BAND MILL BLADES

1. **BLADE RIDES UP IN THE CUT IN THE FIRST SIX INCHES AND STAYS THERE** - it cuts straight until the end and then drops down. This is called "push-off." You have too much hook angle. Decrease the hook angle by 2 degrees. See "HOOK ARTICULATION" - PAGE 8, RULE #6.
2. **BLADE RIDES UP IN THE CUT** - plus when you pull the board off you have a bow in the board. This is caused by too much hook angle and not enough set. Reduce the hook angle by 2 degrees and increase the set by .003" per side.
3. **BLADE DROPS DOWN IN THE CUT AND STAYS THERE** - This could be caused by a dull blade but usually means you have too little hook angle. Increase the hook angle by 2 degrees.
4. **BLADE DROPS DOWN IN THE CUT** - plus when you pull the board off, you have a bow in the board. This is caused by too little hook angle and not enough set. Increase the hook angle by 2 degrees and increase the set by .003" per side.
5. **EXCESSIVE LOOSE SAWDUST ON THE BOARD AND LOG** - This is caused by too much set, and if you look closely, you will probably see some tooth marks. Down-set about .003" per side.
6. **EXCESSIVE PACKED SAWDUST ON THE BOARD AND LOG** - This is caused by too little set. Up-set about .003" per side. You could also be highly overset causing the body of the blade to bounce in the cut. This is always accompanied by deep tooth marks. If so, down-set by .006" per side.
7. **PACKED SAWDUST IN FROZEN LOGS** - Down-set to .017" per side but no lower than .015" This will pinch down on the blade and force the sawdust out of the cut before it freezes. Also use 8-degree hook angle in frozen logs. Blades should only be run about half as long when cutting frozen logs.
8. **BLADE CUTS IN A WAVY MOTION** - The blade is EXTREMELY under-set. For a small wave, up-set the blade .004" per side. For a heavy wave, up-set .006". Running a blade that is under-set is the MOST damaging thing you can do to the steel. See "APPROPRIATE SET" - PAGE 6, RULE #4.
9. **BLADES ARE CRACKING FROM THE BACK OF THE BLADE** - this is caused by bad guide bearings and/or bad guide alignment. The most common cause is the back guide bearing(s) or flange(s) is set too far back or set too close to the blade. Never run the blade without some clearance at the back edge, but never exceed more than .125" clearance to the bearing or flange.
10. **NEW BLADES THAT HAVE NEVER BEEN SHARPENED ARE CRACKING IN THE GULLET** - This is usually caused by a blade being run to extreme dullness or by running a heavily under-set blade. Excessive S.F.P.M (PAGE 11), excessive tension (PAGE 5) and/or a bad wheel bearing can also cause this.
11. **EXCESSIVE PITCH BUILT UP ON THE BODY OF THE BLADE** - even when you are using our lubrication advice. The set is too low, leaving no air space. The blade body is rubbing on the wood producing excessive heat and pitch build up. Up-set the blade .004" per side.
12. **PITCH BUILT UP IN THE GULLET OF THE BLADE** - but no pitch built up on the body. This is usually caused by improper sharpening, too much hook angle or just a dull blade.
13. **AFTER A FEW SHARPENINGS THE BLADES CRACK IN THE GULLET** - Low Hook Angles! Any blade that is sharpened to less than 8 degrees will break. Buy a protractor!!!! You can't sharpen properly without it. Also, if you sharpen the gullet so that it is squared off you will produce excessive heat and stress at the bottom of the gullet, which ruins the temper of the steel. Lastly, if you run your blades too long they will break. Even if a blade is set and sharpened perfectly it should only be run for a maximum of 3 hours.

THE CAUSE: improper set and/or inaccurate set are the cause of most blade problems. Also, improperly dressing the stone and/or not dressing the stone often enough are the cause of many blade problems. Dress your grinding stone lightly after every pass. When your blades are set and sharpened properly you should produce straight boards at a good feed rate and see 85% of the sawdust ejected from the cut. IMPORTANT NOTE: If you had to gauge the importance of setting the teeth versus sharpening them, remember this; a blade that does not have the sharpest edge will still cut straight if the teeth are set accurately, whereas a blade that is super sharp but has inaccurate set will not cut at all.

"The NEW WOLF has arrived . . . see page 10 for details"

HOW LONG SHOULD YOU RUN A BAND MILL BLADE?

When a TimberWolf blade is new or has been properly sharpened there is about 5 pounds of pressure per square inch applied to the face of each tooth. Friction, impact and heat will dull the teeth during use. As the edge and tip of the tooth erode, the pressure on the face of each tooth increases dramatically. If this pressure exceeds 15 pounds per square inch, the gullets of the teeth will start to stretch and will be literally ripped apart over time. If the blade is run to this same point of dullness each time, the steel will fail and you will lose 50 to 75% of the life of the blade. That equates to 2 or 3 sharpenings as opposed to 8 or 10 sharpenings over the life of the blade.

So how long should you run a blade?

Always change your blade while it is still relatively sharp. Run the blade for 2 to 3 hours max!

Also, if your blades are set or sharpened improperly you might start with 15 pounds of pressure. These blades are being ripped apart from the moment they are put on the mill.

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 in the front of the catalogue. I can not 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 shaft 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" bands that need a bit of understanding, our 1/16" 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 Visa, Master Card, Discover, Amex, Check by Phone and can 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-(800)-234-7297.

Silicon Steel Tooth Styles

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.

VPC (Variable Positive Claw): The VPC is designed for straight-line resawing in small to large boards, kiln and air dry, up to 12" wide. The variable pitch, positive claw, 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. Now available in 3/4" and 1" widths.

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 a 90" blade length or a wheel diameter of less than 14".

TPC (Thin Positive Claw): This blade which was previously known as the AS-S 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 super finish, and you are not concerned with speed, this is the blade for you.

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 blades available in widths from 3/16" through 1" with 8, 10, 14 and 18 teeth per inch. HP blade available in 1/8" x 14 teeth per inch only.

Please see our Blade Selection Chart on page 22 & 23.

SPECIALTY WOOD CUTTING BLADES



TIMBER WOLF® 1" CARBIDE TIPPED

This 1" wide by .035 thick by 2/3 variable pitch tooth incorporates a multi-chip face grind with 4 different profiles and 8 different tooth heights to produce the best possible finish with only .060 kerf. This will reduce the need for sanding and planing by as much as 70%. The multi-chip face grind and variable pitch tooth design also substantially reduce heat and produce more airflow, which keeps the carbide significantly cooler for longer life. This blade is designed to cut wood with moisture content of 10% or less and can only be used on 18" and larger vertical band saws. For pricing, please call 800-234-7297.



TIMBER WOLF® 1" and 3/4" BI-METAL

This 1" wide by .035 thick by 1" tooth is designed for the most difficult wood cutting applications. The hardness of the teeth is twice that of a standard blade and makes this blade ideal for recycling timbers and cutting logs on 18" and larger vertical band saws. For pricing, please call 800-234-7297.



These 3/4" and 1" wide x .035 thick by 2/3 variable tooth are designed for the most difficult wood cutting applications. The hardness of the teeth is twice that of a standard blade and makes this blade ideal for recycling timbers and resawing exotic wood on 18" and larger vertical band saws. For pricing, please call 800-234-7297.

SUFFOLK MACHINERY CORP.

12 Waverly Avenue
 Patchogue, New York 11772-1902
 Tel 800-234-7297 • Fax 631-289-7156



TIMBER WOLF®

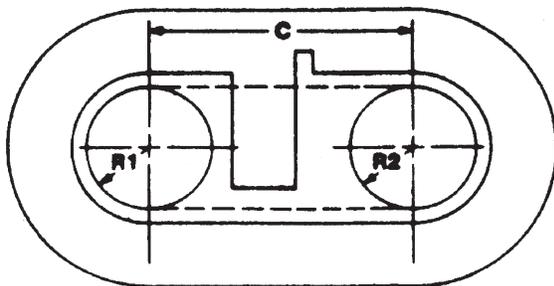
TOOTH PITCHES AVAILABLE

TEETH PER INCH														
WIDTH OF BLADE		3/4" pitch	7/8" pitch	1" pitch	2	2/3v	3	4	6	8	10	14	18	
	1/8"												HP	
	3/16							PC				RK		
	1/4							PC	PC	RK	RK	RK		
	3/8						PC & AS	PC	PC	RK	RK	RK		
	1/2				AS		PC & AS	PC	PC	RK	RK	RK	RK	
	3/4					VPC	TPC & PC	PC	PC			RK	RK	
	1	MILL		PC	PC	VPC	PC	PC	PC			RK		
	1 1/4	MILL	MILL											
	1 1/2		MILL	MILL										
	1 3/4			MILL										
	2			MILL										

PC = POSITIVE CLAW, AS = ALTERNATE SET, RK = RAKER, TPC = THIN POSITIVE CLAW
 VPC = VARIABLE POSITIVE CLAW, HP = HIGH PERFORMANCE, MILL = BAND MILL

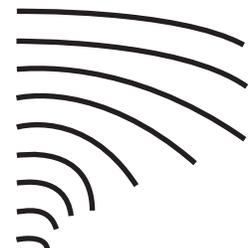
HOW TO CHOOSE CORRECT LENGTH OF BLADE

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: $(R1 \times 3.1416) + (R2 \times 3.1416) + (2 \times C) = \text{Length}$



BAND SAW RADIUS SELECTION CHART

Blade Width	Radius	Material Thickness 1"
1"	7 1/8"	
3/4"	5 7/16"	
5/8"	3 3/4"	
1/2"	2 1/2"	
3/8"	1 1/4"	
1/4"	5/8"	
3/16"	3/8"	
1/8"	7/32"	
1/16"	1/8"	



URETHANE BAND SAW TIRES AVAILABLE 10" THRU 20"

Timber Wolf® Swedish Silicon Steel Blade Pricing

Effective January 1, 2015

Blades welded to any length

PC, RK & HP Blades								AS	AS	TPC & VPC
Width	1/8	3/16	1/4	3/8	1/2	3/4	1	3/8	1/2	3/4
Thickness	.025	.025	.025	.025	.025	.032	.035	.032	.032	.025
Length up to:										
60" 5'	\$14.76	\$13.54	\$14.19	\$14.79	\$15.39	\$18.14	\$19.70	\$15.73	\$16.01	\$18.99
66" 5'6"	\$15.57	\$14.31	\$14.97	\$15.63	\$16.29	\$19.31	\$21.03	\$16.67	\$16.98	\$20.25
72" 6'	\$16.37	\$15.08	\$15.75	\$16.47	\$17.19	\$20.49	\$22.36	\$17.60	\$17.94	\$21.51
78" 6'6"	\$17.17	\$15.85	\$16.53	\$17.31	\$18.09	\$21.67	\$23.69	\$18.54	\$18.90	\$22.77
84" 7'	\$17.97	\$16.62	\$17.31	\$18.15	\$19.00	\$22.84	\$25.03	\$19.47	\$19.87	\$24.03
90" 7'6"	\$18.78	\$17.39	\$18.09	\$18.99	\$19.90	\$24.02	\$26.36	\$20.41	\$20.83	\$25.29
96" 8'	\$19.58	\$18.16	\$18.88	\$19.84	\$20.80	\$25.19	\$27.69	\$21.34	\$21.79	\$26.56
102" 8'6"	\$20.38	\$18.93	\$19.66	\$20.68	\$21.70	\$26.37	\$29.02	\$22.28	\$22.76	\$27.82
108" 9'	\$21.19	\$19.70	\$20.44	\$21.52	\$22.60	\$27.55	\$30.35	\$23.21	\$23.72	\$29.08
114" 9'6"	\$21.99	\$20.47	\$21.22	\$22.36	\$23.50	\$28.72	\$31.68	\$24.15	\$24.68	\$30.34
120" 10'	\$22.79	\$21.24	\$22.00	\$23.20	\$24.40	\$29.90	\$33.02	\$25.08	\$25.65	\$31.60
126" 10'6"	\$23.60	\$22.01	\$22.78	\$24.04	\$25.30	\$31.07	\$34.35	\$26.02	\$26.61	\$32.86
132" 11'	\$24.40	\$22.78	\$23.56	\$24.88	\$26.20	\$32.25	\$35.68	\$26.95	\$27.57	\$34.12
138" 11'6"	\$25.20	\$23.55	\$24.34	\$25.72	\$27.11	\$33.43	\$37.01	\$27.89	\$28.54	\$35.38
144" 12'	\$26.01	\$24.32	\$25.12	\$26.56	\$28.01	\$34.60	\$38.34	\$28.82	\$29.50	\$36.64
150" 12'6"	\$26.81	\$25.10	\$25.90	\$27.40	\$28.91	\$35.78	\$39.68	\$29.76	\$30.47	\$37.90
156" 13'	\$27.61	\$25.87	\$26.68	\$28.24	\$29.81	\$36.95	\$41.01	\$30.69	\$31.43	\$39.16
162" 13'6"	\$28.42	\$26.64	\$27.47	\$29.09	\$30.71	\$38.13	\$42.34	\$31.63	\$32.39	\$40.43
168" 14'	\$29.22	\$27.41	\$28.25	\$29.93	\$31.61	\$39.31	\$43.67	\$32.56	\$33.36	\$41.69
174" 14'6"	\$30.02	\$28.18	\$29.03	\$30.77	\$32.51	\$40.48	\$45.00	\$33.50	\$34.32	\$42.95
180" 15'	\$30.83	\$28.95	\$29.81	\$31.61	\$33.41	\$41.66	\$46.33	\$34.43	\$35.28	\$44.21
186" 15'6"	\$31.63	\$29.72	\$30.59	\$32.45	\$34.31	\$42.83	\$47.67	\$35.37	\$36.25	\$45.47
192" 16'	\$32.43	\$30.49	\$31.37	\$33.29	\$35.22	\$44.01	\$49.00	\$36.30	\$37.21	\$46.73
198" 16'6"	\$33.24	\$31.26	\$32.15	\$34.13	\$36.12	\$45.18	\$50.33	\$37.24	\$38.17	\$47.99
204" 17'	\$34.04	\$32.03	\$32.93	\$34.97	\$37.02	\$46.36	\$51.66	\$38.17	\$39.14	\$49.25
210" 17'6"	\$34.84	\$32.80	\$33.71	\$35.81	\$37.92	\$47.54	\$52.99	\$39.11	\$40.10	\$50.51
216" 18'	\$35.65	\$33.57	\$34.49	\$36.65	\$38.82	\$48.71	\$54.32	\$40.04	\$41.06	\$51.77
222" 18'6"	\$36.45	\$34.34	\$35.28	\$37.50	\$39.72	\$49.89	\$55.66	\$40.98	\$42.03	\$53.04
228" 19'	\$37.25	\$35.11	\$36.06	\$38.34	\$40.62	\$51.06	\$56.99	\$41.91	\$42.99	\$54.30
234" 19'6"	\$38.05	\$35.88	\$36.84	\$39.18	\$41.52	\$52.24	\$58.32	\$42.85	\$43.95	\$55.56
240" 20'	\$38.86	\$36.65	\$37.62	\$40.02	\$42.42	\$53.42	\$59.65	\$43.78	\$44.92	\$56.82
246" 20'6"	\$39.66	\$37.42	\$38.40	\$40.86	\$43.33	\$54.59	\$60.98	\$44.72	\$45.88	\$58.08
252" 21'	\$40.46	\$38.19	\$39.18	\$41.70	\$44.23	\$55.77	\$62.32	\$45.65	\$46.84	\$59.34
258" 21'6"	\$41.27	\$38.96	\$39.96	\$42.54	\$45.13	\$56.94	\$63.65	\$46.59	\$47.81	\$60.60
264" 22'	\$42.07	\$39.73	\$40.74	\$43.38	\$46.03	\$58.12	\$64.98	\$47.52	\$48.77	\$61.86

All blades are custom welded to *any* length. If your blade length falls between the lengths listed, use the higher price, i.e., for a 93 1/2" blade use the 96" price.

Quantity Discounts:

10-19 blades LESS 15%!	20-29 blades LESS 25%!	30+ blades* LESS 30%!
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PC, RK, HP, AS, TPC and VPC blades may be combined for quantity discounts

*1/8" blades have a maximum discount of 25%

**Prices subject to change without notice

Timber Wolf® Band Mill & Resaw Blade Pricing

Blades welded to any length

1" Silicon Steel .042		1 1/4" Silicon Steel .042		1 1/4" Silicon Steel .045		1 3/8" x 8° Cobalt .042		1 3/8" x 10° Cobalt .042		1 1/2" Silicon Steel .042	
13'6"	\$14.95	13'6"	\$20.90	13'6"	\$21.90	13'6"	\$45.10	13'6"	\$50.39	13'6"	\$25.98
14'	15.51	14'	21.67	14'	22.71	14'	46.40	14'	51.89	14'	26.94
14'6"	16.06	14'6"	22.45	14'6"	23.52	14'6"	47.70	14'6"	53.38	14'6"	27.90
15'	16.61	15'	23.22	15'	24.33	15'	49.00	15'	54.88	15'	28.87
15'6"	17.17	15'6"	24.00	15'6"	25.14	15'6"	50.30	15'6"	56.38	15'6"	29.83
16'	17.72	16'	24.77	16'	25.96	16'	51.60	16'	57.87	16'	30.79
16'6"	18.27	16'6"	25.54	16'6"	26.77	16'6"	52.90	16'6"	59.37	16'6"	31.75
17'	18.83	17'	26.32	17'	27.58	17'	54.20	17'	60.86	17'	32.71
17'6"	19.38	17'6"	27.09	17'6"	28.39	17'6"	55.50	17'6"	62.36	17'6"	33.68
18'	19.94	18'	27.87	18'	29.20	18'	56.80	18'	63.86	18'	34.64
18'6"	20.49	18'6"	28.64	18'6"	30.01	18'6"	58.10	18'6"	65.35	18'6"	35.60
19'	21.04	19'	29.41	19'	30.82	19'	59.40	19'	66.85	19'	36.56
19'6"	21.60	19'6"	30.19	19'6"	31.63	19'6"	60.70	19'6"	68.34	19'6"	37.53
20'	22.15	20'	30.96	20'	32.44	20'	62.00	20'	69.84	20'	38.49
20'6"	22.70	20'6"	31.74	20'6"	33.26	20'6"	63.30	20'6"	71.34	20'6"	39.45
21'	23.26	21'	32.51	21'	34.07	21'	64.60	21'	72.83	21'	40.41
21'6"	23.81	21'6"	33.28	21'6"	34.88	21'6"	65.90	21'6"	74.33	21'6"	41.37
22'	24.37	22'	34.06	22'	35.69	22'	67.20	22'	75.82	22'	42.34
22'6"	24.92	22'6"	34.83	22'6"	36.50	22'6"	68.50	22'6"	77.32	22'6"	43.30
23'	25.47	23'	35.61	23'	37.31	23'	69.80	23'	78.82	23'	44.26
23'6"	26.03	23'6"	36.38	23'6"	38.12	23'6"	71.10	23'6"	80.31	23'6"	45.22
24'	26.58	24'	37.15	24'	38.93	24'	72.40	24'	81.81	24'	46.19
24'6"	27.13	24'6"	37.93	24'6"	39.74	24'6"	73.70	24'6"	83.30	24'6"	47.15
25'	27.69	25'	38.70	25'	40.56	25'	72.40	25'	84.80	25'	48.11

* Prices are subject to change without notice

Effective Jan. 1, 2016

Quantity Discounts Available Per Blade

1" Silicon Steel .042	1 1/4" Silicon Steel .042		1 1/4" Silicon Steel .045		1 3/8" x 8° Cobalt .042		1 3/8" x 10° Cobalt .042		1 1/2" Silicon Steel .042	
No Discounts	30-59	Less \$1	30-59	Less \$1	15-29	Less \$2	15-29	Less \$2	24-59	Less \$1
	60-119	Less \$2	60-119	Less \$2	30-49	Less \$3	30-49	Less \$3	60-119	Less \$2
	120+	Less \$3	120+	Less \$3	50+	Less \$4	50+	Less \$4	120+	Less \$3

Timber Wolf® Band Mill & Resaw Blade Pricing

Blades welded to any length

1 1/2" Cobalt		1 1/2" Silicon Steel		1 3/4" Silicon Steel		2" Timber Wolf		2" Silicon Steel		2 1/8" Cobalt	
.050		.052		.052		.042		.052		.063	
13'6"	\$63.03	13'6"	\$28.92	13'6"	\$30.47	13'6"	\$33.75	13'6"	\$40.50		
14'	64.99	14'	29.99	14'	31.60	14'	35.00	14'	42.00		
14'6"	66.96	14'6"	31.06	14'6"	32.73	14'6"	36.25	14'6"	43.50		
15'	68.92	15'	32.13	15'	33.86	15'	37.50	15'	45.00		
15'6"	70.88	15'6"	33.20	15'6"	34.98	15'6"	38.75	15'6"	46.50		
16'	72.85	16'	34.27	16'	36.11	16'	40.00	16'	48.00		
16'6"	74.81	16'6"	35.34	16'6"	37.24	16'6"	41.25	16'6"	49.50		
17'	76.78	17'	36.41	17'	38.37	17'	42.50	17'	51.00		
17'6"	78.74	17'6"	37.48	17'6"	39.50	17'6"	43.75	17'6"	52.50		
18'	80.70	18'	38.55	18'	40.63	18'	45.00	18'	54.00	18'	143.20
18'6"	82.67	18'6"	39.63	18'6"	41.75	18'6"	46.25	18'6"	55.50	18'6"	146.90
19'	84.63	19'	40.70	19'	42.88	19'	47.50	19'	57.00	19'	150.60
19'6"	86.60	19'6"	41.77	19'6"	44.01	19'6"	48.75	19'6"	58.50	19'6"	154.30
20'	88.56	20'	42.84	20'	45.14	20'	50.00	20'	60.00	20'	158.00
20'6"	90.52	20'6"	43.91	20'6"	46.27	20'6"	51.25	20'6"	61.50	20'6"	161.70
21'	92.49	21'	44.98	21'	47.40	21'	52.50	21'	63.00	21'	165.40
21'6"	94.45	21'6"	46.05	21'6"	48.53	21'6"	53.75	21'6"	64.50	21'6"	169.10
22'	96.42	22'	47.12	22'	49.65	22'	55.00	22'	66.00	22'	172.80
22'6"	98.38	22'6"	48.19	22'6"	50.78	22'6"	56.25	22'6"	67.50	22'6"	176.50
23'	100.34	23'	49.26	23'	51.91	23'	57.50	23'	69.00	23'	180.20
23'6"	102.31	23'6"	50.33	23'6"	53.04	23'6"	58.75	23'6"	70.50	23'6"	183.90
24'	104.27	24'	51.41	24'	54.17	24'	60.00	24'	72.00	24'	187.60
24'6"	106.24	24'6"	52.48	24'6"	55.30	24'6"	61.25	24'6"	73.50	24'6"	191.30
25'	108.20	25'	53.55	25'	56.43	25'	62.50	25'	75.00	25'	195.00

* Prices are subject to change without notice

Effective Jan. 1, 2016

Quantity Discounts Available Per Blade

1 1/2" Cobalt		1 1/2" Silicon Steel		1 3/4" Silicon Steel		2" Silicon Steel		2" Silicon Steel		2 1/8" Cobalt	
.050		.052		.052		.042		.052		.063	
10-19	Less \$2	24-35	Less \$2	20-29	Less \$2	16-23	Less \$4	16-23	Less \$4	4-6	Less \$10
20+	Less \$4	36-59	Less \$3	30-49	Less \$3	24+	Less \$6	24+	Less \$6	7+	Less \$20
		60+	Less \$4	50+	Less \$4						

Timber Wolf® Silicon Steel and Specialty Wood Cutting Blade Selection Chart (1/8" to 1" Wide)

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

(cont.)

Timber Wolf® Silicon Steel and Specialty Wood Cutting Blade Selection Chart (1/8" to 1" Wide)

Blade Type	Blade Thickness	Thickness of Work Material to be cut			Radius of Cut	Tooth Hook Angle	Tooth Set Pattern
		Kiln Dry Wood (Unless Specified) (H) = Hardwood (S) = Softwood	Plywood, MDF & other Composites	Metal & Plastic			
1/2 x 10RK	.025	(H) 0 - 3/4 (S) 0 - 1/2	1/4 - 1	1/2	2 1/2	0	5
1/2 x 14RK	.025		1/8 - 1/4	1/4	2 1/2	0	5
1/2 x 18RK	.025		1/16 - 1/8	1/8	2 1/2	0	3
3/4 x 2/3 VPC	.025	(H) 8 - 12 (S) 6 - 10 (kiln & air dry)			5 7/16	6.5	5
3/4 x 2/3 VPC M42 (Bi-Metal)	.035	(H) 8 - 12 (S) 6 - 10 (kiln & air dry)			5 7/16	6.5	5
3/4 x 3TPC	.025	(H) 6 - 10 (S) 5 - 8			5 7/16	6.5	5
3/4 x 3PC	.032	(H) 6 - 10 (S) 5 - 8			5 7/16	6.5	5
3/4 x 4PC	.032	(H) 2 1/2 - 6 (S) 1 1/2 - 4			5 7/16	6.5	5
3/4 x 6PC	.032	(H) 3/4 - 2 1/2 (S) 1/2 - 1 1/2			5 7/16	6.5	5
3/4 x 10RK	.032	(H) 0 - 3/4 (S) 0 - 1/2	1/4 - 1	1/2	5 7/16	0	5
3/4 x 14RK	.032		0 - 1/4	1/4	5 7/16	0	5
1" x " 79SS M42 (Bi-Metal)	.035	(H) 3 - 18 (S) 3-15			7 1/8	6.5	3
1 X 2PC	.035	(H) 8 - 12 (S) 6 - 10 (green wood)			7 1/8	6.5	5
1 x 2/3VCT (Carbide Tip)	.035	(H) 3 - 12 (S) 3-10			7 1/8	6.5	Swaged Tooth (.060 kerf)
1 x 2/3VPC11D (Bi-Metal)	.035	(H) 3 - 12 (S) 3-10			7 1/8	6.5	5
1 X 3PC	.035	(H) 6 - 10 (S) 5 - 8			7 1/8	6.5	5
1 X 4PC	.035	(H) 2 1/2 - 6 (S) 1 1/2 - 4			7 1/8	6.5	5
1 X 6PC	.035	(H) 3/4 - 2 1/2 (S) 1/2 - 1 1/2			7 1/8	6.5	5
1 X 10RK	.035	(H) 0 - 3/4 (S) 0 - 1/2	1/4 - 1	1/2	7 1/8	0	5

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