AMADA MACHINE TOOLS AMERICA, INC.

THE VISION OF PRECISION

Saw Blades

AMADA®

Contents

Amada Machine Tools America

With more than 70 years of industry experience, Amada Machine Tools America is committed to helping our customers deliver dependable service and top-quality work with exceptional sawing solutions.

Whatever your sawing needs, we have the right solution for your specific application.

Market-Leading Quality—We believe quality work begins with quality tools designed and built from the ground up to deliver outstanding performance time after time.

Customer-Driven Innovation—Every feature, function and configuration we offer has been developed to address the needs of our customers.

Proven Accuracy—We help you take your work to the next level and exceed your customers' expectations.

Reliable Productivity—We understand productivity is the heart of your business, and we can help you optimize it in multiple ways.

A History of Cutting-Edge Manufacturing

Amada Machine Tools was founded on the manufacturing of saws back in 1946. Since that time, our goals have always been to provide our customers with increased productivity and reliability.

Amada also offers another unique advantage in that we manufacture our own bandsaw blades. This allows you to precisely match the characteristics of the blade to the machine to achieve optimum cutting performance, no matter what material you're working with.

Because we manufacture our own blades, we're able to ensure we've got the right blades—in stock—when you need them. And we have expert engineers with years of industry experience on staff to answer any questions you might have.

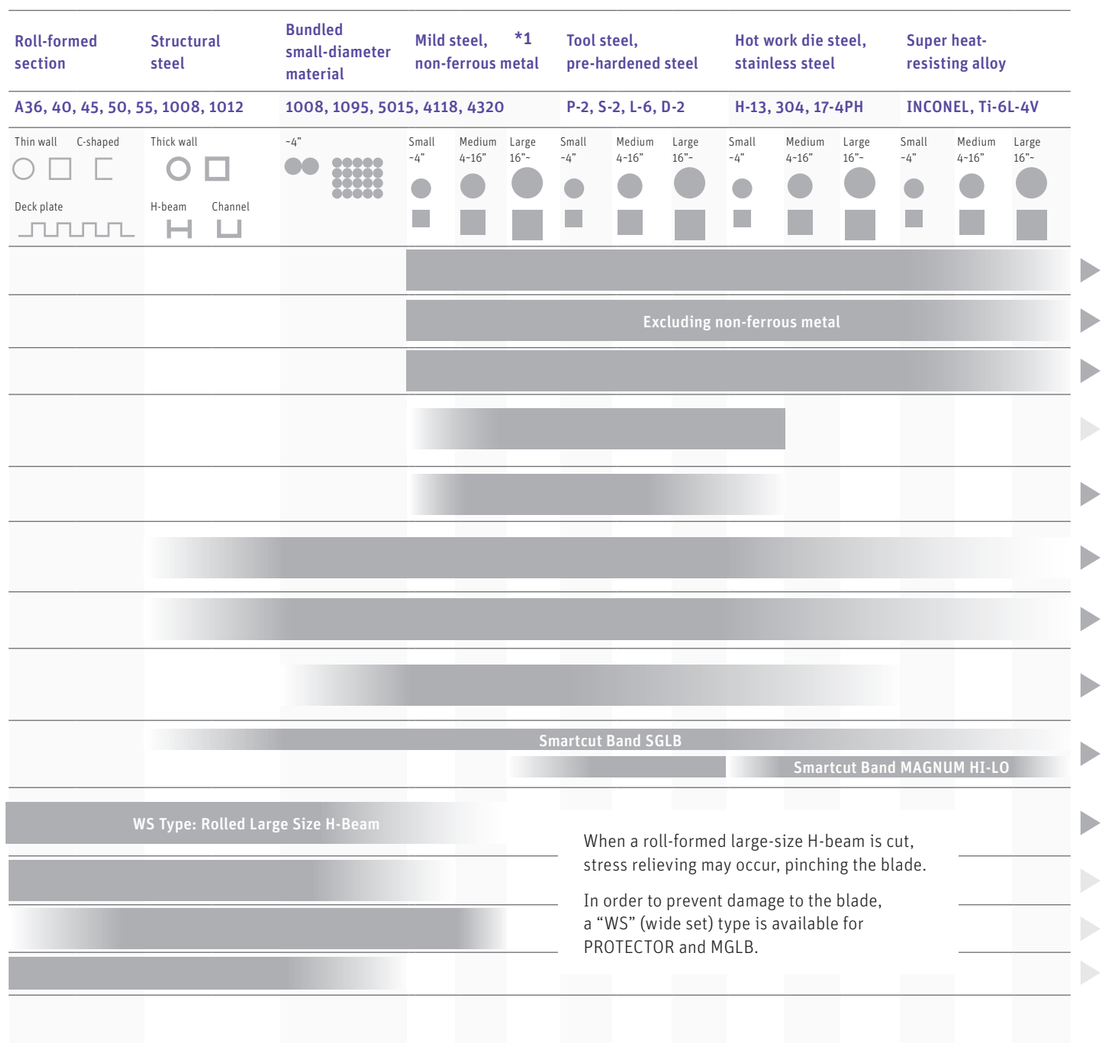
TECHNOLOGIES OF AMADA

Saw Blades

Finding the Right Blade

No matter what kind of sawing capabilities you need, these blades deliver the proven quality and performance that have made Amada the trusted choice for productivity and reliability.

Using the chart below, you can select the blade that is best suited for the type and shape of the material to be cut.



When a roll-formed large-size H-beam is cut, stress relieving may occur, pinching the blade.

In order to prevent damage to the blade, a “WS” (wide set) type is available for PROTECTOR and MGLB.

Blade Type Selection

*1: Non-ferrous metals referred to in this chart are mainly aluminum, aluminum alloy, copper, and copper alloy. These metals may be equivalent to hard-to-cut materials and even harder in some cases. When using a special alloy, consult Amada first.

*2: The hardness of the tooth tip represents Amada’s average value. It is adjusted so some extent according to the types and sizes of the products.

The minimum requirement for cutting is that the tooth tip is harder than the material to be cut. In order to ensure economical cutting, however, the tooth tip should be a minimum of twice as hard as the material to be cut. This is a reference guide only.

Blade type	Edge material	Hardness of tooth tip (Hv) *2	Wear resistance / Chipping resistance	Features
AXCELA B	Carbide Tip	1600	★★★★★ / ★★	Highly efficient standard carbide-tipped bandsaw blade that excels on hard-to-cut materials like titanium and nickel-based alloys.
AXCELA G	Carbide + EXCOAT-DP	1600 + 2800	★★★★★ / ★★★	High-quality carbide tips and dovetail tooth shape provide outstanding cutting speed for hard-to-cut materials.
AXCELA S	Carbide Tip	1600	★★★★★ / ★★	A unique design and precision grinding of each tooth provide excellent performance with a wide range of materials.
MAGNUM HI-LO	Amada M71 HSS	1000	★★★★ / ★	New, high-performance edge material with specially designed set and tooth geometry. Appropriate for hard-to-cut materials, including super heat-resisting alloys.
HI-LO	M42 HSS	950	★★★ / ★★	Special tooth design for faster cutting and longer blade life when cutting work-hardened materials.
CHIP BREAKER	M42 HSS	950	★★★ / ★★	Special tooth design reduces cutting resistance while maintaining penetration. Suitable for a wide variety of steel types and sizes, from mild steels to hard-to-cut alloys.
SGLB	M42 HSS	950	★★★ / ★★	Suitable for a wide variety of steel types and sizes, from mild steels to hard-to-cut alloys.
COBALT8	Amada Modified M42 HSS	930	★★ / ★★★★	General-purpose Amada-modified M43 blade ideal for cutting mild steel and structural steel. The “Chip-Curler” tooth shape and unique set pattern provide longer blade life.
SMARTCUT BAND	Amada M71 HSS	1000	★★★★ / ★	Thinner versions of the SGLV and MAGNUM HI-LO blades designed specifically for the PCSAW330.
	M42 HSS	950	★★★ / ★★	
PROTECTOR EX M42	M42 HSS	950	★★★ / ★★★★★	Designed for the structural steel industry, the tooth geometry virtually eliminates tooth chipping, plus the M42 edge provides abrasion resistance for extended blade life.
PROTECTOR	Matrix HSS (M42 HSS)	900	★★ / ★★★★★	A special Amada-modified M42 blade exclusively for structural steel and profiles. Incorporates a unique chip-resisting feature.
MGLB		900	★★ / ★★★	An economical Amada-modified M42 blade, appropriate for small-size mild steel and general-purpose applications.
DUOS		900	★★ / ★★★★★	For thin-walled tubes to small-size solids of mild steel.
CIRCULAR SAW BLADES			—	Designed for accurate cuts at higher cutting rates with high-quality sawing-grade carbide.

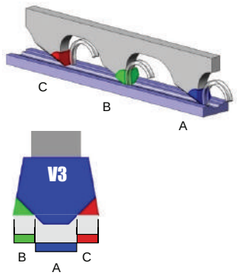
AXCELA B Series

AXCELA B Series
Carbide-Tipped Blade for Hard-to-Cut Materials

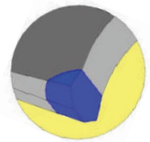
The highly efficient AXCELA B series of bandsaw blades offers a unique tooth design that delivers outstanding performance in hard-to-cut materials, such as titanium and nickel-based alloys. The AXCELA B series also has additional design features that ensure high performance.

Features

Tooth shape optimized to match cutting applications—The S3 (three-pitch pattern, set tooth shape) design excels in cutting heat-resistant steel, Inconel, nickel-based alloys, titanium-based alloys, hard material (50HRC), hard chromium plate, copper alloy, brass, bronze, etc.

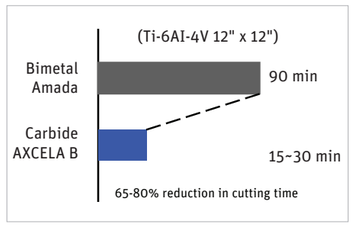


Sharp edge surface—Enhanced cutting performance comes from high-precision grinding of each tooth surface.



SPECIFICATIONS	
EDGE MATERIAL	Carbide
HARDNESS OF TOOTH TIP	1600 HV
WEAR RESISTANCE (1–5)	★★★★★ (5 Stars)
CHIPPING RESISTANCE (1–5)	★★ (2 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

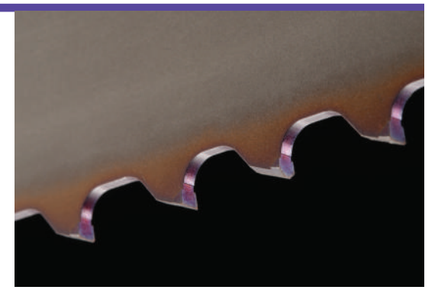


COMPARISON

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)				
		0.9/1.1	1.4/1.6	1.8/2	2/3	3/4
1"	0.035"					●
1-1/4"	0.042"				●	●
1-1/2"	0.050"		●	●	●	●
2"	0.063"		●	●	●	
2-5/8"	0.063"	●	●			

AXCELA G Series

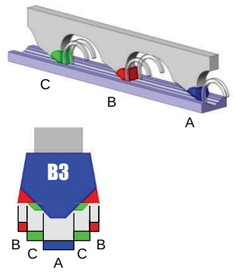


AXCELA G Series
High-Performance Carbide-Tipped Blade

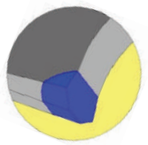
With high-quality carbide tips and a dovetail tooth shape, AXCELA G blades deliver outstanding cutting speeds for hard-to-cut materials.

Features

Carbide tooth tips—The kerf-dispersing tooth shape effectively reduces cutting resistance of high-alloy steel.



Tooth tip microchamfer—The microchamfer on each tooth top helps the blade achieve ultra-high cutting rates and reduces tooth chipping.



EXCOAT-DP—This coating provides a high degree of hardness, oxidation resistance, and adhesion strength—it's the ultimate coating for bandsaw blades.

Advantages

- Greater wear resistance than bi-metal blades
- Higher heat resistance than bi-metal blades
- Less tooth vibration
- Precision-ground teeth

Benefits

- Better finish
- Faster cutting
- Longer life

SPECIFICATIONS	
EDGE MATERIAL	Carbide + EXCOAT-DP
HARDNESS OF TOOTH TIP	1600 + 2800 HV
WEAR RESISTANCE (1–5)	★★★★★ (5 Stars)
CHIPPING RESISTANCE (1–5)	★★★ (3 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

MANUFACTURED

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)	
		1.4/1.6	1.8/2
1-1/2"	0.055"		V
2"	0.063"	V	V
2-5/8"	0.063"	V	V

V: Variable Positive Rake

WELDED TO LENGTH

BLADE WIDTH	BLADE THICKNESS	BLADE LENGTH	PITCH (INCHES)		
			0.9/1.1	1.4/1.6	1.8/2
1-1/2"	0.055"	15'0"			V
1-1/2"	0.055"	15'6"			V
2"	0.063"	20'0"		V	V
2-5/8"	0.063"	22'11"	V	V	V
2-5/8"	0.063"	27'3"	V	V	

AXCELA S Series

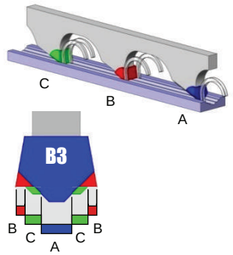
AXCELA S Series
Carbide-Tipped Blade for a Wide Range of Applications

The highly efficient AXCELA S series offers a unique tooth design that delivers superior performance with a wide range of materials.

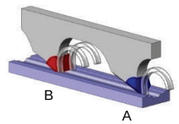
Designed to excel in mild steels, tool steels, stainless steels, and non-ferrous materials, the AXCELA S series offers two pitch patterns to match your cutting applications.

Features

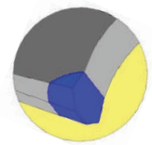
D3 (three-pitch pattern, dovetail tooth)—Kerf-cleaning tooth design effectively reduces cutting resistance for hard-to-cut materials and large cross-sections. For 0.9/1.1P, 1.4/1.6P.



D2 (two-pitch pattern, dovetail tooth)—This tooth design improves the precision of a cut surface. For 1.8/2P, 2/3P, 3/4P.

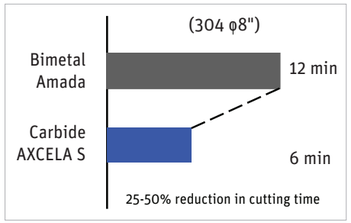


Enhanced cutting performance comes from high-precision grinding of each tooth surface.



SPECIFICATIONS	
EDGE MATERIAL	Carbide
HARDNESS OF TOOTH TIP	1600 HV
WEAR RESISTANCE (1–5)	✱✱✱✱✱ (5 Stars)
CHIPPING RESISTANCE (1–5)	✱✱ (2 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.



COMPARISON

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)				
		D3	D3	D2	D2	D2
		0.9/1.1	1.4/1.6	1.8/2	2/3	3/4
1"	0.035"					●
1-1/4"	0.042"			●	●	●
1-1/2"	0.050"		●	●	●	●
2"	0.063"		●	●	●	
2-5/8"	0.063"	●	●			
3"	0.063"	●				

MAGNUM HI-LO

MAGNUM HI-LO
Patented Varying Tooth Height and Set M71 Blade

With their special alloying technology, MAGNUM HI-LO blades achieve HRC 70 tooth hardness. They maintain positive cutting action and outlast other blades in production cutting of large-diameter work-hardened steels and nickel-based super alloys with tensile strengths of up to 164,000 psi.

Features

- 15-degree positive rake angle
- Hardness of HRC 70
- HI-LO tooth height
- Patented M71 high-speed edge

Advantages

- High heat resistance
- High wear resistance
- Higher tooth hardness than M42 bi-metal blade
- Reduced cutting resistance

Benefits

- Faster cutting on difficult-to-cut materials
- Faster cutting on large-diameter materials
- Increased accuracy
- Longer life on difficult-to-cut materials

SPECIFICATIONS	
EDGE MATERIAL	Amada M71 HSS
HARDNESS OF TOOTH TIP	1000 HV
WEAR RESISTANCE (1–5)	✱✱✱✱ (4 Stars)
CHIPPING RESISTANCE (1–5)	✱ (1 Star)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)			
		0.75/1.1	1.1/1.5	2/3	3/4
1-1/4"	0.042"			V	V
1-1/2"	0.050"		V	V	V
2"	0.063"		V	V	V
2-5/8"	0.063"		V		
3"	0.063"	V	V		

V: Variable Positive Rake

HI-LO

HI-LO
Varying Tooth Height Design, M42 Welded Edge Blade for Metal-Cutting Bandsaws

The HI-LO blade features a high-and-low tooth height design and a 15-degree rake angle. The blade is ideal for cutting hard steels.

Features

- 15-degree positive rake angle
- Hardness of HRC 68-69
- Patented HI-LO tooth design
- Specially designed tooth form

Advantages

- High heat resistance
- High wear resistance
- Reduced cutting resistance

Benefits

- Faster cutting on difficult-to-cut materials
- Longer life on difficult-to-cut and work-hardened materials
- Straighter cutting

SPECIFICATIONS	
EDGE MATERIAL	M42 HSS
HARDNESS OF TOOTH TIP	950 HV
WEAR RESISTANCE (1–5)	✱✱✱ (3 Stars)
CHIPPING RESISTANCE (1–5)	✱✱ (2 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)				
		0.75/1	1.1/1.5	2/3	3/4	4/6
1"	0.035"			V	V	V
1-1/4"	0.042"			V	V	V
1-1/2"	0.050"		V	V	V	
2"	0.063"	V	V	V		
2-5/8"	0.063"	V	V			
3"	0.063"	V	V			

V: Variable Positive Rake

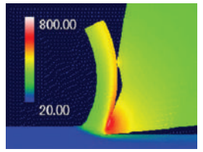
CHIP BREAKER

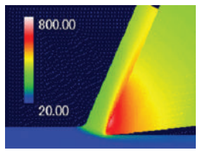
CHIP BREAKER
Patented Gullet Design

The CHIP BREAKER blade is designed to reduce the heat generated at increased chip loads. With reduced tooth stripping and breaking, this equates to the lowest possible cost per square inch of metal cutting.

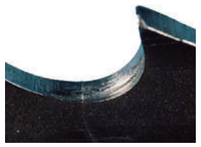
Features

- Reduces heat generated at increased chip loads





- Prevents scoring on gullets



- Reduced chip weld
- Reduced backing fatigue

Advantages

- Reduced tooth stripping
- Reduced blade breakage

Benefits

- Higher cutting rates
- Increased blade life

SPECIFICATIONS	
EDGE MATERIAL	M42 HSS
HARDNESS OF TOOTH TIP	950 HV
WEAR RESISTANCE (1–5)	✱✱✱ (3 Stars)
CHIPPING RESISTANCE (1–5)	✱✱ (2 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)				
		0.75/1	1.1/1.5	2/3	3/4	4/6
1"	0.035"				V	V
1-1/4"	0.042"			V	V	V
1-1/2"	0.050"		V	V	V	V
2"	0.063"		V	V	V	V
2-5/8"	0.063"	V	V	V	V	
3"	0.063"		V			

V: Variable Positive Rake

SGLB

SGLB
High-Production M42 Bi-Metal Blade

The SGLB was designed to cover a broad range of cutting applications with maximum efficiency in sawing wear-resistant tool steels. The blade's tough M42 cobalt edge resists heat and abrasion, while the varied pitch tooth form expands the range of sizes and shapes that can be sawed successfully without changing blades.

Features

- 7-degree positive rake angle
- Hardness of HRC 68-69
- M42 cobalt high-speed steel edge
- Specially designed tooth form

Advantages

- Better tooth penetration
- High heat resistance
- High wear resistance

Benefits

- Fast cutting rates
- High production rate
- Long life on moderate to difficult-to-cut materials
- Low cost per cut

SPECIFICATIONS	
EDGE MATERIAL	M42 HSS
HARDNESS OF TOOTH TIP	950 HV
WEAR RESISTANCE (1–5)	✱✱✱ (3 Stars)
CHIPPING RESISTANCE (1–5)	✱✱ (2 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)								
		0.75/1.1	1.1/1.5	1.5/2	2/3	3/4	4/6	5/7	6/10	8/12
3/4"	0.035"						PR			
1"	0.035"				MG	MG	PR	PR	S	S
1-1/4"	0.042"		AG		AG	MG	PR	PR	S	
1-1/2"	0.050"		AG	AG	AG	MG	PR	PR		
2"	0.063"	AG	AG	AG	AG	MG	MG			
2-5/8"	0.063"	AG	AG	AG	AG	WS/MG	MG			
3"	0.063"	AG	AG	AG						

S: Standard Tooth, Straight Rake Set | PR: 7-Degree Positive Rake | MG: 10-Degree Positive Rake
AG: Positive Rake, Large Gullet Size | WS: Wide Set

COBALT8

COBALT8
Amada-Modified M42 High-Speed Bi-Metal Blade

This general-purpose blade is ideal for cutting mild steel and structural steel. The "Chip Curler" tooth shape and unique set pattern deliver exceptional performance and longer blade life.

Features

- Amada-modified M42 high-speed steel edge
- "Chip Curler" tooth shape

The "Chip Curler" tooth shape improves chip removal and reduces the impact on the bottom of the gullet, resulting in longer life. COBALT8 is ideally suited to cut mild steel.

The distinctive set pattern reduces noise and vibration during cutting, resulting in much longer blade life and noticeably better cutting performance, as well.

Advantages

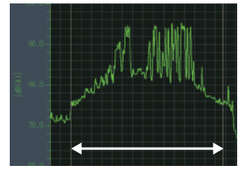
- Enhanced chipping resistance
- Improved tooth penetration

Benefits

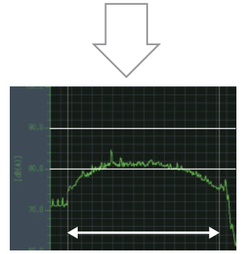
- General-purpose blade
- Low cost per cut
- Longer life for mild steel and structural steel shapes

SPECIFICATIONS	
EDGE MATERIAL	Amada-modified M42 high-speed steel
HARDNESS OF TOOTH TIP	930 HV
WEAR RESISTANCE (1–5)	✱✱ (2 Stars)
CHIPPING RESISTANCE (1–5)	✱✱✱✱ (4 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.



CONVENTIONAL



COBALT8

COMPARISON OF NOISE
Flat Bar
A36 12 mm x 300 mm
Blade Speed 60 m/min
Cutting Time 1 min. 12 sec.

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)			
		2/3	3/4	4/6	5/7
1"	0.035"		V	V	V
1-1/4"	0.042"		V	V	V
1-1/2"	0.050"	V	V	V	V
2"	0.063"		V	V	

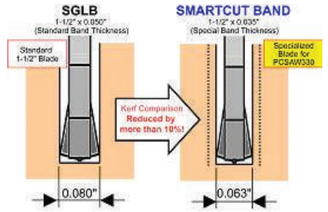
V: Variable Positive Rake

SMARTCUT BAND
Specialized Bi-Metal Blade for PCSAW330

These thinner versions of our SGLB and MAGNUM HI-LO blades are ideal for sawing narrow parts from expensive metal bars or blocks. Using SMARTCUT BAND blades gives you twofold cost-saving benefits: reducing material waste/disposal costs and increasing parts yield per bar, resulting in additional profit. And those little savings here and there can really add up!

Features

- Special band thickness

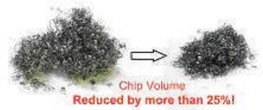


Advantages

- More than 10% thinner than regular SGLB or MAGNUM HI-LO blades

Benefits

- Reduced chip volume



SPECIFICATIONS	
SMARTCUT BAND-SGLB	
EDGE MATERIAL	M42 high-speed steel
HARDNESS OF TOOTH TIP	950 HV
WEAR RESISTANCE (1–5)	✱✱✱ (3 Stars)
CHIPPING RESISTANCE (1–5)	✱✱ (2 Stars)

SPECIFICATIONS	
SMARTCUT BAND-MAGNUM HI-LO	
EDGE MATERIAL	Amada M71 high-speed steel
HARDNESS OF TOOTH TIP	1000 HV
WEAR RESISTANCE (1–5)	✱✱✱✱ (4 Stars)
CHIPPING RESISTANCE (1–5)	✱ (1 Star)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

SCB-SG

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)			
		1.1/1.5	2/3	4/4	4/6
1-1/2"	0.035"		V	V	V

SCB-MA

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)			
		1.1/1.5	2/3	4/4	4/6
1-1/2"	0.042"		V	V	

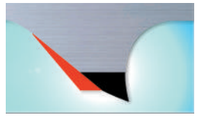
V: Variable Positive Rake

PROTECTOR EX M42
For Structural Steel with M42 Edge

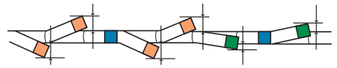
Designed exclusively for use with structural steel, the M42 Edge protects against tooth chipping and delivers high wear resistance. This PROTECTOR EX feature, added to the back face of the tooth tip, prevents excessive cutting.

Features

- M42 cobalt high-speed steel edge—M42 cobalt high-speed steel provides superior wear resistance. Treated with Amada's unique heat treatment technology, this steel exhibits a performance that is highest in the class. It is broadly suitable for cutting general steel through hard-to-cut materials.
- Unique design tooth form—PROTECTOR added on the back face of the tooth tip suppresses excessive cutting and prevents continuous chipping.



- Positive rake tooth angle
- Strong tooth profile—The tooth tip is strengthened to better withstand impact caused during intermittent cutting. At the same time, high cutting efficiency is assured.
- Set design—The broaching style set pattern was designed to eliminate pinching, thereby preventing the blade from binding in the cut.



Advantages

- Extra-tough shock resistance
- Extra-tough tooth strippage resistance

Benefits

- Extremely fast cutting on structural steel
- Extremely long life during intermittent structural cutting
- Low cost per cut

SPECIFICATIONS	
EDGE MATERIAL	M42 HSS
HARDNESS OF TOOTH TIP	950 HV
WEAR RESISTANCE (1–5)	✱✱✱ (3 Stars)
CHIPPING RESISTANCE (1–5)	✱✱✱✱✱ (5 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)	
		3/4	4/6
1"	0.035"	V	V
1-1/4"	0.042"	V	V
1-1/2"	0.050"	V	V
2"	0.063"	V	

V: Variable Positive Rake

PROTECTOR
Designed Exclusively for Structural Steel

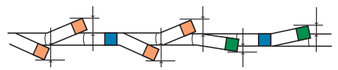
The PROTECTOR blade provides excellent resistance against tooth chipping while delivering unparalleled efficiency. The PROTECTOR feature, added to the back face of the tooth tip, prevents excessive cutting.

Features

- Amada-modified M42 high-speed steel edge
- Unique design tooth form

The PROTECTOR is added to the back face of the tooth tip, suppressing excessive cutting and preventing continuous chipping.

- Positive rake tooth angle
- Strong tooth profile—The tooth tip is strengthened to better withstand impact caused during intermittent cutting. At the same time, high cutting efficiency is assured.
- Set design—The broaching style set pattern was designed to eliminate pinching, thereby preventing the blade from binding in the cut.



- Wide set available—When a large roll-formed H-beam is cut, stress relieving may occur, pinching the blade. In order to prevent damage to the blade, a wide set (WS) type is available for PROTECTOR.

Advantages

- Extra-tough shock resistance
- Extra-tough tooth strippage resistance

Benefits

- Extremely fast cutting on structural steel
- Extremely long life during intermittent structural cutting
- Low cost per cut

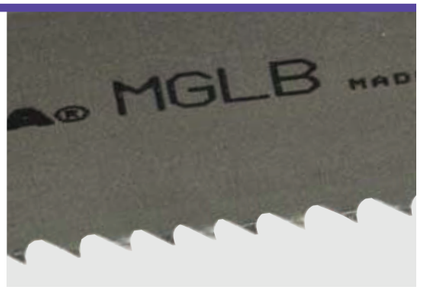
SPECIFICATIONS	
EDGE MATERIAL	Amada-modified M42 HSS
HARDNESS OF TOOTH TIP	900 HV
WEAR RESISTANCE (1–5)	✱✱ (2 Stars)
CHIPPING RESISTANCE (1–5)	✱✱✱✱✱ 5 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)		
		2/3	3/4	4/6
3/4"	0.035"			V
1"	0.035"		V	V
1-1/4"	0.042"		V	V
1-1/2"	0.050"	V/WS	V/WS	V
2"	0.063"	V/WS	V/WS	V
2-5/8"	0.063"	V	V/WS	V

V: Variable Positive Rake | WS: Wide Set



MGLB
General-Purpose Matrix Bi-Metal Blade

The MGLB is best suited for cutting structural shapes, tubing, and stacks of mild steel pieces. The MGLB allows bandsaw machines to cut a wide range of material sizes and shapes without requiring a change of blades. Its tough, high-speed steel teeth resist chipping, stripping, and abrasion. It can also tolerate the occasional improper speeds and feeds that are often used by inexperienced saw operators.

Features

- Hardness of HRC 67-68
- Amada-modified M42 cobalt high-speed steel edge
- Specially designed tooth form
- Wide set available—When a roll-formed large-size I-beam is cut, stress relieving may occur, pinching the blade. In order to prevent damage to the blade, a wide set (WS) type is available for MGLB.

Advantages

- High wear resistance
- Tough shock-resistant tooth edge

Benefits

- High production rate
- Low cost per cut
- Long life on mild solid steel, heavy wall tubing, and structural steel

SPECIFICATIONS	
EDGE MATERIAL	Amada-modified M42 HSS
HARDNESS OF TOOTH TIP	900 HV
WEAR RESISTANCE (1–5)	✱✱ (2 Stars)
CHIPPING RESISTANCE (1–5)	✱✱✱ (3 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

Availability

MGLB Straight Pitch, General-Purpose Matrix Bi-Metal

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)				
		3	4	6	10	14
1/4"	0.035"				V	V
3/8"	0.035"		V			
1/2"	0.035"		V	V	V	V

MGLB Varied Pitch Matrix Bi-Metal

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)						
		2/3	3/4	4/6	5/7	6/10	8/12	10/14
3/4"	0.035"		V	V	V	V	V	V
1"	0.035"		V	V	V	V	V	V
1-1/4"	0.042"		V	V	V	V	V	
1-1/2"	0.050"	V	V	V	V			
2"	0.063"	V	V/WS	V				

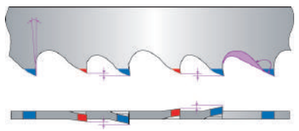
V: Variable Positive Rake | WS: Wide Set

DUOS
Patented Bi-Metal Blade for Thin-Wall Tubes and Small Solids

DUOS blades are designed specifically for light-duty bandsaws to cover a wide range of cutting applications. No break-in procedure is necessary.

Features

- The challenge of selecting the proper blade has been virtually eliminated by the DUOS—most cutting applications can be accomplished efficiently and economically with the DUOS 9/11P.



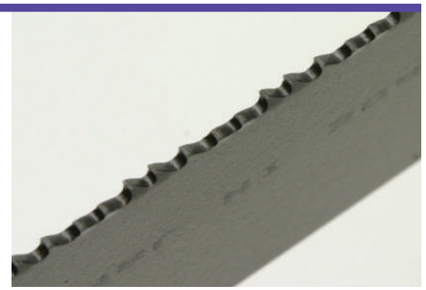
- The DUOS uses two different tooth and set configurations to control excessive feeding in profile and tubing type materials.
- Adopting a positive rake angle enhances cutting performance in both solid and profile cutting.
- Increasing the chip area of the gullet by utilizing the two-step relief angle is a first for the smaller pitches.
- Time-consuming break-in periods are totally eliminated when using the DUOS.
- DUOS is a blade developed exclusively for the light-duty bandsaw. This design prevents tooth stripping and/or chipping when cutting profiles, while expanding the application to include solid material to the full capacity.

Advantages

- High-quality backing material with an Amada-modified M42 strip ensures the longest possible blade life
- Innovative dual tooth and set configuration, plus proprietary tooth shapes in a HI-LO configuration, provide the most efficient and economic metal sawing

Benefits

- High production rate
- Long life on mild solid steel, heavy wall tubing, and structural steel
- Low cost per cut



SPECIFICATIONS	
EDGE MATERIAL	Amada-modified M42 base matrix HSS
HARDNESS OF TOOTH TIP	900 HV
WEAR RESISTANCE (1–5)	★★ (2 Stars)
CHIPPING RESISTANCE (1–5)	★★★★★ (5 Stars)

The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and size of the products.

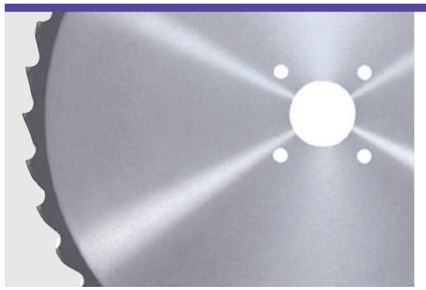
Availability

BLADE WIDTH	BLADE THICKNESS	PITCH (INCHES)
		9/11
1/2"	0.025"	V
1/2"	0.035"	V
3/4"	0.035"	V
1"	0.035"	V
1-1/4"	0.042"	V

V: Variable Positive Rake

Note: Product lineup of DUOS is limited to comparatively small pitches, considering frequency of use.
Please use "PROTECTOR" 4/6 or 3/4 pitch when material is outside the application range.

Circular Saw Blades



Circular Saw Blades

Designed for accurate cuts at higher cutting rates, these blades feature the highest-quality sawing grade of carbide.

Features

- Created on state-of-the-art manufacturing equipment
- Tested and proven backing material
- Unmatched accuracy and consistency from tooth to tooth
- Pioneers in the manufacturing and development of carbide blades
- Unmatched consistency from blade to blade

Benefits

- Longest possible blade life
- Higher cutting rate
- Minimal or no warpage during cutting operation
- Lowest cost per cut in all types of material
- Minimal burrs, due to consistent chip load
- Accurate cuts with a high-quality surface finish

SPECIFICATIONS: CERMET

MODEL	BLADE TYPE	SIZE
CMB75 (CM75)	TCB-CR	285 mm x 2.0 mm x 60 teeth
	TCB-CR	285 mm x 2.0 mm x 80 teeth
CMB100 (CM100)	TCB-CR	360 mm x 2.25 mm x 60 teeth
	TCB-CR	360 mm x 2.25 mm x 80 teeth
	TCB-CR	360 mm x 2.25 mm x 100 teeth
CMB150 (CM150)	TCB-CR	460 mm x 2.7 mm x 40 teeth
	TCB-CR	460 mm x 2.7 mm x 60 teeth
	TCB-CR	460 mm x 2.7 mm x 80 teeth
	TCB-CR	460 mm x 2.7 mm x 100 teeth
CMB230	TCB-CR	750 mm x 3.8 mm x 50 teeth
	TCB-CR	750 mm x 3.8 mm x 80 teeth

TCB-CR is the former ST-3.

SPECIFICATIONS: CARBIDE TIN COATED

MODEL	BLADE TYPE	SIZE
CMB75 (CM75)	TCB-TI	285 mm x 2.0 mm x 60 teeth
	TCB-TI	285 mm x 2.0 mm x 80 teeth
CMB100 (CM100)	TCB-TI	360 mm x 2.25 mm x 60 teeth
	TCB-TI	360 mm x 2.25 mm x 80 teeth
	TCB-TI	360 mm x 2.25 mm x 100 teeth
CMB150 (CM150)	TCB-TI	460 mm x 2.7 mm x 40 teeth
	TCB-TI	460 mm x 2.7 mm x 60 teeth
	TCB-TI	460 mm x 2.7 mm x 80 teeth
	TCB-TI	460 mm x 2.7 mm x 100 teeth

TCB-TI is the former TI-3.

SPECIFICATIONS: CARBIDE

MODEL	BLADE TYPE	SIZE
CMB75 (CM75)	TCB-CB	285 mm x 2.0 mm x 60 teeth
	TCB-CB	285 mm x 2.0 mm x 80 teeth
CMB100 (CM100)	TCB-CB	360 mm x 2.25 mm x 60 teeth
	TCB-CB	360 mm x 2.25 mm x 80 teeth
	TCB-CB	360 mm x 2.25 mm x 100 teeth
CMB150 (CM150)	TCB-CB	460 mm x 2.7 mm x 40 teeth
	TCB-CB	460 mm x 2.7 mm x 60 teeth
	TCB-CB	460 mm x 2.7 mm x 80 teeth
	TCB-CB	460 mm x 2.7 mm x 100 teeth

TCB-CB is the former TA-3.

SPECIFICATIONS: CARBIDE FOR STAINLESS

MODEL	BLADE TYPE	SIZE
CMB75 (CM75)	TCB-SU	285 mm x 2.0 mm x 60 teeth
	TCB-SU	285 mm x 2.0 mm x 80 teeth
CMB100 (CM100)	TCB-SU	360 mm x 2.25 mm x 60 teeth
	TCB-SU	360 mm x 2.25 mm x 80 teeth
	TCB-SU	360 mm x 2.25 mm x 100 teeth
CMB150 (CM150)	TCB-SU	460 mm x 2.7 mm x 40 teeth
	TCB-SU	460 mm x 2.7 mm x 60 teeth
	TCB-SU	460 mm x 2.7 mm x 80 teeth
	TCB-SU	460 mm x 2.7 mm x 100 teeth

TCB-SU is the former TA-SUS.

SPECIFICATIONS: CARBIDE FOR PIPE AND TUBE

MODEL	BLADE TYPE	SIZE
CMB75 (CM75)	TCB-PT	285 mm x 2.0 mm x 60 teeth
	TCB-PT	285 mm x 2.0 mm x 80 teeth
CMB100 (CM100)	TCB-PT	360 mm x 2.25 mm x 60 teeth
	TCB-PT	360 mm x 2.25 mm x 80 teeth
	TCB-PT	360 mm x 2.25 mm x 100 teeth
CMB150 (CM150)	TCB-PT	460 mm x 2.7 mm x 40 teeth
	TCB-PT	460 mm x 2.7 mm x 60 teeth
	TCB-PT	460 mm x 2.7 mm x 80 teeth
	TCB-PT	460 mm x 2.7 mm x 100 teeth

CMB75 11.2" x .0787" X 1.57" x T

40mm bore

40mm bore

50mm bore

80mm bore

Diameter x Kerf x Bore x Teeth (T)

CMB100 14.1" x .088" x 1.574" x T

CMB150 18.1" x .106" x 1.968" x T

CMB230 29.5" x .110" x 3.149" x T

CMB75 AND CMB100 40MM BORE

CMB150 50MM BORE

CMB230 80MM BORE

Cermet
A cermet is a composite material composed of ceramic (cer) and metal (met) materials.
A cermet is ideally designed to have the optimal properties of both a ceramic, such as high temperature resistance and hardness, and those of a metal, such as the ability to undergo plastic deformation.
Cermets are used instead of tungsten carbide in saws and other brazed tools due to their superior wear and corrosion properties.

See Amada Saw Blades at Work

The AMTA Technical Center was created to provide a unique atmosphere for visitors to experience the latest manufacturing technology in action. This stunning 40,000-square-foot facility houses the latest Amada technology in each product group. Much more than just an exhibit, every machine, automation accessory, and software program in the facility is fully operational and ready to empower customers to solve their most challenging manufacturing applications.

At **AMADA MACHINE TOOLS AMERICA**, we're committed to your success. More than just a provider of precision metalworking solutions, we're a partner who can help you meet the advanced engineering and manufacturing challenges unique to your industry. Together, we can create the right solution to meet your needs today and empower you to build your business for the future.

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