

BAND SAW BLADE SERIES

Blade Pitch Selection

Blade pitch selection table by materials to be cut

Maximum cutting length		mm													
		50	100	150	200	250	300	400	500	700	1000				
Material to be cut		inches													
		2"	4"	6"	8"	10"	12"	16"	20"	28"	40"				
Roll formed section		6/10P 6/8P 5/7P													
Structural steel, Bundled tubes				4/6P											
Solid material	Bundled small diameter material, Mild steel			3/4P			2/3P	1.5/2P							
	Tool steel, Prehardened steel														
	Hot work die steel, Stainless steel														
	Super heat resisting alloy							1.1/1.5P			0.75/1P				

Note 1: When cutting profiles or structurals, it is desirable that at least 2 teeth are in contact with the material being cut at all times. This will prevent chipping and stripping of the teeth and eliminate premature blade failure.

Note 2: The above table based on "SGLB" should be used as a guide. Specific applicability vary somewhat depending on the characteristics of the blades. For example, 3/4P of "PROTECTOR" is capable of cutting materials in the range including 4/6P in the above table.

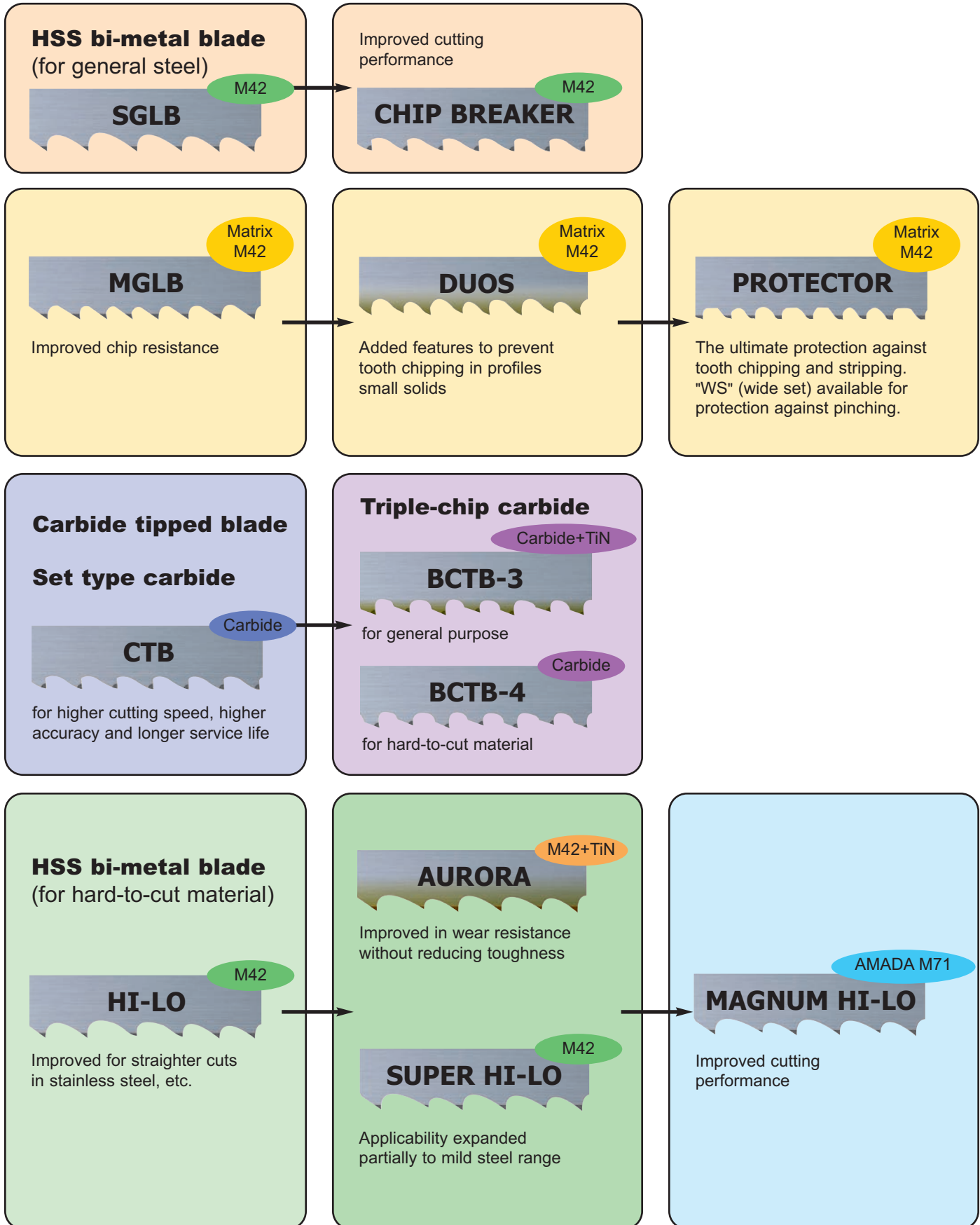
Blade Type Selection

- *1: The hardness of the tooth tip represents Amada's average value. It is adjusted to some extent according to the types and sizes of the products.
- *2: Non-ferrous metals referred to on 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.
- ** 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)*1	Wear resistance		Features
			Chipping resistance		
<small>PATENT PENDING</small> BCTB-3	Carbide + TiN	1600 + 3200	★★★★★ ★★★★		Highest grade carbide saw blades with a unique tooth geometry for the highest-cutting speeds and accuracies achievable only with AMADA's advanced technology. Five types are available depending upon on materials being cut. It is also possible to select pitches and tooth patterns to accommodate sizes and other requirements.
<small>PATENT PENDING</small> BCTB-4	Carbide	1600	★★★★★ ★★★★		
BCTBR	Carbide	1600	★★★★★ ★★★★		
CTB	Carbide	1600	★★★★★ ★		Carbide tooth tip for cutting extra hard materials that cannot be cut with conventional HSS bi-metal blades. Extended blade life in abrasive materials.
<small>PATENTED</small> AURORA	M42 + TiN	950 + 2300	★★★★★ ★★		High-quality "SIGMA" blade with TiN coating added for extended blade life in hard-to-cut materials.
<small>PATENTED</small> MAGNUM HILO	AMADA M71 HSS	1000	★★★★★ ★		New, high performance edge material with specially designed set and tooth geometry. Applicable to hard to cut materials including super heat resisting alloy.
<small>PATENTED</small> HI-LO	M42 HSS	950	★★★★ ★★		Special tooth design for faster cutting and longer blade life. For materials with work hardening characteristics.
<small>PATENTED</small> SUPER HI-LO		950	★★★★ ★★		Special set and tooth design reduces cutting resistance while maintaining penetration rates. For material of medium to large diameters with low machinability rates.
<small>PATENT PENDING</small> CHIP BREAKER		950	★★★★ ★★		Special tooth design reduces cutting resistance while maintaining penetration. Suitable for wide variety of steel types and sizes, from mild steels to hard-to-cut alloys.
SGLB		950	★★★★ ★★		Suitable for wide variety of steel types and sizes, from mild steels to hard-to-cut alloys.
<small>PATENT PENDING</small> PROTECTOR M42		950	★★★★★ ★★★★★		Blade designed for the structural steel industry. The tooth geometry virtually eliminates tooth chipping plus the M-42 edge provides abrasive resistance for extended blade life.
<small>PATENT PENDING</small> PROTECTOR	Matrix HSS (M42 HSS)	900	★★★ ★★★★★		A special blade exclusively for structural steel and profiles, incorporates a unique chip resisting qualities.
MGLB		900	★★★ ★★★★		Economical blade, applicable for small-size mild steel. General purpose applications.
<small>PATENT PENDING</small> DUOS		900	★★★ ★★★★★		For thin walled tubes to small size solids of mild steel.

Blade Line-up

Line-up of AMADA's blades and development concepts



CTB

CARBIDE TIPPED BAND SAW BLADES

WIDTH	THICKNESS	1.25	2	2.5	3	4	1.1/1.5
1"	0.042				P		
1 1/4"	0.055			P		P	
1 1/2"	0.055	P		P		P	
2"	0.063			P			P
2 5/8"	0.063	P	P				
3"	0.063	P					

BCTBR

MULTI FACETED CARBIDE TIPPED BLADE

WIDTH	THICKNESS	1.8/2.3
1 1/4"	0.042	●
1 1/2"	0.055	●
2"	0.063	●

P POSITIVE RAKE
 V VARIABLE POSITIVE RAKE
 MG 10 DEGREE POSITIVE RAKE
 S STANDARD TOOTH
 PR 7 DEGREE POSITIVE RAKE
 AG POSITIVE RAKE, LARGE GULLET SIZE
 WS WIDE SET
 MGG . . . 12 DEGREE POSITIVE GROUND TOOTH
 NS NARROW SET

BCTB Type 3 to 4

MULTI FACETED CARBIDE TIPPED BLADE

TYPE	WIDTH	THICKNESS	PITCH	LENGTH
BCTB 3-2	1 1/2"	0.055	1.8/2.3	15'6"
BCTB 4-2	1 1/2"	0.055	1.8/2.3	15'6"

*** PLEASE CALL FOR SPECIAL REQUIREMENTS, ADDITIONAL WIDTHS, PITCHES OR LENGTH.**

AURORA

TITANIUM NITRIDE COATED BI-METAL BLADES

WIDTH	THICKNESS	2/3	3/4
1 1/4"	0.042	V	V
1 1/2"	0.050	V	V

MAGNUM HI-LO

PATENTED VARYING TOOTH HEIGHT AND SET M-71 BLADE

WIDTH	THICKNESS	.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	
2 5/8"	0.063		V		
3"	0.063	V	V		

HI-LO

VARYING TOOTH HEIGHT DESIGN, M-42 BI-METAL BLADE

WIDTH	THICKNESS	.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	V	
2 5/8"	0.063	V	V			
3"	0.063	V	V			

P POSITIVE RAKE
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 MGG . . . 12 DEGREE POSITIVE GROUND TOOTH
 NS NARROW SET

SUPER HI-LO

VARYING TOOTH HEIGHT AND SET WIDTH M-42 WELDED EDGE

WIDTH	THICKNESS	2/3	3/4
1"	0.035	V	V
1 1/4"	0.042	V	V
1 1/2"	0.050	V	V
2"	0.063	V	V

SGLB

VARIED PITCH M-42 BI-METAL BLADES

WIDTH	THICKNESS	.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	MG	PR	PR	S	
1 1/2"	0.050		AG	AG	AG	MG	PR	PR		
2"	0.050		AG	AG	AG	MG				
2"	0.063	AG	AG	AG	AG	MG	MG			
2 5/8"	0.063	AG	AG	AG	AG		MG			
3"	0.063	AG	AG	AG						

MGLB - STRAIGHT PITCH

STRAIGHT PITCH MATRIX BI-METAL BAND SAW BLADES

WIDTH	THICKNESS	4	6	10	14
1/4"	0.035			S	S
3/8"	0.035	S			
1/2"	0.035	S	S	S	S

MGLB - VARIED PITCH

VARIED PITCH MATRIX BI-METAL BLADES

WIDTH	THICKNESS	.75/1.1	1.1/1.5	2/3	3/4	4/6	5/7	6/10	8/12	10/14
3/4"	0.035				MG	PR	PR	S	S	S
1"	0.035				MG	PR	PR	S	S	S
1 1/4"	0.042				MG	PR	PR	S	S	
1 1/2"	0.050		AG	AG/WS	MG/WS	PR	PR			
2"	0.063	AG	AG	AG	MG					

PROTECTOR

EXCLUSIVE USE FOR STRUCTURAL MATERIAL MATRIX BLADE

WIDTH	THICKNESS	2/3	3/4	4/6
3/4"	0.035			V
1"	0.035		V	V
1.25"	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	V

PROTECTOR M-42

EXCLUSIVE USE FOR STRUCTURAL STEEL WITH M-42 EDGE

WIDTH	THICKNESS	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	

CHIPBREAKER

PATENTED GULLET DESIGN FOR FASTER CUTTING

WIDTH	THICKNESS	1.1/1.5	2/3	2.5/3.5	3/4	4/6
1"	0.035				V	
1 1/4"	0.042		V	V	V	
1 1/2"	0.050		V		V	V
2"	0.063		V	V		
2 5/8"	0.063	V				
3"	0.063	V				

DUOS

PATENTED BI-METAL FOR THIN WALL TO SOLID

WIDTH	THICKNESS	9/11
1/2"	0.025	V
	0.035	V
3/4"	0.035	V
1"	0.035	V
1 1/4"	0.042	V

P POSITIVE RAKE
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 AG POSITIVE RAKE, LARGE GULLET SIZE
 WS WIDE SET
 MGG . . . 12 DEGREE POSITIVE GROUND TOOTH
 NS NARROW SET

Blade Specifications

CIRCULAR SAW BLADE

CARBIDE TIPPED CIRCULAR BLADE

[New item name]	Replaces
TCB-CR Cermet	
TCB-TI Tungsten carbide Tin coated	
TCB-CB Tungsten carbide	
TCB-SU Tungsten carbide for cutting stainless steels	
TCB-PT Tungsten carbide for cutting pipe & tube	

[Current model name]

←	ST-3
←	TI-3
←	TA-3
←	TA-SUS
←	N/A

New package



* Package colors are different for other models.

CERMET

MODEL	BLADE TYPE	SIZE
CM 75	TCB-CR	285 X 2.0 X 60
	TCB-CR	285 X 2.0 X 80
CM 100	TCB-CR	360 X 2.25 X 60
	TCB-CR	360 X 2.25 X 80
	TCB-CR	360 X 2.25 X 100
CM 150	TCB-CR	460 X 2.7 X 40
	TCB-CR	460 X 2.7 X 60
	TCB-CR	460 X 2.7 X 80
	TCB-CR	460 X 2.7 X 100

CARBIDE FOR STAINLESS

MODEL	BLADE TYPE	SIZE
CM 75	TCB-SU	285 X 2.0 X 60
	TCB-SU	285 X 2.0 X 80
CM 100	TCB-SU	360 X 2.25 X 60
	TCB-SU	360 X 2.25 X 80
	TCB-SU	360 X 2.25 X 100
CM 150	TCB-SU	460 X 2.7 X 40
	TCB-SU	460 X 2.7 X 60
	TCB-SU	460 X 2.7 X 80
	TCB-SU	460 X 2.7 X 100

CARBIDE TIN COATED

MODEL	BLADE TYPE	SIZE
CM 75	TCB-TI	285 X 2.0 X 60
	TCB-TI	285 X 2.0 X 80
CM 100	TCB-TI	360 X 2.25 X 60
	TCB-TI	360 X 2.25 X 80
	TCB-TI	360 X 2.25 X 100
CM 150	TCB-TI	460 X 2.7 X 40
	TCB-TI	460 X 2.7 X 60
	TCB-TI	460 X 2.7 X 80
	TCB-TI	460 X 2.7 X 100

CARBIDE FOR PIPE & TUBE

MODEL	BLADE TYPE	SIZE
CM 75	TCB-PT	285 X 2.0 X 60
	TCB-PT	285 X 2.0 X 80
CM 100	TCB-PT	360 X 2.25 X 60
	TCB-PT	360 X 2.25 X 80
	TCB-PT	360 X 2.25 X 100
CM 150	TCB-PT	460 X 2.7 X 40
	TCB-PT	460 X 2.7 X 60
	TCB-PT	460 X 2.7 X 80
	TCB-PT	460 X 2.7 X 100

CARBIDE

MODEL	BLADE TYPE	SIZE
CM 75	TCB-CB	285 X 2.0 X 60
	TCB-CB	285 X 2.0 X 80
CM 100	TCB-CB	360 X 2.25 X 60
	TCB-CB	360 X 2.25 X 80
	TCB-CB	360 X 2.25 X 100
CM 150	TCB-CB	460 X 2.7 X 40
	TCB-CB	460 X 2.7 X 60
	TCB-CB	460 X 2.7 X 80
	TCB-CB	460 X 2.7 X 100

Amada reserves the right to change specifications and/or accessories at any time without prior notice.



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