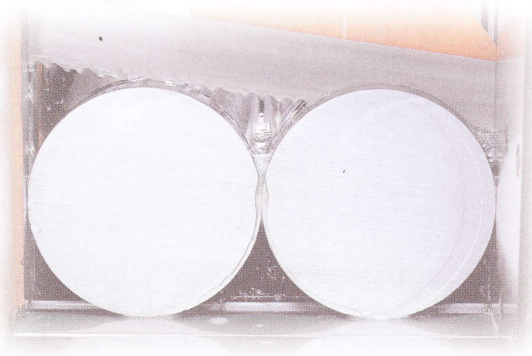
SGLB Amada Global standard blade

M42 Cobalt HSS

Adapted to a wide range of materials from general steels to difficult-to-cut materials

- Worldwide sales achievements and our most versatile, best-selling band saw blade.
- Ideal sawing for a wide range of material types, shapes, and sizes.



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

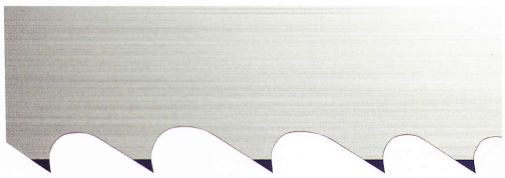
❶ Adoption of M42 cobalt high-speed steel

The cutting edge is made of the M42 to improve wear resistance.

❷ Amada's proprietary heat treating technology

A global standard blade to make the most of the performance of the cutting edge material.

Standard tooth shape



Standard tooth shape used for a wide variety of products. Suitable for cutting materials of a broad range from structural steel to hard-to-cut materials.

Applicability

: Brake-in area/1000㎠

Structural steels	Bundled small diameter materials	Mild steels, carbon steels			Tool steels, pre-hardened steels			Hot work tool steels, stainless steels			Super heat resistant alloy, titanium alloys		
Thick wall / H-beam	~100mm	~100mm	100~400mm	400mm~	~100mm	100~400mm	400mm~	~100mm	100~400mm	400mm~	~100mm	100~400mm	400mm~
WS type : Roll-formed large size H-beam													

Line-up of products

Blades width mm	Blades thickness mm	Pitch 0.75/1	1.1/1.5	1.5/2	2/3	3/4	4/6	5/7	6/10	8/12
19	0.9					●	●	●	▲	▲
27	0.9				●	●	●	●	●	●
	1.1					●	▲			
34	1.1				●	●	●	●	●	▲
	1.3				▲	●	▲			
41	1.3		●	●	●/WS△	●/WS	●	●		
54	1.3		●		●	▲/WS△	●			
	1.6	●	●	●	●/WS△	●/WS	●			
67	1.6	●	●	●	●/WS	●/WS	▲			
80	1.6	●/WS△	●	●	▲					

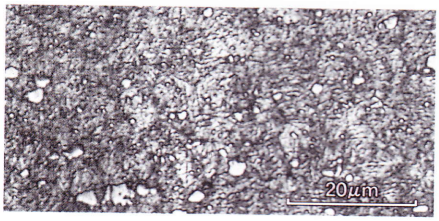
● : Standard item ▲ : Separate order required (standard specs) WS : Wide set specification available (helps eliminate blade pinching) WS△ : WS specifications requiring separate order

Blade information

Edge material

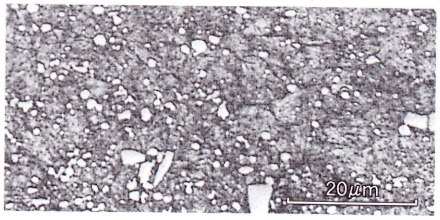
It is not necessarily true that the harder the edge, the longer the service life and the higher the efficiency. In case of cutting that involves high vibration and a large shock, edge material of high toughness are more advantageous because drop-off wear occurs before friction wear.

Amada M42 Modified HSS



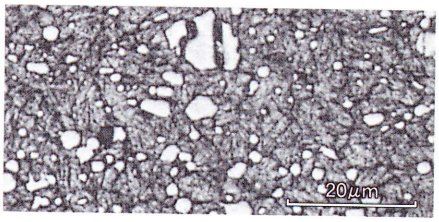
Amada's original matrix high-speed steel, produced based on M42 cobalt high-speed steel. With toughness greatly improved, this steel exhibits its greatest performance under cutting conditions involving vibration and shock.

M42 Cobalt HSS



M42 cobalt high-speed steel that 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.

Amada M71 Original HSS



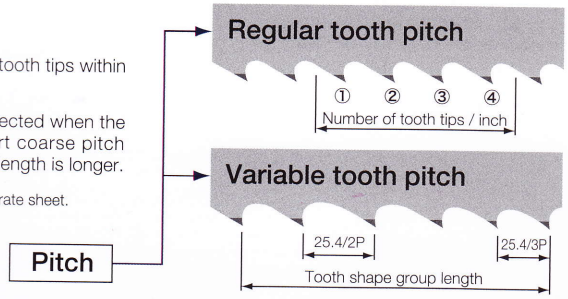
Original highest grade, high-speed steel, developed jointly with a leading steel manufacturer. This steel has hardness of 1000Hv, which is the highest ever recorded in ingot high-speed steel. It is suitable for cutting hard-to-cut materials.

Selection

■Pitch

- ●Pitch is expressed by the number of tooth tips within one inch (25.4mm).
- ●Generally, a finer pitch should be selected when the cutting length is shorter and a mort coarse pitch should be selected when the cutting length is longer.

※See "Blade pitch selection guide" on separate sheet.



Tooth tips are located at equal intervals. The regular tooth pitch is expressed as "00P(00=number of teeth/inch)".
The example shown on the left is 4P, and the tooth tip interval in this case is 25.4÷4P=6.35mm.

Multiple different pitches are combined within one inch. The variable tooth pitch is expressed by two figures such as "2/3P" in the example shown on the left. It means that the maximum tooth tip interval is equivalent to 2P in a tooth shape group (minimum unit of repetition) and that the minimum tooth interval is equivalent to 3P.
Use of this pitch can suppress vibration, and is applicable to cutting in wide range.

■Blade pitch selection table by materials to be cut

	Material to be cut \ Maximum cutting length		50	100	150	200	250	300	400	500	700	1000 (mm)
			2"	4"	6"	8"	10"	12"	16"	20"	28"	40" (Inch)
HSS Bi-Metal Blades	Roll-formed section steels		6/10P	5/7P & 4/6P								
	Structural steel, Bundled tubes											
	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										
Carbide Tipped Blades	Solid material	Mild steel Tool steel Prehardenced steel Hot work die steel Stainless steel Super heat resisiting alloy			1.8/2P		1.4/1.6P		1.1/1.5P		0.75/1P	
											0.9/1.1P	

Note1 : It is recommended for optimum cutting to select a pitch to allow for 20 to 30 teeth to correspond to the cutting length.
Note2 : When cutting deformed material or like that varies in the cutting length suddenly, it is desirable that at least 2 teeth are in contact with the material constantly while cutting.
Note3 : The above table based on "SGLB" should be used as guide. Specific applicability varies 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.

Cutting oils

Cutting oils are essential to cutting. Amada's original cutting oils offer a choice best suited for various applications based on blades, cutting environments and materials.

■SD Soluble cutting fluid

- ・This cutting oil suitable for drilling and cutting has excellent defoaming and antiseptic properties. Its high lubricating ability accommodates heavy cutting.

18 litter can