

# **BLADES**

# AN INTRODUCTION TO WOOD-MIZER BLADES

Sawmill users in more than 100 countries depend on Wood-Mizer's wide range of blades to cut their timber. For many species of logs, specialized blades are needed for the best cutting performance. Wood-Mizer's blade testing teams work across Asia, Europe, Africa, and the Americas to develop and improve our selection of blade brands and profiles to meet the most difficult sawmilling challenges. Whatever wood you are cutting, Wood-Mizer has a blade to meet your needs.

Wood-Mizer has been producing blades specifically for sawmill applications since 1987. With ISO 9001 certification since 2003, quality control systems are strictly adhered to at each stage of blade production. Blade quality is carefully monitored. Our exclusive CBN sharpening and computerised setting equipment ensure that Wood-Mizer blades meet the highest standards.

Whether your needs are small or large, Wood-Mizer blades are affordable and deliver excellent performance. Blades can be ordered in any custom length. Wood-Mizer blades come in five distinct brands: BiMETAL, MaxFLEX, DoubleHARD, SilverTIP and StartCUT.

All Wood-Mizer blade can be easily sharpened and maintained on-site using Wood-Mizer's sharpening and setting equipment.

Wood-Mizer is one of very few companies that ultilize laser marking technology to brand and label blades.





# **EXCLUSIVE BLADE PROFILES**





Developed on exotic hardwoods in South America, the Wood-Mizer Turbo7 blade's unique, aggressive profile has established itself in the industry for sawing white oak, hickory, ash, hard maple and more. With increased air flow and higher tooth penetration while sawing hardwoods, the Turbo7 degree profile is tried, tested, and proven by high production, high horsepower, and high feed rate sawmilling operations throughout the world. Available in SilverTIP, DoubleHARD, and BiMETAL material, Turbo7 blades provide maximum run time and cut quality no matter what species is being sawn. Boost your blade performance today with Turbo 7 sawmill blades only available from Wood-Mizer.





Wood-Mizer's VORTEX dust removal blade will clear the dust from your cut like no other blade on the market. This extremely unique profile has generated extraordinary results in high production pallet factory tests. Not only does the VORTEX profile remove sawdust, it also does a more efficient job of removing the wood 'strings' that often appear on the edges of boards during sawing. Don't waste time removing these manually from your board, try VORTEX - patented by Wood-Mizer!

# **BANDSAW BLADES**





The BiMETAL blade for cutting wood is designed for high performance in industrial production environments. The high-alloy backing material of the BiMETAL blades offers a combination of durability and fatigue resistance, resulting in longer sharp life than MaxFLEX or DoubleHARD, especially when cutting harder, more abrasive wood species.

#### **BIMETAL Blades**

I	Raw material	Profile	Thickness / Width (mm)
	BB2734	10/30	1.07 x 34









The MaxFLEX blade features premium quality steel, chosen by Wood-Mizer to outperform competitors and maximise performance for customers.

The specialized alloy provides longer blade flex-life and increased durability. This premium quality blade will provide high performance results at an exceptional value.

#### MaxFLEX Blades

Raw material	Profile	Thickness / Width (mm)		
BM1735	10/30	1.00 x 35		
BM2732	10/30	1.07 x 32		
BMV2732	10/30	1.07 x 32		
BM2735	9/29, 10/30	1.07 x 35		
BMV2735	10/30	1.07 x 35		
BM3732	9/29, 10/30	1.14 x 32		
BM3738	9/29, 10/30, 4/32	1.14 x 38		
BMV3738	10/30	1.14 x 38		
BM4738	4/32, 9/29, 10/30, 13/29	1.40 x 38		
BM5738	4/32, 10/30, 13/29	1.27 x 38		
BM3775	10/30	1.14 x 75		
BM5775	10/30	1.27 x 75		



The DoubleHARD blade has been Wood-Mizer's most popular blade for more than a decade. It is affordable and dependable for all general sawing conditions. Higher quality steel is used, and the teeth are induction hardened. DoubleHARD blades are tough, non-brittle, and will not chip or wear prematurely. DoubleHARD blades offer unmatched cutting flexibility, whether you want to cut frozen or kiln-dried timber, softwoods, hardwoods or knotty woods.

#### DoubleHARD Blades

Double HATTD blades					
Raw material	Profile	Thickness / Width (mm)			
BD1735	9/29, 10/30	1.00 x 35			
BD1740	10/30	1.00 x 40			
BD1750	9/29, 10/30	1.00 x 50			
BD2732	7/34, 10/30	1.07 x 32			
BD2735	7/39, 9/29, 10/30	1.07 x 35			
BDV2735	10/30	1.07 x 35			
BD2750	9/29, 10/30	1.07 x 50			
BDV2750	10/30	1.07 x 50			
BD3732	7/34, 7/39, 9/29, 10/30	1.14 x 32			
BD3738	4/32, 7/34, 7/39, 9/29, 10/30, 13/29	1.14 x 38			
BDV3738	10/30	1.14 x 38			
BD5738	4/32, 7/34, 10/30, 13/29	1.27 x 38			





The SilverTIP blade is a proven economical blade, for high production and resaw environments.

A standard, very flexible base material is used to maximise flex-life, and the teeth are induction hardened. This combines exceptional sharp life with maximum flex-life in our SilverTIP blades for the secondary processing environment.

#### SilverTIP Blades

Raw material	Profile	Thickness / Width (mm)		
BS1425	10/30	0.90 x 25		
BS1735	10/30	1.00 x 35		
BS1740	10/30	1.00 x 40		
BS1745	10/30	1.00 x 45		
BS1750	10/30	1.00 x 50		
BS2732	10/30	1.07 x 32		
BSV2732	10/30	1.07 x 32		
BS2735	9/29, 10/30	1.07 x 35		
BSV2735	10/30	1.07 x 35		
BS2750	4/32, 10/30	1.07 x 50		
BS2775	10/30	1.07 x 75		
BS3738	4/32, 7/39, 9/29, 10/30, 13/29	1.14 x 38		
BSV3738	10/30	1.14 x 38		
BS3763	10/30	1.14 x 63		
BS4745	10/30, 13/29	1.40 x 45		
BS5775	7/39, 10/30	1.27 x 75		
BS5975	10/30	1.27 x 75		
BS7420	10/30	0.80 x 20		





StartCUT bandsaw blades are being manufactured from carbon steel with focus on their quality – prioritizing high standard of technical parameters. These cutting tools are being sold with induction hardened teeth that are set and sharpened.

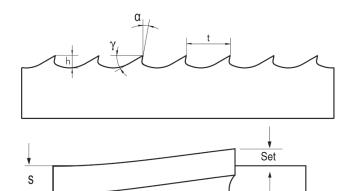
StartCUT sawmill blade type is currently the most economical bandsaw blade for sawmills and resaws in Wood-Mizer offer which provides competitive price alongside adequate cutting results.

#### StartCUT Blades

	Starteor Blades				
Raw material		Profile	Thickness / Width (mm)		
	BSC1732	10/30, 9/29	1.00 x 32		
	BSC1735	10/30, 9/29	1.00 x 35		
	BSC1740	10/30, 9/29	1.00 x 40		
	BSC2732	10/30, 9/29	1.07 x 32		
	BSC2735	10/30, 9/29	1.07 x 35		
	BSC3732	10/30, 9/29	1.14 x 32		
	BSC3738	10/30, 9/29	1.14 x 38		

# **Wood-Mizer** BLADES & BLADE MAINTENANCE

# **BLADE PARAMETERS**



A – Hook Angle

t - Tooth spacing

**h** – Tooth Height (Depth of Gullet)

S - Thickness of blade

γ - Back Angle

# **TOOTH PROFILES**

Recommended profiles for different applications:

- 4/32 recommended for very hard or frozen wood
- 7/34 recommended for hardwood. works best with engines over 15kW
- 7/39 recommended for frozen/tropical/extreme hardwoods. works best with engines over 15kW
- 9/29 recommended for hard or frozen wood
- 10/30 recommended for general purpose sawing. softwoods or easy-to-saw hardwoods
- 13/29 recommended for softwoods

	HOW TO READ THE BLADE PART NUMBER
В	How sold: B = BOX OF BLADES
D	How read:  B = BIMETAL BLADES  M = MaxFLEX BLADES  D = DoubleHARD BLADES  S = SilverTIP BLADES
٧	How read: V = VORTEX
2	Thickness:  1 = 1.00 mm 2 = 1.07 mm 3 = 1.14 mm 4 = 1.40 mm 5 = 1.27 mm 7 = 0.80 mm 9 = 0.90 mm
7	Tooth spacing: 4 = 1/2" = 12.7 mm 7 = 7/8" = 22.2 mm
32	Width:  20 = 20 mm  25 = 25 mm  32 = 32 mm  34 = 34 mm  35 = 35 mm  38 = 38 mm  40 = 40 mm  45 = 45 mm  50 = 50 mm  75 = 75 mm
IH	Details of teeth:  HS = HIGH SPEED (BiMETAL only)  IH = INDUCTION HARDENED (MaxFLEX, DoubleHARD, SilverTIP)  NH = NON-INDUCTION HARDENED (MaxFLEX, DoubleHARD, SilverTIP)
1030	Details of profile:  0432 = BLADE PROFILE 4°/32°  0734 = BLADE PROFILE 7°/34°  0739 = BLADE PROFILE 7°/39°  0929 = BLADE PROFILE 9°/29°  1030 = BLADE PROFILE 10°/30°  1329 = BLADE PROFILE 13°/29°
-401	Length: LENGTH IN CENTIMETERS
-F15	Type of box and quantity of blades:  F = FLAT BOX S = SQUARE BOX  5 = 5 PCS PER BOX 8 = 8 PCS PER BOX 10 = 10 PCS PER BOX 15 = 15 PCS PER BOX

# RECOMMENDED BLADE SPECIFICATIONS

		Extremely soft wood	Average wood	Extremely hard or frozen wood			
Hook Angle / Back Angle		13° / 29°	10° / 30°	4° / 32°	7° / 34°	7° / 39°	9° / 29°
	Tooth Height	7.6mm	6.4mm	6.4mm 7.1mm 8.1mm 5.5mm		5.5mm	
	Thickness 1.00mm	-	0.019"- 0.021"	-			
Set	Thickness 1.07mm	0.021"- 0.023"	0.019"- 0.021"	0.016"- 0.018"			
Tooth 8	Thickness 1.14mm	0.025"- 0.027"	0.023"- 0.025"		0.018"-	- 0.020"	
Po	Thickness 1.27mm	0.027"- 0.029"	0.024"- 0.026"		0.019"-	- 0.023"	
	Thickness 1.40mm	0.028"- 0.030"	0.025"- 0.027"		0.020"-	- 0.024"	
New blades are set at the factory with a 4, 7, 9, 10 or 13° hook angle.  Blade set and hook angle can be modified by users.							



# SHARPENERS -

#### BMS500/600 - PROFESSIONAL BLADE SHARPENER

The BMS500 is designed to suit the requirements of high-production sawmills that sharpen blades continuously. It features industrial-grade construction, and automatic features that let you focus less on sharpening blades, and more on being efficient with your time.

The BMS500 sharpener will sharpen a blade from 25mm wide to 75mm wide and tooth spacing from 12.7mm to 28.6mm.

The BMS500 uses an industrial 203mm diameter CBN wheel to sharpen blades, and the wheel rotates at 4250 rpm. The hood lifts up and the grinding wheel lifts out of the way for easy blade installation and removal.

The hood features a viewing window and interior LED lighting so the operator can closely and safely monitor the sharpening progress.

The user-friendly control station includes a tooth counter display, variable grinding speed, and two modes: Set-Up and Run. The sharpener is quickly configured to stop after an exact number of teeth have been sharpened. A carbide scraper deburrs each tooth and the oil wiper pads clean excess oil off the blade automatically. Grinding oil is cleaned by a series of magnets that remove iron filings from the oil.

Designed by professional blade maintenance experts for quality and production, the BMS500 is the ultimate band blade sharpener on the market today.

BMS600 – Same features as the BMS500, but with a larger pump for increased and efficient coolant flow.



The BMS250 blade sharpener is ideal for the sawyer looking to invest in a high quality, automatic sharpener that can sharpen blades regularly and reliably for a timber cutting business.

Wood-Minry 250 BIMS 2

The BMS250 automatically sharpens blades according to a set number of teeth. The hood enclosure and grinding wheel lift out of the way for easy blade installation and removal. It features an auto-shutoff, and a variable speed feed rate controlled from the control panel. The heavy-duty hood encloses the blade during sharpening and includes an exhaust vent. Oil wiper pads clean excess oil off the blade automatically.

The BMS250 uses 127mm full profile CBN grinding wheels, which come in various profiles, and are ready to sharpen out-of-the-box. The BMS250 is equipped with a 0.18kW single phase AC motor with a speed of 2800 rpm.

An oil lubrication system keeps the blade cool during

grinding, and magnets attract the metal filings, cleaning the oil for reuse.

The tooth pusher is adjustable for fine-tuning, as well as the blade height platform is easily adjusted to manage blades from 25mm to 50mm wide.



# **Wood-Mizer**\* BLADES & BLADE MAINTENANCE

# CBN WHEELS —

### CBN WHEELS 127 MM (5") AND 203 MM (8")

Wood-Mizer manufactures specially designed borazon grinding wheels in five profiles which exactly match our factory set profiles:

- 4/32 recommended for very hard or frozen wood
- 7/34 recommended for hardwood, works best with engines over 15 kW
- 7/39 recommended for frozen/tropical/extreme hardwoods. works best with engines over 15 kW
- 9/29 recommended for hard or frozen wood
- 10/30 recommended for general purpose sawing. softwoods or easy-to-saw hardwoods
- 13/29 recommended for softwoods



203 mm borazon grinding wheels are available for all Wood-Mizer blade profiles. The 203 mm wheel is made for use with the BMS500/600 industrial blade sharpener. The larger grinding surface provides longer sharpening life of the grinding wheel, and a faster grind, resulting in top quality sharpening.

# SHARPENER & TOOTH SETTER TWO-IN-ONE -

#### **BMST50 – SHARPENER AND TOOTH SETTER**

The BMST50 enables blade sharpening and setting with a single machine. Manually operated, this efficient, space saving unit will lower operation time and costs by providing a complete blade ready for sawing. With a capacity of 25 mm-38 mm blades, the BMST50 offers many adjustable features to maintain blade precision and accuracy.



# **TOOTH SETTERS -**

#### BMT300 - AUTOMATIC TOOTH SETTER / ONE SIDE AT A TIME

The BMT300 industrial toothsetter is designed for professional blade sharpening businesses and large sawmill companies. Maximum blade width is 75mm, and the feed rate is up to 24 teeth per minute.

The BMT300 pneumatic setter ensures extreme tooth setting accuracy and consistency. An electronic control panel displays all parameters and diagnostic tools. Simply install the blade, and start the setter in the mode you wish to run. When one side of the blade is finished, invert the blade, re-install it in the setter, and move the blade pusher into the reverse position.

Several different modes and functions allow flexibility with how the setter will operate and the parameters that it will use. Inspection Mode simply checks the set on the teeth. Regular setting modes can detect set patterns, and bend back overset teeth automatically. After setting

the blade, the setter will stop, or will double-check the blade to ensure that the set is exact. Tolerances for minimum and maximum set can be adjusted.



The BMT300 is designed as the toothsetting companion for the BMS500 blade sharpener for companies with multiple band sawmills in operation as well as for ReSharp service centres whose business is based on blade maintenance.

# **TOOTH SETTERS** -

# BMT250 - DUAL TOOTH SETTER / WITH ELECTRIC FEED SYSTEM

The BMT250 dual toothsetter semi-automatically sets of both sides of your blades with high quality and efficiency. The BMT250 is equipped with electric power feed that keeps the blade moving smoothly forward until all teeth are set.

The BMT250 can be adjusted to set blades 25 mm-75 mm wide, and from 13 mm-32 mm tooth spacing. The BMT250 is controlled with a central control panel that features an automatic tooth counter, which stops when all teeth have been set.

The gauge precisely measures the set in each tooth to ensure your tooth set is accurate and ready to cut like a new blade again.

#### BMT200 - DUAL TOOTH SETTER / MANUAL CRANK

Set both sides of your blade at the same time easily with the manual BMT200 toothsetter, which will help you extend your blade's sharp life and get the most accurate cut of timber. The BMT200 is designed for affordable blade tooth setting. One turn of the crank sets two teeth and moves the blade forward at the same time.

The BMT200 handles 25 mm -75 mm blades, can set from 13 mm-32 mm tooth spacing, and can finely adjust tooth space indexing. The gauge precisely measures the set in each tooth to ensure your tooth set is accurate and ready to cut like a new blade again.





#### **BMT150 - CRANK TOOTH SETTER**

Set both sides of your blade at the same time easily with the manual BMT150 toothsetter, which will help you extend your blade's sharp life, improve cutting performance, and get the most accurate cut of timber.

The BMT150 is designed for affordable blade tooth setting. By pulling back on the lever, both teeth are set, and by pushing forward, the blade is advanced to the next set of teeth. This cycle continues until the blade is completely set. One cycle sets all blade teeth. There is no need to invert the blade.

The BMT150 handles 25 mm-76 mm blades, can set from 6 mm-32 mm tooth spacing, and can finely adjust tooth space indexing. A set gauge is included with the machine and precisely measures the set in each tooth to ensure your tooth set is accurate and ready to cut like a new blade again.

#### **BMT100 – CRANK TOOTH SETTER**

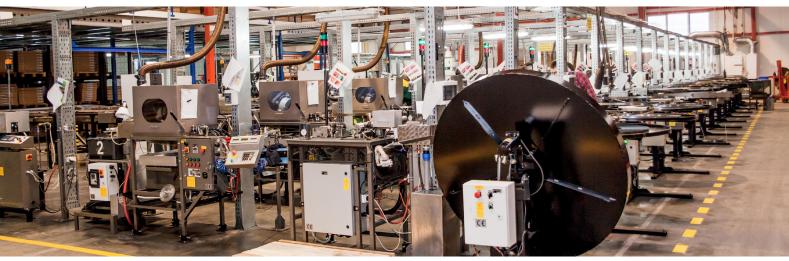
The BMT100 is designed for simple, accurate, and affordable blade tooth setting. Simply manually advance the blade and set one side at a time. The gauge precisely measures set in each tooth to ensure your tooth set is accurate and ready to cut like a new blade again. Once one side of the blade is completed, invert the blade and set the alternating teeth.

Adjustable blade arms allow you to handle 25 mm-50 mm blades, and indexing pawls support various blade profiles. The set point can be adjusted if required. For the individual who has low volume but who needs to ensure consistent set, the BMT100 is a great way to get started.





### BLADES • BLADE MAINTENANCE • RESHARP SERVICE



European blades production facility



#### LEAVE BLADE SHARPENING TO THE EXPERTS

Many of Wood-Mizer's distributors offer our full ReSharp service, where your blades are not only sharpened, but completely re-manufactured to like-new quality again. The same machines used to produce blades on Wood-Mizer's production lines are used by our ReSharp locations. Each blade is sharpened using the best CBN grinding technology, along with computerised tooth setting to ensure accuracy and straight, smooth cuts.

#### **CUSTOMER BLADE MAINTENANCE PACKAGE**

Wood-Mizer has developed a range of sharpening equipment to suit your needs from basic sharpeners to industrial high production sharpeners. For customers unable to benefit from a ReSharp Service, we have a Blade Maintenance Package that will allow you to recondition your own blades. The blade maintenance system will give you "near" factory results. Our sharpening and setting equipment has been carefully designed to be the best balance between low-cost, excellent results and long life under difficult working conditions.

All Wood-Mizer sharpeners utilise super abrasive CBN grinding wheel technology to ensure the best sharpening results. Wood-Mizer manufactures our own CBN wheels, which are pre-shaped to each blade profile, eliminating the need to configure your sharpening stone. When you use a Wood-Mizer CBN wheel to sharpen your blades, you are sharpening them to our factory specifications.



from forest to final form

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