



# SAW BLADES

## PRODUCT OVERVIEW

Bimetal & Carbide Tipped Band Saw Blades



# A HISTORY OF CUTTING-EDGE MANUFACTURING

Since we began building machine tools many decades ago, our goals have always been to provide our customers with increased accuracy and productivity. Throughout our history, we've maintained our time-honored tradition of hand-fitting our solutions to deliver the ultimate in quality and precision.

As technology has evolved, we've embraced CNC automation as a core strength, improving throughput and helping new operators become productive more quickly. Today, combining the legacies of AMADA Cutting Technologies and our Grinding Business unit, we are uniquely positioned to help you expand your capabilities and grow your business maintaining our philosophy of **"GROWING WITH OUR CUSTOMERS"**.



1956  
■ AM C 225



1962  
■ Carbon Steel Saw Blades

1965  
■ RH 300

1968  
■ Bimetal Saw Blades

1971  
■ Carbide Saw Blades

1990  
■ CTB 400  
First Fully Automatic Carbide CNC Machine  
■ SIGMA Bimetal Saw Blade

2005  
■ Double-Pulse-Cutting Automated Band Saw  
■ Carbide Saw Blades  
- AXCELA G  
- AXCELA H  
■ SMART CUT BAND Thiner Bimetal Saw Blades

2012  
■ 2nd-Generation PCSAW  
■ Carbide Saw Blades  
- AXCELA S  
- AXCELA B

2013  
■ Carbide Saw Blades  
- AXCELA ALB  
- AXCELA HMAX  
- AXCELA A

2014  
■ DYNASAW 530  
■ Bimetal Saw Blade  
- DYNABAND G  
- SUPER 8

2016  
■ Bimetal Saw Blades  
- New Protector M42 Design  
■ Carbide Saw Blades  
- SMART CUT AXCELA S  
- SMART CUT AXCELA B  
- SMART CUT AXCELA G

2017  
■ HPSAW 310  
■ Carbide Saw Blades  
- AXCELA HP/HP1  
- AXCELA C-S7

2019  
■ Carbide Saw Blades  
- AXCELA STRIKER  
- AXCELA BOOSTER  
■ DBSAW 500 Diamond Saw  
■ VT 3850 / VT 4555 Mitre-Box Saws







# TOTAL SOLUTION

- **A Total Manufacturer of Band Saws and Blades**

AMADA has a full line of Band Saws and Blades to provide the maximum possible sawing performance.

We are engaged not only in development and manufacturing, but also in marketing and after-sales service. Our customers' opinions are fed back directly to our development and manufacturing teams to meet their specific sawing needs.

- **Band Saw Blade History and R&D**

We started manufacturing and marketing Contour Saws in 1955 and commercialized Bi-metal Blades in 1968. We then innovated technologies in all areas of blade materials, shapes, and coatings and developed the high-performance Carbide-Tipped Band Saw Blade series AXCELA in 2007.

The sawing know-how and latest sawing technologies accumulated over many years, allowing us to develop products that meet our customers needs.

Manufacturing



AMADA LIANYUNGANG  
MACHINE TOOL CO.,LTD. (China)



AMADA AUSTRIA GmbH  
(Austria)



ONO WORKS (Ono-Japan)



Development



ONO WORKS (Ono-Japan)







AMADA SOLUTION CENTER



VERIFICATION



P&P ROOM

Sales

Service

- **Global Supply System**

Our Saw Blades are delivered to our customers throughout the world. From manufacturing facilities in Japan, China, and Austria through an optimum supply network.

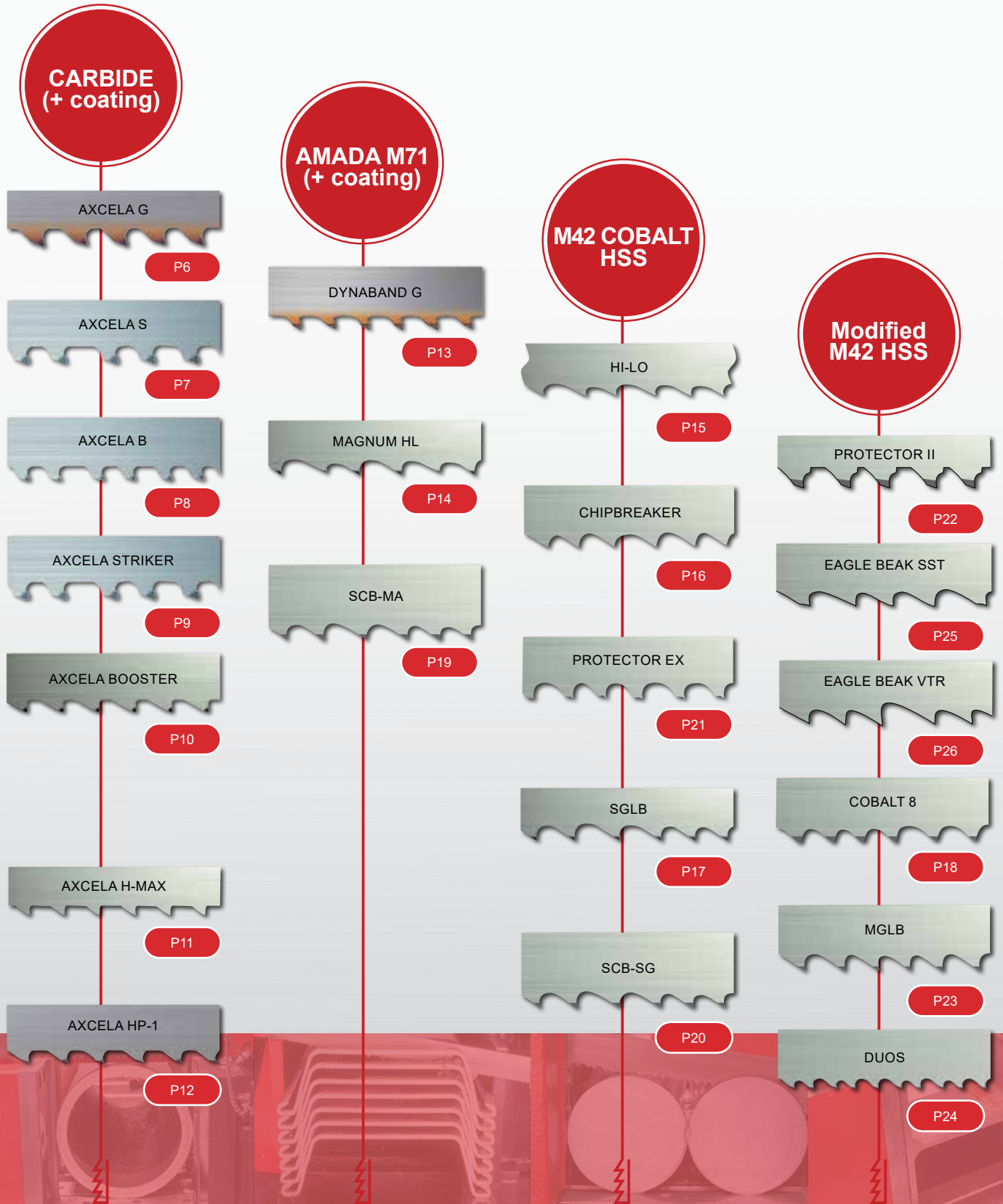
- **Solution Proposal**

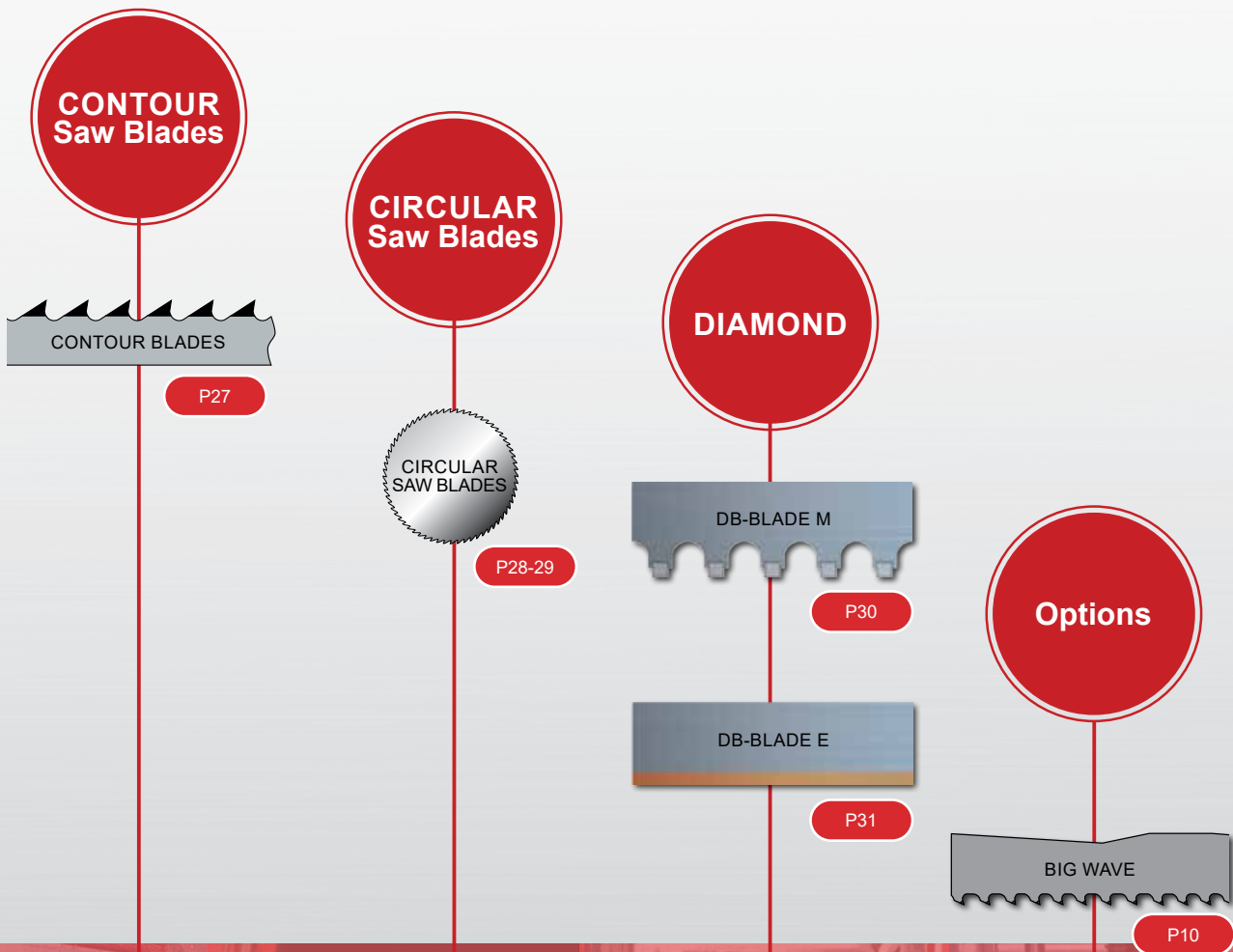
Technical centers are established in Japan, United States, Germany, Thailand, and China. To propose optimum solutions for the sawing issues. At the technical centers, customers can actually cut their products to experience the differences between conventional and proposed sawing technologies and can verify the performance of proposed solutions by simulation.

# A FULL LINE-UP OF AMADA SAW BLADES

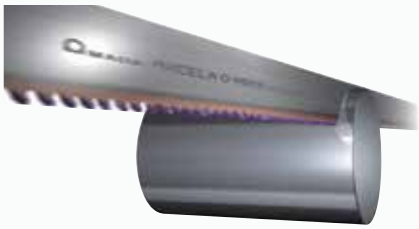
## TO SUIT ALL MATERIALS AND CUTTING NEEDS

AMADA has a full line-up of Band Saw Blades, Contour Saw Blades, Carbide Tipped Circular Saw Blades, and Diamond Blades. You can select optimum saw blades for your materials and for your sawing productivity and cost problems.





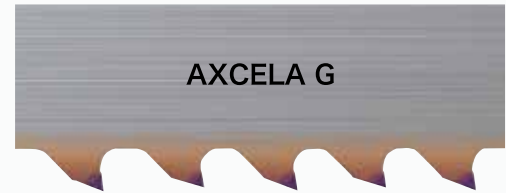




AXCELA® G
Carbide blade designed for high speed, high performance cutting
Carbide

## Capable of Cutting Difficult to Cut Materials

- Carbide blade providing unparalleled high speed sawing of special steels.
- Excellent multi-purpose blade for production sawing of mixed materials and grades.



### 1 Kerf-Dispersal Tooth Shape

Effectively reduces cutting resistance on high-alloy steels.

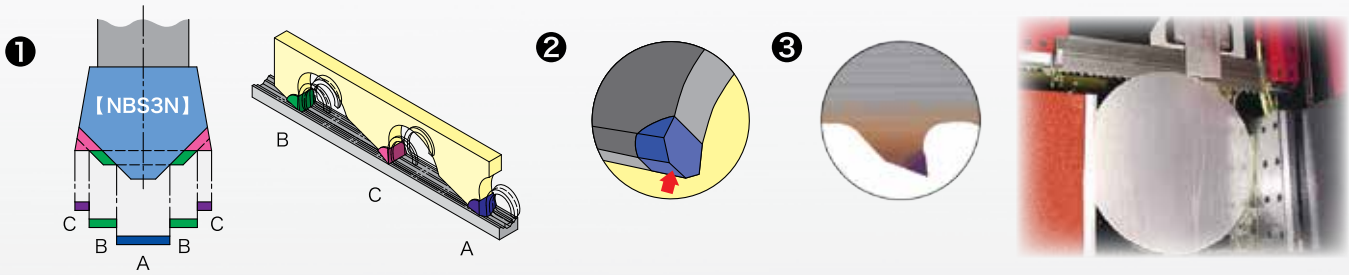
### 2 Tooth Tip Micro-chamfer

Delivers ultra-high cutting rates and reduces tooth chipping.

### 3 EX-COAT-DP

Coating provides a high degree of hardness, high resistance to heat and chipping.

**Tooth Type:** Variable Gullet, Kerf dispersion dove tail tooth shape  
**Edge Material:** Carbide+ (EX-COAT-DP)  
**Hardness:** 1600HV+ (Film 2800HV)  
**Wear Resistance:** ★★★★★  
**Chipping Resistance:** ★★★



## Applicability by Materials

☉ : Break-in area / 1000cm<sup>2</sup> • 100 in<sup>2</sup>

Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~
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## Lineup of Products

Name		AXCELA G (MANUFACTURED)									
Blade Width inch	Blade Thickness mm	Blade Thickness inches		Pitch							
				.9/1.1		1.4/1.6		1.8/2.0		2/3	
1-1/4	34	0.042	1.1								V
1-1/2	41	0.050	1.3					V			V
2	54	0.063	1.6				V	V			
2-5/8	67	0.063	1.6				V	V			
3	80	0.063	1.6				V				

Name		AXCELA G (PREWELDED TO LENGTH)									
Blade Width inch	Blade Thickness mm	Blade Thickness inches		Length	Pitch						
					.9/1.1		1.4/1.6	1.8/2.0			
1-1/2	41	0.050	1.3	15' 0"			V				
1-1/2	41	0.050	1.3	15' 6"			V				
2	54	0.063	1.6	20' 0"		V	V				
2-5/8	67	0.063	1.6	22' 11"	V	V	V				
2-5/8	67	0.063	1.6	27' 3"	V	V					
3	80	0.063	1.6	36' 5"	V						

V: Variable Positive Rake  
 Specifications may change without notice at the sole discretion of Amada's Engineering Department.

Standard carbide blades for high speed/high accuracy cutting

Carbide

## Standard Model Suitable for Difficult to Cut Materials

• Robust Carbide saw blade for variable application fields, particularly for existing higher performance machines.

### ① Cutting Surface Improved

Kerf cleaning tooth design reduces cutting resistance, improving the straightness and finish of the cut.

### ② Cutting Performance Improved

Enhanced cutting performance comes from High-Precision grinding of each tooth surface.

### ③ Chipping Suppressed

Multiple pitch dove tail tooth pattern reduces chip load on hard to cut materials. Creating less cutting resistance.



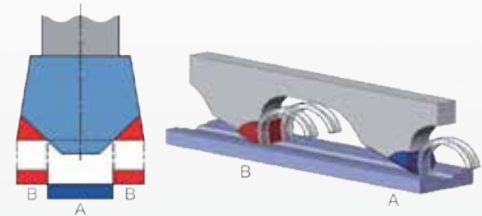
Tooth Type: Dove Tail Type

Edge Material: Carbide

Hardness: 1600HV

Wear Resistance: ★★★★★

Chipping Resistance: ★★



## Properties

- Uncoated Carbide Saw Blade
- Sectional Cut Channel
- Robust Cutting Geometry
- For Production Machines

## Advantages

- Reduced Cutting Resistance
- High Economic Efficiency
- Wide Application Spectrum

## Applicability by Materials

: Break-in area / 1000cm<sup>2</sup> • 100in<sup>2</sup>

Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~
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## Lineup of Products

Name				AXCELA S				
Tooth type				Dove tail type				
Blade Width		Blade Thickness		Pitch				
inch	mm	inches	mm	.9/1.1	1.8/2.0	1.4/1.6	2/3	3/4
1	27	0.035	0.9					V
1-1/4	34	0.042	1.1		V		V	V
1-1/2	41	0.050	1.3		V	V	V	V
2	54	0.063	1.6		V	V	V	
2-5/8	67	0.063	1.6	V		V		
3	80	0.063	1.6	V				

V: Variable Positive Rake  
 Specifications may change without notice at the sole discretion of Amada's Engineering Department.

**AXCELA® B** Standard carbide blades for most difficult to cut materials Carbide

## Standard Model Suitable for most Difficult to Cut Materials

• The highly efficient AXCELA B offers a unique tooth design that allows the blade to excel in a titanium and nickel based alloys.



**1 Cutting Resistance Reduced**

Cutting resistance is reduced and blade edge wear is suppressed with a flat set triple tip.

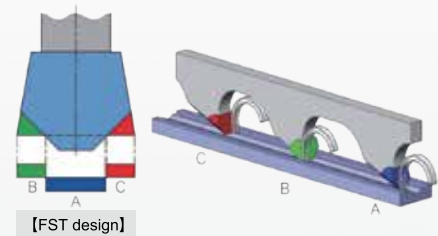
**2 Cutting Performance Improved**

Enhanced cutting performance comes from High-Precision grinding of each tooth surface.

**3 Chipping Suppressed**

Robust three pitch ground kerf tooth pattern, reduces chip load on hard to cut materials. Creating less cutting resistance.

**Tooth Type:** FST • 3 Special Set Teeth Pattern  
**Edge Material:** Carbide  
**Hardness:** 1600HV  
**Wear Resistance:** ★★★★★  
**Chipping Resistance:** ★★



### Properties

- Uncoated Carbide Saw Blade
- Variable Grinding Pattern Similar to an Offset
- Robust Cutting Geometry
- For Older Standard Machines

### Advantages

- Suitable for Universal use with Almost all Steels & Nonferrous Metals
- Improved Cutting Performance and Service Life

### Applicability by Materials

☉ : Break-in area / 1000cm<sup>2</sup> • 100 in<sup>2</sup>

Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~
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### Lineup of Products

Name				Axcela B				
Tooth type				FST•3 special set teeth pattern				
Blade Width		Blade Thickness		Pitch				
inch	mm	inches	mm	0.9/1.1	1.4/1.6	1.8/2.0	2/3	3/4
1-1/4	34	0.042	1.1				V	V
1-1/2	41	0.050	1.3		V	V	V	V
2	54	0.063	1.6		V	V	V	
2-5/8	67	0.063	1.6	V	V			

V: Variable Positive Rake  
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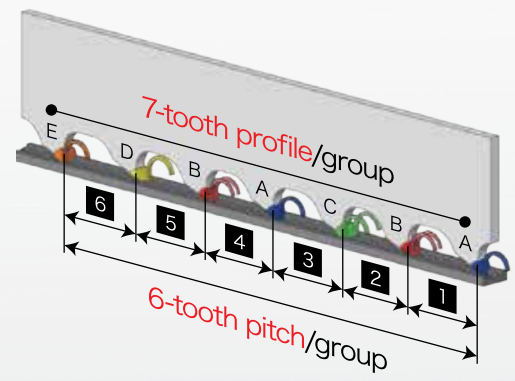
**AXCELA STRIKER** Carbide blades for cutting tool steels and stainless steels Carbide

## Carbide Blades with Excellent Vibration Isolation Performance

- Designed with distinguished vibration isolation performance, our carbide blades realize stable high-speed cutting.

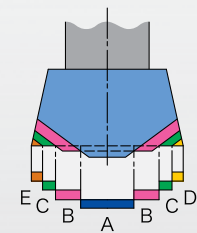


**Tooth Type:** Kerf Dispersion FST Set Tooth  
**Edge Material:** Carbide  
**Hardness:** 1600HV  
**Wear Resistance:** ★★★★★  
**Chipping Resistance:** ★★



- 1 Reduced Vibration Using Multiple Pitch Pattern**  
 7 tooth profile = 42 tooth pitch/pattern with a kerf dispersion tooth. Unique profile contributes to minimized vibration during cutting. Resulting in longer service life and excellent surface finish.

- 2 Tooth Tip with Sharp Edge (Sharp Tooth Tip Form)**  
 Enhanced cutting performance comes from High-Precision grinding of each tooth surface.



### Applicability by Materials

: Break-in area / 1000cm<sup>2</sup> • 100 in<sup>2</sup>

Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~
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●●●			●●●			●●			●		

### Lineup of Products

Name				AXCELA STRIKER				
				Pitch				
Blade Width inch	mm	Blade Thickness inches	mm	.9/1.1	1.8/2.0	1.4/1.6	2/3	3/4
1	27	0.035	0.9					V
1-1/4	34	0.042	1.1		V		V	V
1-1/2	41	0.050	1.3		V	V	V	V
2	54	0.063	1.6		V	V	V	
2-5/8	67	0.063	1.6	V		V		

V: Variable Positive Rake  
 Specifications may change without notice at the sole discretion of Amada's Engineering Department.

**AXCELA® BOOSTER** Carbide blades suitable for cutting mild steels Carbide

## Carbide Blades with Improved Durability Intended for General-Purpose Band Saws

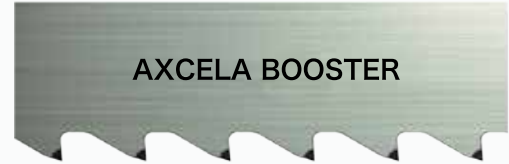
• Under the concept of “easier to use carbide blades,” these carbide blades enable the HA and HFA series band saws to realize high speed cutting.

**1 Set Tooth Type Adopted**

The adoption of the set tooth type, which has been used for a wide variety of blades and highly reputed, helps reduce cutting resistance and minimize blade deviation.

**2 Tooth Tip Mirco-Chamfering**

Micro-chamfering minimizes tooth tip chipping of general-purpose band saws during cutting.



**Tooth Type:** Set Tooth  
**Edge Material:** Carbide  
**Hardness:** 1600HV  
**Wear Resistance:** ★★★★★  
**Chipping Resistance:** ★★★

### Applicability by Materials

: Break-in area / 1000cm<sup>2</sup> • 100in<sup>2</sup>

Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~
(Icons: circle, square, triangle)			(Icons: circle, square, triangle)			(Icons: circle, square, triangle)			(Icons: circle, square, triangle)		
(Icons: circle, square, triangle)			(Icons: circle, square, triangle)			(Icons: circle, square, triangle)			(Icons: circle, square, triangle)		

### Lineup of Products

Name		AXCELA BOOSTER						
Blade Width inches	Blade Width mm	Blade Thickness inches	Blade Thickness mm	Pitch				
				1.8/2.0	2/3	3/4		
1-1/4	34	0.042	1.1	V	V	V		
1-1/2	41	0.050	1.3	V	V			

V: Variable Positive Rake  
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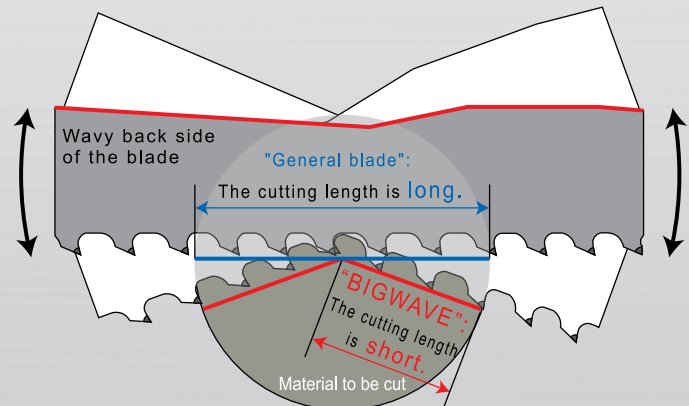
**BIGWAVE** Additional processing options for most difficult to cut materials

**1 AMADA's Original Waveform Machined on the Back Side of the Blade**

**2 The Blade Oscillates along the Waveform Machining**

**3 The Reduced Cutting Length Ensures Reduced Cutting Loads**

\*Applicable to Bi-Metal & Carbide Tipped Blades.  
 \*Contact our Sales Rep for Detailed Specifications.



BIGWAVE Image diagram of operation

**AXCELA<sup>®</sup> HMAX** Carbide blade for most difficult to cut materials Carbide

**Special Geometry for Separating Boundary Layer-Hardened Steels**  
 Induction Hardened Chrome Rod up to 65HRC

**Properties**

- Uncoated Carbide Saw Blade
- Robust Design
- Negative Rake Angle



**Advantages**

- Extended Service Life Cutting Boundary Layer-Hardened Steels or Hard Chromium Plated Steels
- Smooth Cutting with Good Surface Finish

**Application Materials - AMADA AXCELA HMAX**

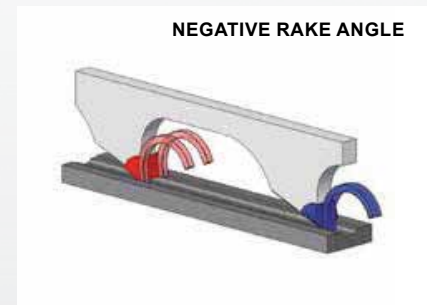


**Recommended**

- Hard-Treated Steel
- Cold-Worked Steel
- Ball-Bearing Steel
- Piston Rods
- Cam and Crankshafts
- Threaded Rods
- Boundary Layer-Hardened Steel

**Limited Suitability\***

- Construction Steel
- Hot-Working Steel
- Stainless Steel
- Cast Steel
- High-Speed Steel
- High Heat-Resisting Steel
- Aluminum Alloys
- Nickel Alloys
- Titanium Alloys
- Copper Alloys



B2 Tooth Pattern

**Selection of the Tooth Pitch - AMADA AXCELA HMAX Delivery Forms**

Height		Thickness		2/3 B2	3/4 B2
inches	mm	inches	mm		
1-1/4	34	0.042	1.2	●	●
1-1/2	41	0.050	1.3	●	●
2	54	0.063	1.6	●	

B2 = 2 Piece Tooth Group





**AXCELA® HP-1** Coated carbide saw blade Carbide

**High Performance Carbide Tipped Saw Blade**  
 Designed for the AMADA HPSAW 310 Band Saw

**Properties**

- Coated Carbide Saw Blade
- AXCELA HP Blade is designed to cut Stainless Steel and Tool Steel Applications.



**Advantages**

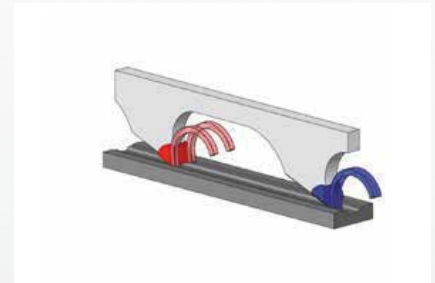
- Long Service Life and Maximum Performance
- Optimized Design for Smooth and Vibration-Free Running

**Application Materials - AMADA AXCELA HP1**

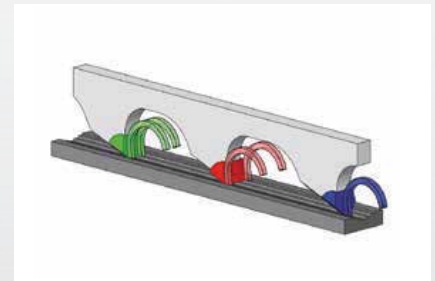


Recommended	Suitable	Limited Suitability*
Construction Steel*	Cold-Worked Steel	Nickel Alloys
Hard-Treated Steel	Hot-Working Steel	Titanium Alloys
Stainless Steel		Copper Alloys
Cast Steel		
Aluminum Alloys		

\*Notes: Mainly for Use with HP1 Mild Steel Version



B2 Tooth Pattern



B3 Tooth Pattern

**Selection of the Tooth Pitch - AMADA AXCELA HP-1**

Height		Thickness		1,4/1,6 B3	1,8/2 B2
inches	mm	inches	mm		
2-5/8	67	0.063	1.6	●	●

B2 = 2 Piece Tooth Group  
 B3 = 3 Piece Tooth Group



**DYNABAND® G** High-speed steel/bi-metal highest quality blades AMADA M71

**Coated HSS Blade Best Suited for Stainless and Hot Work Tool Steels**

• Dynamic tooth shape developed by AMADA laser technology.



**Tooth Type:** Triple-Hybrid Tooth Shape  
**Edge Material:** AMADA M71 HSS + (EX-COAT-DP)  
**Hardness:** 1000HV + (Film 2800HV)  
**Wear Resistance:** ★★★★★  
**Chipping Resistance:** ★

**1 Triple Hybrid Tooth Profile**

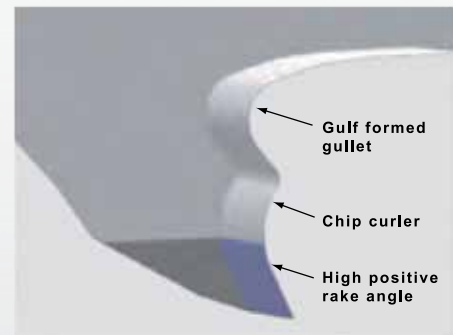
- Gulf gullet shape improves blade fatigue life.
- Chip curler improves chip discharge and suppresses bending.
- High positive rake angle reduces cutting resistance when cutting difficult to cut materials.

**2 Adoption of AMADA M71 High-Speed Steel**

AMADA's exclusive M71 HSS with a special heat-treatment process greatly improves cutting performances and blade life.

**3 EX-COAT-DP**

Coating technology with high hardness/high thermo stability/high adhesion.



Triple-hybrid tooth shape

**Applicability by Materials**

: Break-in area / 1000cm<sup>2</sup> • 100 in<sup>2</sup>

Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~

**Lineup of Products**

Name		DYNABAND G									
Blade Width inches mm	Blade Thickness inches mm	Pitch									
		.75/1.1		1.1/1.5		1.5/2.0		2/3			
1-1/2	41	0.050	1.3					V			
2	54	0.063	1.6					V			V
2-5/8	67	0.063	1.6			V					
3	80	0.063	1.6	V							

V: Variable Positive Rake  
 Specifications may change without notice at the sole discretion of Amada's Engineering Department.

**MAGNUM HL** High performance blade for hardened materials AMADA M71

**Best Suited for Medium to Large Sized Difficult-to-Cut Materials**  
Such as Stainless Steels and Hot Die Steels

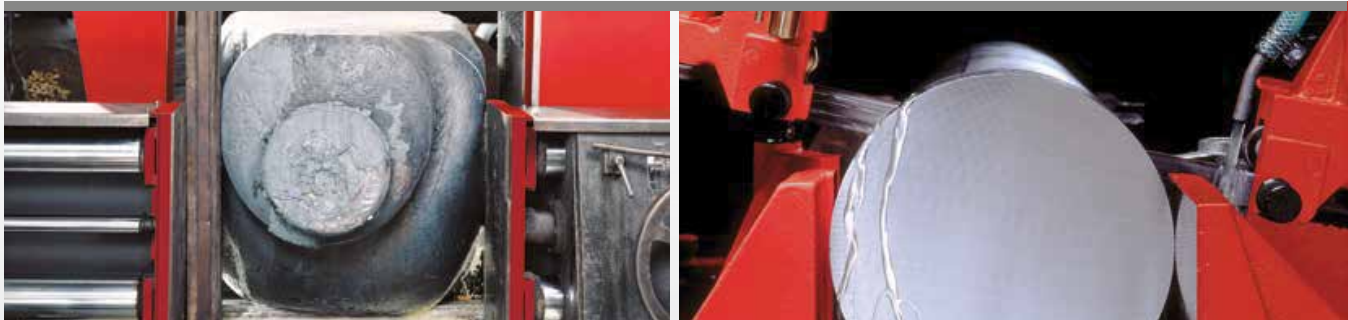
• Blades suitable for medium/large diameter high hardness materials with a kerf dispersion tooth shape and special blade edge shape.

**Advantages**

- Higher Resistance to Wear Compared to Conventional M42 Saw Blades Thanks to M71 Tooth Tip Material
- Reduction of the Cutting Resistance
- Longer Service Life with Tool Steel, Stainless Steels, High Heat-Resistant Special Alloys in the Intermediate and Large Diameter Range
- Recommended for Nickel-Based Alloys and Titanium



**TOOTH TYPE:** Variable Gullet, Kerf Dispersion Tooth Shape  
**EDGE MATERIAL:** AMADA M71 HSS  
**HARDNESS:** 1000HV  
**WEAR RESISTANCE:** ★★★★★  
**CHIPPING RESISTANCE:** ★



**Applicability by Materials**

: Break-in area / 1000cm<sup>2</sup> • 100 in

Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~

**Lineup of Products**

Name		MAGNUM HL					
Blade Width inches	Blade Thickness mm	Pitch					
		.75/1.1	1.1/1.5	2/3	3/4		
1-1/4	34	0.042	1.1			V	V
1-1/2	41	0.050	1.3		V	V	V
2	54	0.063	1.6		V	V	
2-5/8	67	0.063	1.6		V		
3	80	0.063	1.6	V	V		

V: Variable Positive Rake  
 Specifications may change without notice at the sole discretion of Amada's Engineering Department.

**HI-LO** High performance blade for hardened materials M42 Cobalt HSS

**Special Saw Blade with High Efficiency**  
Ideal for Cutting Hard Steels

**Features**

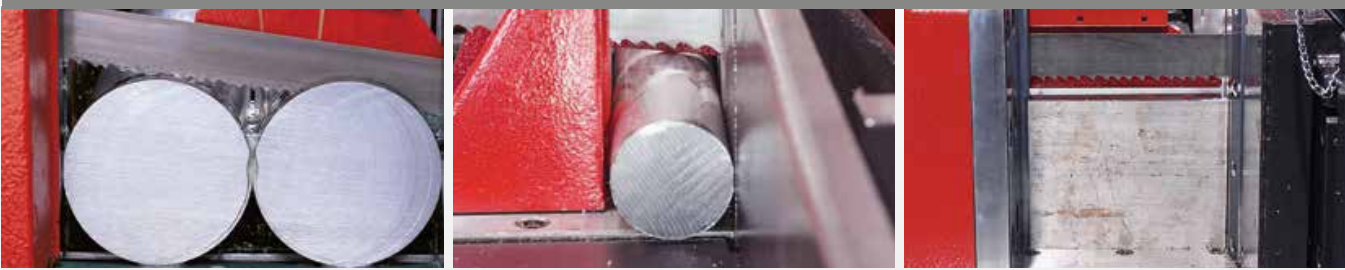
- 15 Degree Positive Rake Angle
- Hardness of HRC68-69
- Patented HI-LO Tooth Design

**Advantages**

- High Heat & Wear Resistance
- Reduced Cutting Resistance
- Fast Cutting on Difficult to Cut Materials



Tooth Type: HI-LO  
 Edge Material: M42 HSS  
 Hardness: 950HV  
 Wear Resistance: ★★ ★  
 Chipping Resistance: ★★



**AMADA HI-LO Varying Tooth Height Design, M-42 BI-Metal Blade**

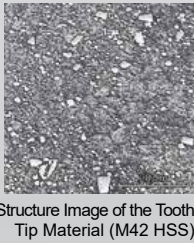
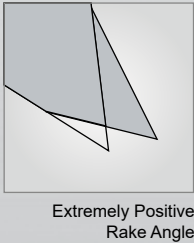
Blade Width		Blade Thickness		.75/1	1.1/1.5	2/3	3/4	4/6
inch	mm	inch	mm					
1	27	0.035	0.9			V	V	V
1 1/4	34	0.042	1.1			V	V	V
1 1/2	41	0.050	1.3		V	V	V	
2	54	0.063	1.6	V	V	V		
2 5/8	67	0.063	1.6	V	V			
3	80	0.063	1.6	V	V			

V: Variable Positive Rake

**Application Materials - AMADA HI-LO**



Recommended	Limited Suitability*
Hot-Working Steel	Cold-Worked Steel
Stainless Steel	
High Heat-Resisting Steel	
Aluminum Alloys	
Nickel Alloys	
Titanium Alloys	
Copper Alloys	





**CHIPBREAKER**® Designed to reduce heat generated at increased chip load M42 Cobalt HSS

**Special Tooth Design Reduces Cutting Resistance**  
While Maintaining Penetration.

• Designed to reduce heat generated at increased chip load. With reduced tooth stripping and breaking this equates to the lowest possible cost per square inch of metal cutting.



Tooth Type: CHIPBREAKER

Edge Material: M42 HSS

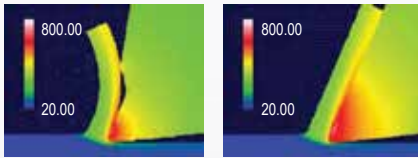
Hardness: 950HV

Wear Resistance: ★★ ★

Chipping Resistance: ★★

**Features**

- Reduced Heat Generated at Increased Chip Loads



- Prevents Scoring on Gullets
- Reduced Chip Weld
- Reduced Backing Fatigue

**Advantages**

- Higher Cutting Rates
- Increased Blade Life
- Reduced Tooth Stripping
- Reduced Blade Breakage

**Applicability by Materials**

: Break-in area / 1000cm<sup>2</sup> • 100 in<sup>2</sup>

Roll-formed section steels	Structural steels	Bundled small diameter materials	Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
Thin wall C-shaped Deck plate	Thick wall H-beam Channel	~100mm ~4in	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~

**Lineup of Products**

Name		CHIPBREAKER											
Blade Width inch	mm	Blade Thickness inch	mm	Pitch									
				0.75/1	1.1/1.5	2/3	3/4	4/6					
1	27	0.035	0.9						V	V			
1 1/4	34	0.042	1.1					V	V	V			V
1 1/2	41	0.050	1.3				V	V	V	V			V
2	54	0.063	1.6	V			V	V	V	V			V
2 5/8	67	0.063	1.6				V	V	V	V			
3	80	0.063	1.6				V						

V: Variable Positive Rake

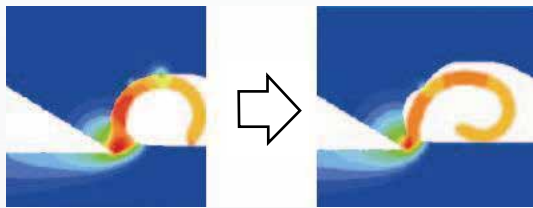


# COBALT 8 Dedicated heavy structural steels blade AMADA Modified M42 HSS

**General-Purpose Blade Ideal for Cutting Mild Steel and Structural Steel**  
 “Chip Curler” tooth shape and unique set pattern result in longer blade life.

### Features

- Modified M42 High-Speed Steel Edge
- Chip curler tooth shape  
 Chip curler tooth shape improves chip removal and reduces the impact on the bottom of the gullet resulting in better life. Cobalt8 is ideally suited to cut mild steel.



Unique “Chip Curler” Tooth Design



**Tooth Type:** Cobalt 8  
**Edge Material:** Amada Modified M42 HSS  
**Hardness:** 930HV  
**Wear Resistance:** ★★  
**Chipping Resistance:** ★★★★★

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

### Advantages

- Enhanced Chipping Resistance
- Improved Tooth Penetration

### Applicability by Materials

: Break-in area / 1000cm<sup>2</sup> • 100in<sup>2</sup>

Roll-formed section steels		Structural steels	Bundled small diameter materials	Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
Thin wall	C-shaped	Thick wall	~100mm ~4in	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~
Deck plate		H-beam Channel													

### Lineup of Products

Name		COBALT 8					
Blade Width inch	mm	Blade Thickness inch	mm	Pitch			
				2/3	3/4	4/6	5/7
1	19	0.035	0.9		V	V	V
1-1/4	34	0.042	1.1	V	V	V	V
1-1/2	41	0.050	1.3	V	V	V	V
2	54	0.063	1.6	V	V	V	

V: Variable Positive Rake

**SCB-MA**

Thinner blade of SGLB & Magnum HI-LO

AMADA M71

## Thin-Kerf Blades of the Magnum HI-LO

Specialized Blade for AMADA PCSAW330 & DYNASAW430 Band Saws

• When sawing narrow parts from expensive metal bars or blocks, using SMARTCUT BAND gives you twofold cost-saving benefits: reducing material waste, disposal cost and increasing parts yield per bar, resulting in additional profit. The power of accumulating little savings cannot be underestimated. "A penny saved is a penny earned."



Tooth Type: SCB-MA (SmartCutBand Magnum HI-LO)

Edge Material: AMADA M71 HSS

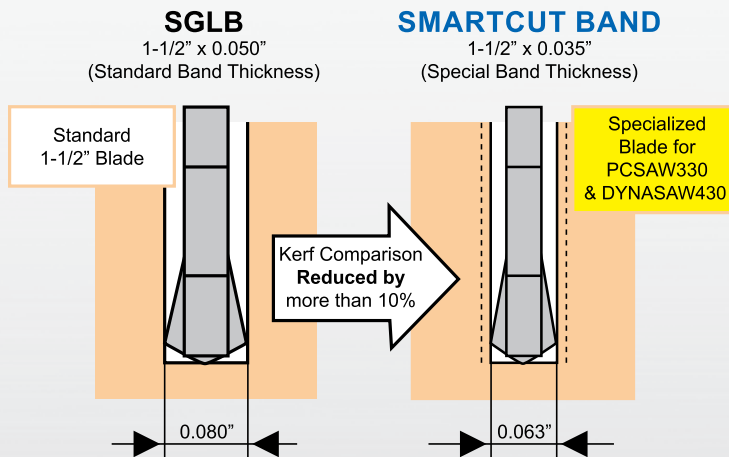
Hardness: 1000HV

Wear Resistance: ★★★★★

Chipping Resistance: ★

### Advantages

- Special Band Thickness
- Thin-Kerf Blade
- Reduce Chip Volume



### Applicability by Materials

☉ : Break-in area / 1000cm<sup>2</sup> • 100 in<sup>2</sup>

Roll-formed section steels		Structural steels	Bundled small diameter materials	Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
Thin wall	C-shaped	Thick wall	~100mm ~4in	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~
Deck plate	H-beam														

### Lineup of Products

Name				SCB-MA			
Blade Width		Blade Thickness		Pitch			
inches	mm	inches	mm	1.1/1.5	2/3	3/4	4/6
1-1/2	41	0.035	0.9		V	V	

V: Variable Positive Rake



**SCB-SG** Thinner blade of SGLB & Magnum HI-LO M42 Cobalt HSS

**Thin-Kerf Blade of SGLB**

Specialized Blade for AMADA PCSAW330 & DYNASAW430 Band Saws

• When sawing narrow parts from expensive metal bars or blocks, using SMARTCUT BAND gives you twofold cost-saving benefits: reducing material waste, disposal cost and increasing parts yield per bar, resulting in additional profit. The power of accumulating little savings cannot be underestimated. “A penny saved is a penny earned.”



Tooth Type: SCB-SG (SMARTCUTBAND SGLB)

Edge Material: M42 High-Speed Steel

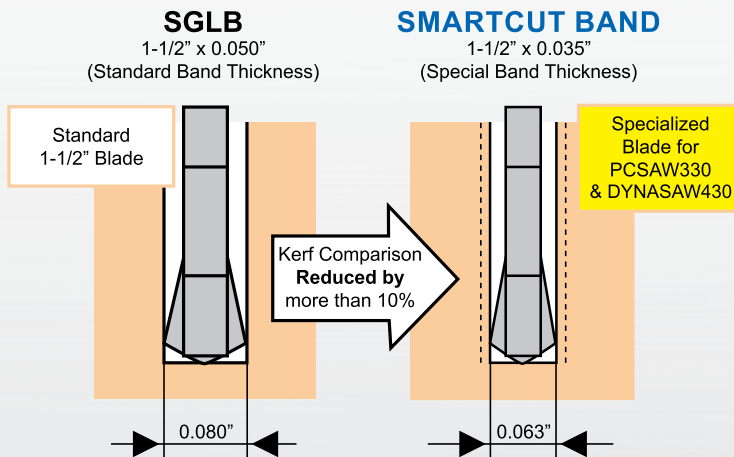
Hardness: 950HV

Wear Resistance: ★★ ★

Chipping Resistance: ★★

**Advantages**

- Special Band Thickness
- Thin Kerf Blade
- Reduce Chip Volume



**Applicability by Materials**

Break-in area / 1000cm<sup>2</sup> • 100in<sup>2</sup>

Roll-formed section steels		Structural steels	Bundled small diameter materials	Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
Thin wall	C-shaped	Thick wall	~100mm ~4in	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~
Deck plate		H-beam													

**Lineup of Products**

Name				SCB-SG			
Blade Width inch	Blade Width mm	Blade Thickness inch	Blade Thickness mm	Pitch			
				1.1/1.5	2/3	3/4	4/6
1-1/2	41	0.035	1.3		V	V	V

V: Variable Positive Rake

**PROTECTOR<sup>®</sup> EX** Dedicated heavy structural steels blade M42 Cobalt HSS

**For Structural Steel with M-42 Edge**

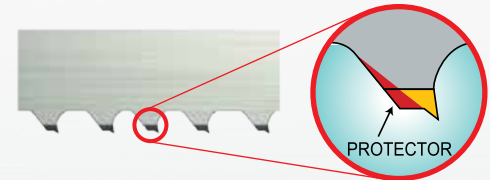
Which has both Strength against Tooth Chipping and High Wear Resistance

**Features**

- M42 Cobalt High-Speed Steel Edge.  
M42 cobalt high-speed steel provides superior wear resistance. Being 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 from occurring.
- Positive Rake Tooth Angle
- Strong Tooth Profile  
As the tooth tip is made stronger, it endures impacts 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, therefore preventing the blade from binding in the cut.



Tooth Type: Protector Tooth Shape  
Edge Material: Amada Modified M42 HSS  
Hardness: 900HV  
Wear Resistance: ★★  
Chipping Resistance: ★★★★★



**Advantages**

- Extra Tough Shock Resistance
- Extra Tough Tooth Strippage Resistance
- Extra Fast Cutting on Structural Steel
- Extra Long Life in Interrupted Structural Cutting

**Applicability by Materials**

: Break-in area / 1000cm<sup>2</sup> • 100in<sup>2</sup>

Roll-formed section steels		Structural steels	Bundled small diameter materials	Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
Thin wall C-shaped Deck plate	Thick wall H-beam	~100mm ~4in	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~	
[Icons of thin wall and C-shaped sections]		[Icon of thick wall H-beam]	[Icon of bundled materials]	[Icon of mild steel]	[Icon of non-ferrous metal]	[Icon of tool steel]	[Icon of pre-hardened steel]	[Icon of hot work tool steel]	[Icon of stainless steel]	[Icon of hot work tool steel]	[Icon of stainless steel]	[Icon of super heat resistant alloy]	[Icon of super heat resistant alloy]	[Icon of super heat resistant alloy]	
[Green bar]															

**Lineup of Products**

Name		PROTECTOR EX					
Blade Width inch	mm	Blade Thickness		Pitch			
		inch	mm	3/4	4/6		
1	27	0.035	0.9	V	V		
1-1/4	34	0.042	1.1	V	V		
1-1/2	41	0.050	1.3	V	V		
2	54	0.063	1.6	V			

V: Variable Positive Rake



**PROTECTOR II** Dedicated heavy structural steels blade M42 Cobalt HSS

## Prevention of Tooth Chipping When Cutting Structural Steels

**PROTECTOR II** Integrates the robust blade design standards and features, highly effective at preventing tooth damage or loss; due to excessive vibration, pinching, and interrupted cutting associated with cutting structural steel materials.



**Tooth Type:** Protector II Tooth Shape

**Edge Material:** M42 Cobalt HSS

**Hardness:** 950HV

**Wear Resistance:** ★★ ★

**Chipping Resistance:** ★★★★★

### Features

■ **Protection from Tooth Chipping**

The “protector” located on the relief face of tooth, reinforces the tooth tip, preventing excessive cutting, and tooth damage or loss. Producing superior high cutting efficiency.

■ **Elimination of Break-In Cutting**

On the PROTECTOR series a special treatment of the cutting surfaces, eliminates the need for blade break-in. This blade can be run using normal cutting parameters from beginning.

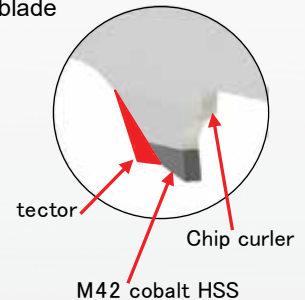
### New Features

■ **New Tooth Set Patterns & Shape**

Decreased burr formation. Reduced time spent deburring parts after cutting completed.

■ **M42 High Speed Steel Edge and Chip Curler Tooth Form**

Improved blade life, M42 HSS edge resist heat and abrasion. Chip Curler improves chip removal and reduces impact on the bottom of the gullet, improving blade life and cut finish.



■ **Coating Options**

High-speed cutting and longer blade life by EXCOAT-DP. Excellent performance in oil mist environments.

### Applicability by Materials

Roll-formed section steels			Structural steels			Bundled small diameter materials	Mild steels, non-ferrous metals		
Thin wall	C-shaped	Deck plate	Thick wall	H-beam	Channel	~100mm ~4in	~100mm ~4in	100~400mm 4 to 16in	400mm~ 16in~
WS type : Roll-formed large size H-beam									

### Selecting the Tooth Pitch

Material Size inch										
4	8	12	16	20	24	28	32	36	40	
4/6P										
3/4P										
						2/3P				

### Lineup of Products

Name				PROTECTOR		
Blade Width inch	Blade Thickness mm	Blade Width mm	Blade Thickness mm	Pitch		
				2/3	3/4	4/6
3/4"	19	0.035	0.9			V
1	27	0.035	0.9		V	V
1-1/4	34	0.042	1.1		V	V
1-1/2	41	0.050	1.3	WS	WS	V
2	54	0.063	1.6	WS	WS	V
2-5/8	67	0.063	1.6	WS	WS	V



V: Variable Positive Rake    WS: Wide Set Specification Available (Helps Eliminate Blade Pinching)    Highlighted Products: EXCOAT-DP coating specification available (special order required)  
 Specifications may change without notice at the sole discretion of Amada's Engineering Department.

## General Purpose Matrix Bi-Metal Blade for Metal Cutting Band Saw

- The MGLB is best suited for cutting structural shapes, tubing and stacks of mild steel pieces. The MGLB allows band saw 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 HRC67-68
- Matrix 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 “WS” (Wide Set) type is available for MGLB.

### Advantages

- High wear resistance
- Tough shock resistant tooth edge

### Applicability by Materials

: Break-in area / 1000cm<sup>2</sup> • 100in<sup>2</sup>

Roll-formed section steels	Structural steels	Bundled small diameter materials	Mild steels, non-ferrous metals			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloys		
Thin wall C-shaped Deck plate	Thick wall H-beam Channel	~100mm ~4in	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~	~100mm ~4in	100~400mm 4 to 16in	400mm~16in~

### Lineup of Products

Name				MGLB, Straight Pitch, General Purpose Matrix Bi-Metal Blades				
Blade Width inch	mm	Blade Thickness		Pitch				
		inch	mm	3	4	6	10	14
1/4	6	0.035	0.9				V	V
3/8	9	0.035	0.9		V			
1/2	12	0.035	0.9		V	V	V	V

V: Variable Positive Rake

### Lineup of Products

Name				MGLB, Varied Pitch Matrix Bi-Metal Blades						
Blade Width inch	mm	Blade Thickness		Pitch						
		inch	mm	2/3	3/4	4/6	5/7	6/10	8/12	10/14
3/4	19	0.035	0.9		V	V	V	V	V	V
1	27	0.035	0.9		V	V	V	V	V	V
1-1/4	34	0.042	1.1		V	V	V	V	V	
1-1/2	41	0.050	1.3	V	V	V	V			
2	54	0.063	1.6	V	V/WS	V				

V: Variable Positive Rake

WS: Wide Set

Specifications may change without notice at the sole discretion of Amada's Engineering Department.



**DUOS**<sup>®</sup>

Dedicated blade for thin walled tubing

AMADA Modified M42 HSS

## Best Suited for Cutting Thin-Walled Tubed and Light-Gauge Structural Steels

- Special tooth construction applied with a unique set pattern provides unsurpassed performance on thin walled piping and light structural steels.
- Also effective in light duty band saw applications.

### 1 HI-LO + Twin Set Tooth Shape

Two types of tooth shapes offer respective protection and prevent excessive penetration into the work material.

### 2 Proprietary Tooth Tip Shape

A positive rake angle improves cutting performance.

### 3 Adoption of First Two-Step Relief Angle for Small Pitch Blades

The gullet capacity is increased to prevent chip clogging.



Tooth Type: HI-LO Twin Set Tooth Shape

Edge Material: AMADA Modified M42 HSS

Hardness: 900HV

Wear Resistance: ★★

Chipping Resistance: ★★★★★

## Applicability

● : Break-in area / 1000cm<sup>2</sup> • 100in<sup>2</sup>

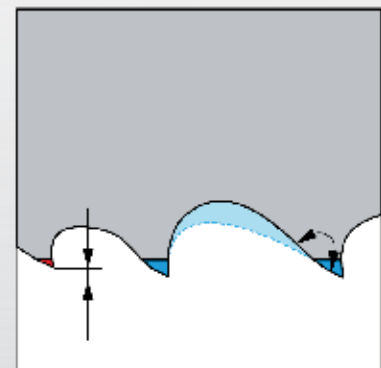
Roll-formed section steels	Structural steels	Small diameter
Thin wall C-shaped ○ □ ▤	H-beam Channel H U	~100mm ~4in ● ■

## Lineup of Products

Blade Width		Blade Thickness		Pitch
inch	mm	inch	mm	
1/2	12	0.025	0.635	9/11 V
1/2	12	0.035	0.9	V
3/4	19	0.035	0.9	V
1	27	0.035	0.9	V
1-1/4	34	0.042	1.1	V

V: Variable Positive Rake

Specifications may change without notice at the sole discretion of Amada's Engineering Department.



Alternating tooth heights and enlarged chip space due to two-stage clearance angle.



**EAGLE BEAK SST** Vertical Tilt-Frame Blade AMADA Modified M42 HSS

**The Blade for Tubes and H-Beams that Resists Chipping and Wear**

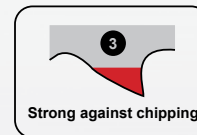
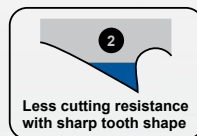
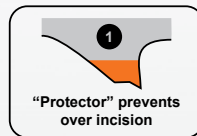
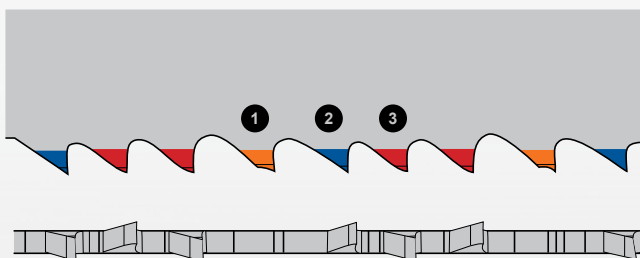
The Amada Marvel Eagle Beak SST blade adapts to various shapes and sizes and is designed for thin wall material up to 1/4 inch thickness.

- Longer Blade Life
- Increases Productivity
- Decreases Blade Change
- Chipping & Wear Resistance are compatible by optimum arrangement of three types of tooth profile



Tooth type :  
Edge material : M42 Cobalt HSS  
Hardness : 950HV  
Wear resistance : ★★ ★★  
Chipping resistance : ★★★★★

Eagle Beak SST has three tooth profiles



**Recommended TPI for Cutting Material Size**

Name	Eagle Beak SST										
	Material Size inch										44
	4	8	12	16	20	24	28	32	36	40	
	4/6P										
	3/4P										
	2/3P										

**Lineup of Products**

Name	Eagle Beak SST						
	Blade Width		Blade Thickness		Pitch		
	inch	mm	inch	mm	2/3	3/4	4/6
1	27	0.035	0.9		V	V	
1-1/4	34	0.042	1.1		V	V	
1-1/2	41	0.050	1.3	V/WS	V/WS	V	
2	54	0.050	1.3		WS		
		0.063	1.6	V	V/WS		
2-5/8	67	0.063	1.6	V	V/WS		

V: Variable Positive Rake      WS: Wide Set Specification Available (Helps Eliminate Blade Pinching)  
\*These specifications, machinery and equipment appearance are subject to change without reason of improvement. These specifications are listed for the United States.

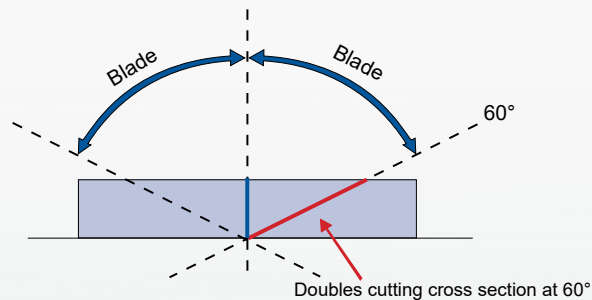
⚠ Before using this product, please read the operator's manual carefully and follow all applicable instructions.

**EAGLE BEAK VTR** Vertical Tilt-Frame Blade AMADA Modified M42 HSS

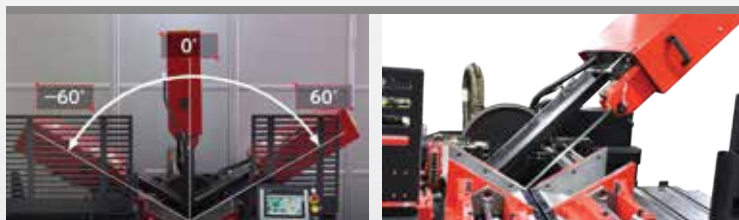
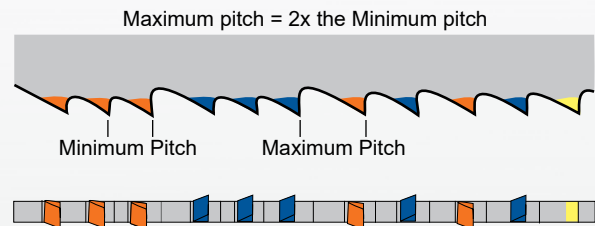
**The Only Blade Designed Specifically for Miter Cutting**  
 on a Vertical Tilt-Frame Band Saw

The Amada Marvel Eagle Beak VTR blade cuts a wide range of cross sectional sizes and material. Perfect for heavy thick wall material up to 12 inches in height.

- **Longer Blade Life**
- **Increases Productivity**
- **Decreases Blade Change**
- **Cuts a wide range of cross sectional sizes**



Tooth type :  
 Edge material : M42 Cobalt HSS  
 Hardness : 950HV  
 Wear resistance : ★★ ★  
 Chipping resistance : ★★ ★★ ★



**Recommended TPI for Cutting Material Size**

Name	Eagle Beak VTR						
	Material Size inch						
	2	4	6	8	10	12	14
	4/6P						
	3/4P						
	3/6P						

**Lineup of Products**

Name		Eagle Beak VTR			Pitch
Blade Width inch	mm	Blade Thickness inch	mm	3/6	
1	27	0.035	0.9	✓	
1-1/4	34	0.042	1.1	✓	
1-1/2	41	0.050	1.3	✓	



V: Variable Positive Rake  
 \*These specifications, machinery and equipment appearance are subject to change without reason of improvement. These specifications are listed for the United State.

Before using this product, please read the operator's manual carefully and follow all applicable instructions.

**GLB<sup>®</sup> contour**

HSS Bi-Metal Contour Blade

AMADA Modified M42 HSS

### Bi-Metal Blade for Contour Machines

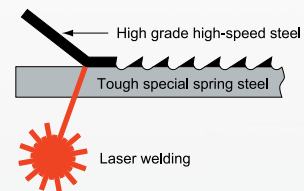
- A breakthrough for previously difficult to cut materials.
- No crooked cuts, no blade breakage and consistent quality cut finish.

#### 1 Teeth of the Modified M42

Teeth of the modified M42 high-speed tool steel are electron beam welded to the body of tough spring steel. The resultant bi-metal blade can cut materials difficult to cut with conventional blades, without breaking and bending. The bi-metal blade features an exceptionally long life.



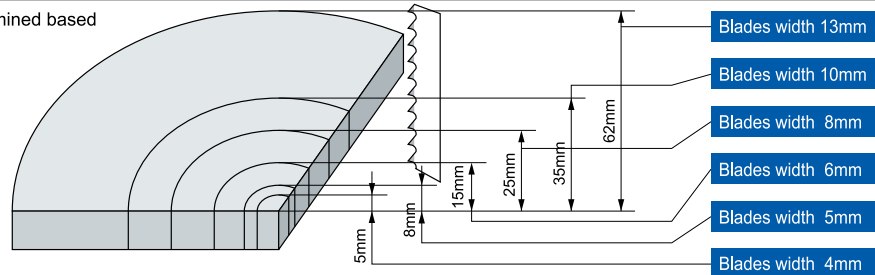
Edge Material: AMADA Modified M42 HSS  
Hardness: 890HV



### Applicability

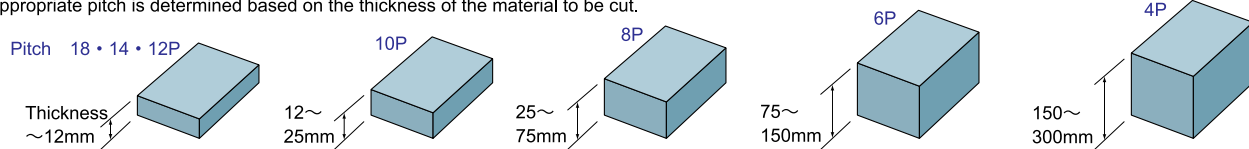
#### Selection of blades width

The work minimum radius is determined based on the blades width.



#### Selection of blades pitch

Appropriate pitch is determined based on the thickness of the material to be cut.



### Lineup of Products

Name		GLB contour								
		Blade Thickness		Pitch						
Blade Width inches	mm	inches	mm	4	6	8	10	12	14	18
1/8	3	0.02	0.64						✓	✓
		0.03	0.9						✓	
1/8	4	0.02	0.64				✓	✓	✓	✓
		0.03	0.9				✓	✓	✓	
3/16	5	0.02	0.64				✓	✓	✓	✓
		0.03	0.9				✓	✓	✓	
1/4	6	0.02	0.64		✓	✓	✓	✓	✓	✓
		0.03	0.9		✓	✓	✓	✓	✓	
3/8	8	0.02	0.64		✓	✓	✓	✓	✓	✓
		0.03	0.9		✓	✓	✓	✓	✓	
1/2	10	0.02	0.64		✓	✓	✓	✓	✓	✓
		0.03	0.9	✓	✓	✓	✓	✓	✓	
1/2	13	0.02	0.64	✓	✓	✓	✓	✓	✓	
		0.03	0.9	✓	✓	✓	✓	✓	✓	

✓ : Standard item

\*There are two types of coil length: 16 meters and 30 meters.



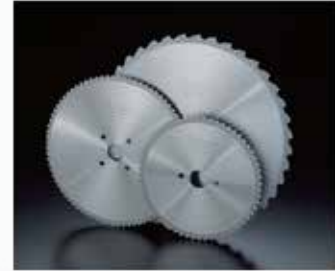
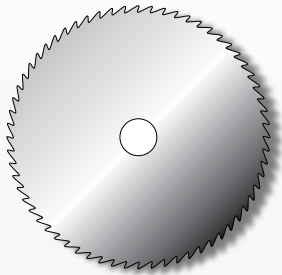
# CARBIDE CIRCULAR BLADES



## AMADA Cold Saw Blades Fully Perform

Across a Wide Variety of Applications Ranging from Low Carbon Steels to Difficult to Cut Materials

- Edge material (Tungsten Carbide/Cermet) welded to durable blade body, also featuring a unique tooth profile that provides dynamic chip removal, exceptional cutting efficiency, and longer blade life.



**SIZE:**  
 Blade Diameter: 240~460mm  
 Thickness: 1.75~2.7mm  
 Number of Teeth: 40~160

### Applicability

Steel pipe Tensile strength ≤ 800N/mm Vc ≤ 200mm/min	Machine structural carbon steel						Structural alloy steel		Special purpose steel	
	Quantity of carbon								bearing steel 1.0%	Stainless steel
	0.1	0.2	0.3	0.4	0.5	%				
	TCB-CRII									
	TCB-CB									TCB-SU
	TCB-PT							TCB-TIII		TCB-TISU
·STKS ·STK ·STKM ·STKR	·SS400, S10C~40C ·SCr, SCM415~440 ·SNCM415~439 ·SMn420~443						·S40C~58C ·SCr, SCM440~445 ·SNCM439~447 ·SMn443		·SUJ2~5 ·SUM ·SUP	·SUS304 etc.

### Blade Size (Diameter) Recommendation by Material Size

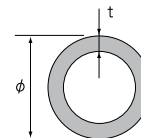
Unit : mm

Outer diameter	Inner diameter	Number of teeth Z	Minimum and maximum diameters of target materials																
			10	20	30	40	50	60	70	80	90	100	110	120	130	140	150		
240	32	60																	
		80																	
250	32	54																	
		72																	
285	32	60																	
		80																	
	40	60																	
		80																	
360	40	60																	
		80																	
		100																	
	50	60																	
		80																	
380	40	60																	
		80																	
		100																	
460	50	40																	
		60																	

### Blade Pitch Recommendation for Pipes

Unit : mm

		Outer diameter	Inner diameter
		TCB-PT	
140Z	120Z		
Pipe diameter	φ 10	—	—
	φ 20	t 6.8	—
	φ 30	t 3.1	t 9.3
	φ 40	t 2.1	t 5.2
	φ 50	t 1.6	t 3.7
	φ 60	t 1.2	t 2.5
	φ 70	t 1.0	t 2.3



Suitable for low and medium carbon steels

## TCB-CR II

- Excellent in wear resistance/deposition resistance cermet tips adopted
- Stable cutting quality is provided with both carbon steel and alloy steel up to C ≤ 0.45%.

Edge material : Cermet  
Mist fluid : AML3  
Dropping speed(1drop) : 5 ~ 6s  
Wear resistance : ★★★★★  
Chipping resistance : ★★★★★



Outer Diameter mm	Inner Diameter mm	Thickness mm	Number of teeth Z					
			40	54	60	72	80	100
240	32	1.75			●		●	
250	32	2.0		●		●	●	
285	32	2.0			●		●	
285	40	2.0			●		●	
360	40	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
360	50	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
380	40	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
460	50	2.7	●		●			

Suitable for low and medium carbon steels

## TCB-CB

- Circular saw blade with tough tips and suitable for cutting low- and medium-carbon steels.
- Excellent in chipping resistance and suited for cutting carbon and many other steels.

Edge material : Carbide  
Mist fluid : AML3  
Dropping speed (1drop) : 5 ~ 6s  
Wear resistance : ★★★★★  
Chipping resistance : ★★★★★



Outer diameter mm	Inner diameter mm	Thickness mm	Number of teeth Z					
			40	54	60	72	80	100
9.4	1.25	1.75			●		●	
11.2	1.25	2.0			●		●	
14.1	1.57	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
14.1	1.96	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
14.9	1.57	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
18.1	1.96	2.7	●		●			

Stainless steels dedicated

## TCB-SU

- Circular saw blade with tough tips and dedicated to cutting stainless steels.
- Chip sticking is reduced to prevent chip loading and tooth chipping.

Edge material : Carbide  
Mist fluid : AML4  
Dropping speed (1drop) : 1 ~ 3s  
Wear resistance : ★★★★★  
Chipping resistance : ★★★★★



Outer diameter mm	Inner diameter mm	Thickness mm	Number of teeth Z					
			40	54	60	72	80	100
240	32	1.75			●		●	
285	32	2.0			●		●	
285	40	2.0			●		●	
360	40	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
360	50	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
460	50	2.7	●		●			

Thin-walled tube dedicated

## TCB-PT II

- Circular saw blade with the number of teeth increased for stably cutting thin-walled pipes.
- As a result of a review of the material and shape of the blade, wear resistance and chipping resistance were improved.

Edge material : Cermet  
Mist fluid : AML3  
Dropping speed(1drop) : 5 ~ 6s  
Wear resistance : ★★★★★  
Chipping resistance : ★★★★★



Outer Diameter mm	Inner Diameter mm	Thickness mm	Number of teeth Z							
			TCB-PT II			TCB-PT				
			60	80	100	100	120	140	160	
250	32	2.0					●	●		
285	32	2.0	●	●			●	●		
285	40	2.0	●	●			●	●		
360	40	2.6(2.5)	●(2.6)	●(2.5)	●(2.5)			●(2.5)	●(2.5)	

Suitable for high carbon steels

## TCB-TII

- Our coated circular saw blades are made of an improved chip material offering outstanding high toughness and wear resistance and suitable for high carbon steels with a carbon content of 0.45% or more.
- A new tip shape with improved chipping resistance and a new blazing method realize a longer service life than conventional blades.

Edge material : Carbide + Coating  
Mist fluid : AML3  
Dropping speed(1drop) : 5 ~ 6s  
Wear resistance : ★★★★★  
Chipping resistance : ★★★★★



Outer Diameter mm	Inner Diameter mm	Thickness mm	Number of teeth Z					
			40	54	60	72	80	100
250	32	2.0		●		●		
285	32	2.0			●		●	
285	40	2.0			●		●	
360	40	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
360	50	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
460	50	2.7	●		●			

Stainless steels dedicated

## TCB-TISU

- Coated circular saw blade dedicated to cutting stainless steels.
- The coating improves chip welding resistance and wear resistance and prolongs the blade life.

Edge material : Carbide + Coating  
Mist fluid : AML4  
Dropping speed (1drop) : 1 ~ 3s  
Wear resistance : ★★★★★  
Chipping resistance : ★★★★★



Outer diameter mm	Inner diameter mm	Thickness mm	Number of teeth Z					
			40	54	60	72	80	100
240	32	1.75			●		●	
250	32	2.0		●		●		
285	40	2.0			●		●	
285	32	2.0			●		●	
360	40	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
360	50	2.6(2.5)			●(2.6)		●(2.5)	●(2.5)
460	50	2.7	●		●			

## DB-BLADE M

Metal diamond blade

Diamond

### Ideal for High-Grade High-Efficiency Cutting of New Materials (for the DBSAW series)

• AMADA's originally developed diamond blade adopting metal-bonded diamond chips

#### 1 Process Improvement with a High-Grade Finish

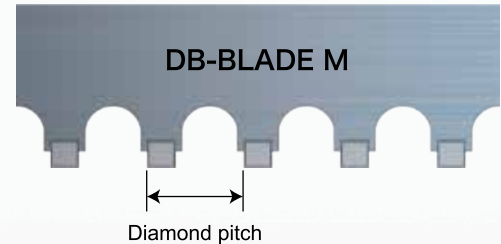
Diamond-supported grinding and cutting contribute to high-accuracy cut faces and reduced burdens on subsequent processes.

#### 2 Adoption of Diamond Tips that Overturns the Conventional Concept

Long-Standing, Stable Sharpness can be maintained thanks to the autogenous (self-sharpening) action of Diamond abrasive grains.

#### 3 High-Class New Materials Can be Cut without Waste

Compared with other cutting methods, this blade can cut materials at high speed and with a shorter time but requires a smaller cutting margin.

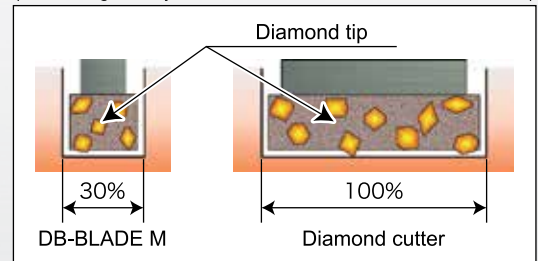


Comparison of cutting time when cutting  $\Phi 300$  quartz glass (The cutting time by the diamond cutter is assumed to be 100%.)

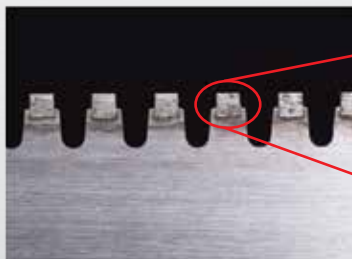


\* Comparison with our in-house products

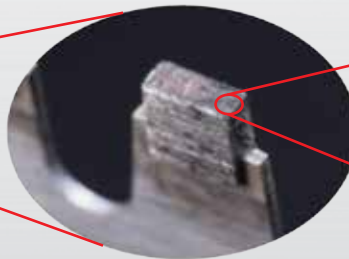
Comparison of cutting margins when cutting  $\Phi 300$  quartz glass (The cutting time by the diamond cutter is assumed to be 100%.)



\* Comparison with our in-house products



Metal diamond blade



Diamond tip



Diamond abrasive grains

### Lineup of Products

Name			DB-BLADE M			
Blade Width inch mm	Blade Thickness inch mm	Thickness inch mm	Diamond pitch			
			8	10	15	30
3-1/8 80	0.019 0.5	0.047 1.2	●			
5 125	0.03 0.8	0.07 1.8		●		
	0.04 1.07	0.07 2.0		●		
6-1/8 155	0.04 1.25	0.098 2.5		●	●	●
	0.05 1.47	0.118 3.0			●	

● : Standard item

\* For specifications not listed in the catalog, contact a representative of AMADA SANWA DAIYA.

**DB-BLADE E**

Electrodeposited diamond blade

Diamond

## Ideal for High-Efficiency Cutting of New Materials

- Available in various electrode position specifications, our electrode posited diamond blades realize preeminent cutting performance for each material to be cut.

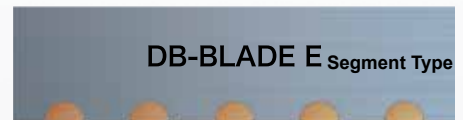
### ① Flat Type

- The flat type can ensure high-grade cutting of to-be-cut materials that are hard and prone to chip.
- Suitable for cutting of small-diameter materials.



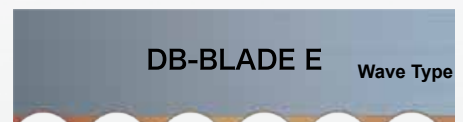
### ② Segment Type

- Loading is minimized by segmenting the shape of the electrode posited portion.
- The cutting efficiency of the segment type is higher than that of the flat type.



### ③ Wave Type

- The cutting edge is provided with gullet to improve cutting chip removal performance.
- The wave type can cut large-size materials at higher speed than the segment type.



## Lineup of Products

Name		DB-BLADE E				
Blade Width inch	mm	Blade Thickness		Electrode position specification		
		inch	mm	Flat type	Segment type	Wave type
3/4	19	0.019 / 0.035	0.5 / 0.9	●		
1	27	0.019 / 0.035	0.5 / 0.9	●	●	
1-1/4	34	0.019 / 0.035 / 0.043	0.5 / 0.9 / 1.1	●	●	●
1-1/2	41	0.019 / 0.035 / 0.043 / 0.051	0.5 / 0.9 / 1.1 / 1.3	●	●	●
2-1/8	54	0.051 / 0.062	1.3 / 1.6	●	●	●
3-1/8	80	0.019	0.5	●	●	
5	125	0.03	0.8	●	●	
6-1/8	155	0.042 / 0.05	1.07 / 1.25	●	●	

● : Standard item

\* For specifications not listed in the catalog, contact a representative of AMADA SANWA DAIYA.

## Example of Materials to Which the Diamond Blade Can be Applied



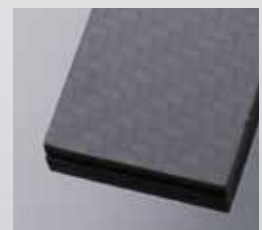
Quartz glass



Sapphire



Carbon



CFRP



Fine ceramics



SiC



Silicon



**Before Using this Product,  
Please Read the Operator's Manual Carefully and Follow all Applicable Instructions.**

※Product availability and product specification subject to change without notice at the discretion of the company.

※Some variation in materials and product specifications may occur according to sales areas.

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※There may be differences in the specification that has been described in this catalog to the AMADA products which are actually shipped. Please ask our staff for more detail.

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