

LionNord

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PRECISION AND STRENGTH

2018



The Company

Bandsaw cutting has evolved into a sophisticated high technology. Bichamp Cutting Technology rises to the challenges, thanks to our highly skilled team, modern and reliable manufacturing facilities, and many years of experience. The combination of experience and specialized technical knowledge ensures high performance bandsaw blades, which are perfectly suited to meet your specific requirements.

Our responsibility for our products performance drives our continuous investment in our facilities, processes and people.

This enables our research and development teams to integrate the best manufacturing and product technology, and for our customers to experience the results in products, which outperform conventional bandsaw blades and bring more value.

Our corporate policy

- Top Quality and Total Customer Satisfaction

Bandsaw Blades Coil Specification:

We can supply welded loops to your specification.

We also provide coil stock in the following lengths:

13mm-100+/-5m per coil	19mm-100+/-5m per coil
27mm-100+/-5m per coil	34mm-85+/-5m per coil
41mm-75+/-5m per coil	54mm-55+/-5m per coil
67mm-55+/-5m per coil	



Variable tooth; blades are indicated by two numbers since the tooth pitch and the gullet vary. Distances vary within a group of teeth. Smallest to largest tooth pitch denotes the tooth variable of the saw blade. Variable tooth pitch reduces noise and vibration of cut while also increasing the life of the blade.

Bandsaw Blades Size Specification:

13mm X 0.65mm	41mm X 1.30mm
13mm X 0.90mm	54mm X 1.60mm
19mm X 0.90mm	67mm X 1.60mm
27mm X 0.90mm	80mm X 1.60mm
34mm X 1.10mm	



*Please visit the following tooth pitch selection chart for further TPI information

Bandsaw Blades Size Specification: TPI Calculation:

Tooth pitch: The number of teeth per inch or per 25.4mm in a saw blade.

$$TPI = \frac{25.4}{\text{The distance between two adjacent teeth (mm)}}$$

There are two kinds of tooth pitch, constant tooth pitch and variable tooth pitch.

Constant tooth: blades have a tooth distance which is equally spaced. Number of teeth per inch denotes the tooth of the saw blade. If the distance of two adjacent teeth is 6.35mm, the pitch is 4 TPI.

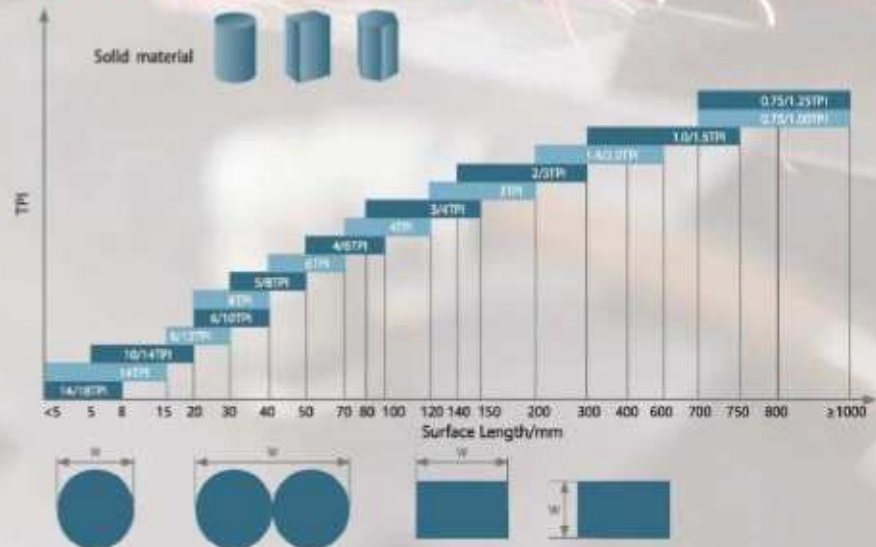
Tooth Pitch Selection Chart For Pipes And Profiles

Thickness S/mm	Diameter/mm													
	15	20	40	60	80	100	120	150	200	300	400	500	600	>700
2	14/18	14/18	14/18	10/14	10/14	10/14	10/14	10/14	8/12	8/12	8/12	6/10	6/10	5/8
3	14/18	14/18	10/14	10/14	10/14	10/14	8/12	8/12	8/12	6/10	6/10	6/10	5/8	5/8
4	14/18	10/14	10/14	10/14	8/12	8/12	6/10	6/10	6/10	5/8	5/8	4/6	4/6	4/6
5	10/14	10/14	8/12	8/12	8/12	6/10	6/10	5/8	5/8	5/8	4/6	4/6	4/6	4/6
6	10/14	10/14	8/12	8/12	6/10	5/8	5/8	5/8	4/6	4/6	4/6	4/6	4/6	3/4
8		10/14	8/12	6/10	6/10	5/8	5/8	4/6	4/6	4/6	4/6	4/6	4/6	3/4
10			6/10	6/10	5/8	5/8	5/8	4/6	4/6	4/6	4/6	3/4	3/4	3/4
12			6/10	5/8	5/8	4/6	4/6	4/6	4/6	4/6	3/4	3/4	3/4	3/4
15			6/10	4/6	4/6	4/6	4/6	4/6	3/4	3/4	3/4	3/4	3/4	2/3
20				4/6	4/6	3/4	3/4	3/4	2/3	2/3	2/3	2/3	2/3	2/3
30					3/4	3/4	3/4	2/3	2/3	2/3	2/3	2/3	2/3	2/3
50							2/3	2/3	2/3	2/3	2/3	2/3	2/3	1.4/2.0
75									2/3	2/3	2/3	1.4/2.0	1.4/2.0	1.4/2.0
100											1.4/2.0	1.4/2.0	1.0/1.5	1.0/1.5
150											1.4/2.0	1.4/2.0	1.0/1.5	1.0/1.5
200												1.0/1.5	0.75/1.25	0.75/1.25
250													0.75/1.25	0.75/1.25
>300													0.75/1.00	0.75/1.00

For 2 or more material add up all wall thickness

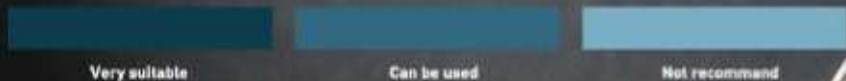


Tooth Pitch Selection Chart For Solid Materials



MTSAW BIMETAL BANDSAW BLADES SELECTION											
PRODUCT SERIES	ALUMINUM /COPPER	BRONZE/ BERYLLIUM COPPER	MILD STEELS	STRUCTURAL STEELS	LOW ALLOY STEELS	BEARING STEELS	DIE STEELS	STAINLESS STEELS	TOOL STEELS	Ti AND Ti-ALLOY	INCONEL/ NICKEL BASED ALLOY
MTSAW-F	Very suitable	Can be used	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable
MTSAW-A	Very suitable	Can be used	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable
MTSAW-P	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable
MTSAW-T	Very suitable	Can be used	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable
MTSAW-DT	Very suitable	Can be used	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable	Very suitable

Recommend:



M42 SAW BLADE

- MTSAW-F Cost-effective
- MTSAW-A Middle Quality
- MTSAW-P High Quality

M51 SAW BLADE

- MTSAW-T

TCT SAW BLADE

- MTSAW-DT

MT'SAW-F M42 GENERAL PURPOSE



M42 tooth tips with reliable 4%Cr backing material make this general-purpose blade suitable for cutting various materials.

Applications:

- Carbon steel
- Stainless steel
- Structural steel
- Aluminum/Aluminum alloys
- Alloy steel
- Cast iron
- Tool steel

Features:

- Perfect for sawing small to medium profiles and solid materials
- 4%Cr backing material for superior fatigue resistance
- High cutting efficiency with upgrade processing techniques



Width* Thickness	TP1												
	1/1.5	1.4/2	2/3	3/4	4/6	5/8	6	6/10	8/12	10/14	14	14/18	
13*0.65							■	■	■	■	■	■	■
19*0.90					■	■	■	■	■	■	■	■	■
27*0.90			■	■	■	■	■	■	■	■	■	■	■
34*1.10			■	■	■	■	■	■	■	■	■	■	■
41*1.30	▲	■	■	■	■	■	■	■	■	■	■	■	■

▲: Deep tooth gullet tooth profile for better chip removal.



MT'SAW-A PM GENERAL PURPOSE



PM Tooth tips combined with our reliable 4%Cr backing material make this general-purpose blade the all-round blade for cutting various materials.

Applications:

- Aluminum/Copper
- Carbon Steel
- Structural Steel
- Alloy Steel
- Bearing Steel
- Die Steel

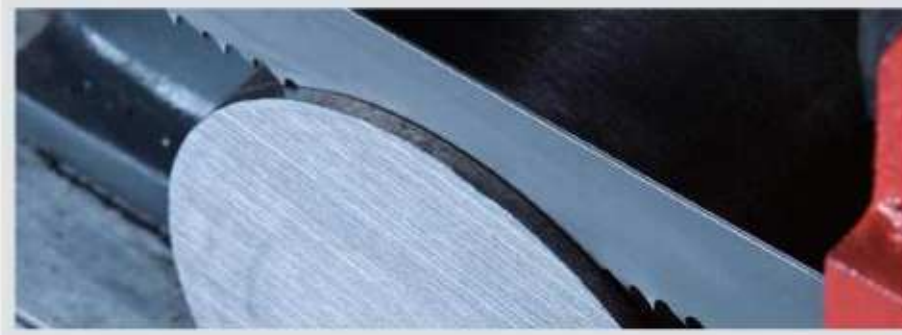
Features:

- Deep gullet tooth design for better chip removal
- Wear resistant PM tooth tips
- 4%Cr backing material for good beam strength



Width* Thickness	TP1	TP1												
		0.75/1.25	1/1.5	1.4/2	2/3	3/4	4/6	5/8	6	6/10	8/12	10/14	14	14/18
13*0.65	1/2" 025													
19*0.90	3/4" 035													
27*0.90	1" 035				▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
34*1.10	1-1/4" 042				▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
41*1.30	1-1/2" 052		■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
54*1.80	2" 065	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
67*1.80	2-5/8" 065	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
80*1.80	3" 065	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

▲: Deep tooth gullet tooth profile for better chip removal. *": non standard tooth, pre-order required.



MTSAW-P IMPACT RESISTANT



With a Protective tooth geometry, especially developed for cutting profiles and tubes. Bichamp's unique heat treatment process of the backing material results in PROCUT having excellent fatigue life.

Applications:

- Mild Steel
- Structural Steel
- Alloy Steel
- Stainless Steel

Features:

- High wear resistant tooth tips
- Impact resistant tooth form
- Strong beam strength
- Excellent fatigue life
- High cutting efficiency
- Reduced noise



Width*Thickness	Inches	TPI				
		2/3	3/4	4/6	5/7	8/11
13*0.65	1/2*0.05					■
13*0.90	1/2*0.08					■
19*0.90	3/4*0.06				■	■
27*0.90	1*0.06		■	■	■	
34*1.10	1-1/4*0.042	■*	■	■		
41*1.30	1-1/2*0.052	■*	■	■		
54*1.60	2*0.03	■*	■*			
67*1.60	2-5/8*0.03	■*	■*			

*" heavy set style is available for pinching problem solving



MTSAW-T HIGH PERFORMANCE



With PM tooth tips, designed to cut medium to very large work pieces with high precision. This blade is characterized by long blade life and extremely clean cutting surface.

Applications:

- Alloy Steel
- Die Steel
- Stainless Steel
- Bearing Steel
- Tool Steel
- Titanium Alloys

Features:

- Wear resistant PM tooth tips
- Quality backing material for long fatigue life and good beam strength
- Deep gullet tooth design for better chip removal



Width*Thickness	Inches	TPI					
		0.75/1.25	1.0/1.5	1.4/2	2/3	3/4	4/6
27*0.90	1*0.03				■	■	■
34*1.10	1-1/4*0.042				■	■	■
41*1.30	1-1/2*0.052			■	■	■	■
54*1.60	2*0.03	■#	■	■	■	■	■#
67*1.60	2-5/8*0.03	■	■	■	■	■#	
80*1.60	3*0.03	■	■#		■#		

"# non standard tooth, pre-order required.



DT EXTREME CUTTING RATE



Engineered for sawing difficult to cut and big solid materials. The High-Low tooth design will reduce cutting forces, resulting in extreme smooth and efficient cutting.

Applications:

- Alloy Steel
- Die Steel
- Stainless Steel
- Tool Steel
- Titanium Alloys

Features:

- Reduced cutting force, compared with general-purpose blades
- Higher cutting efficiency
- Better chip removal capability
- High-Low teeth formation



Width*Thickness	Inches	TPS				
		0.75/1.0	1.0/1.5	1.4/2	2/3	3/4
27*0.90	1*0.35				■	■
34*1.10	1-1/4*.042				■	■
41*1.30	1-1/2*.052			■	■	■
54*1.60	2*.063		■	■	■	
67*1.60	2-5/8*.063	■	■	■		
80*1.60	3*.063	■	■			



CARBIDE PRODUCT SELECTION													
PRODUCT SERIES	HARD WOOD	ALUMINUM COPPER	BRONZE BERYLLIUM COPPER	MILD STEELS	STRUCTURAL STEELS	LOW ALLOY STEELS	BEARING STEELS	DIE STEELS	STAINLESS STEELS	TOOL STEELS	TI AND TI-ALLOY	NICKEL BASED ALLOY	CASE HARDENED MATERIAL
CB-MP	Light Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue
CB-PRO	Light Blue	Dark Blue	Dark Blue	Light Blue	Light Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue
TCB-MP	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue
TCB-PROAL	Light Blue	Dark Blue	Dark Blue	Light Blue	Light Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue

All the above products are not suitable for thin wall structural materials and for the solid material of which the diameter is less than 50mm.

Recommend:



- CB-MP(set style for multipurpose) 16
- CB-PRO(set style for difficult to cut materials) 17
- TCB-MP(non-set style for multipurpose) 18
- TCB-PRO AL (non-set style for aluminum high speed cutting) 19



CB-MP SET STYLE FOR MULTIPURPOSE



This carbide tipped bandsaw blade with specially designed multipurpose geometry is developed to cover cutting a wide range of materials. The geometry and set teeth also allows for the blade to be used in less stable machines.

Applications:

- Alloy Steel
- Die Steel
- Abrasive Tool Steel
- Aerospace Alloys
- Non ferrous (Aluminum)
- Bearing Steel
- Stainless Steel
- Titanium Alloys
- Abrasive Graphite

Features:

- High rake angle set style bandsaw blade
- Wear resistant, extra fine grain carbide grade tooth tips
- High toughness and accuracy
- High beam strength due to gullet design



Width*Thickness	Inches	TPI					
		0.75/1.0	1.0/1.25	1.4/2.0	2/3	3	3/4
19*0.90	3/4*.035					■	
27*0.90	1*.035				■	■	■
34*1.10	1-1/4*.042				■	■ #	■
41*1.30	1-1/2*.052			■	■		■
54*1.60	2*.063	■ #	■	■	■		
67*1.60	2-5/8*.063	■	■	■	■ #		
80*1.60	3*.063	■	■ #				

*# non standard tooth, pre-order required



CB-PRO SET STYLE FOR DIFFICULT TO CUT MATERIALS



Carbide tipped bandsaw blade with a Multi-Chip geometry, that is designed for cutting difficult to cut materials providing excellent cutting performance, toughness and wear resistance.

Applications:

- Titanium Alloys
- Stainless Steel
- Inconel
- High Nickel Chrome Alloy
- Aerospace Alloys

Features:

- Precision ground multi chamfer tooth profile
- High cutting efficiency with reduced cutting forces



Width*Thickness	Inches	TPI				
		0.75/1.0	1.0/1.25	1.4/2.0	2/3	3/4
34*1.10	1-1/4*.042				■	■
41*1.30	1-1/2*.052			■	■	■
54*1.60	2*.063		■	■	■ #	
67*1.60	2-5/8*.063	■	■	■	■ #	
80*1.60	3*.063	■	■			

*# non standard tooth, pre-order required



TCB-MP NON-SET STYLE FOR MULTIPURPOSE



TCB-MP-Multipurpose is the ultimate all-round carbide tipped bandsaw blade that covers cutting most materials including hard wood.

Applications:

- Hard Wood
- Alloy Steel
- Bearing Steel
- Die Steel
- Stainless Steel
- Tool Steel
- Titanium
- Nickel Based Material
- Cast Iron Bronze
- Aluminum /Aluminum alloys

Features:

- Triple chip tooth design
- Selected backing material for excellent fatigue life
- For general purpose applications



Width*Thickness	Inches	TPI					
		0.75/1.0	1/1.5	1.4/2	2/3	3	3/4
19*0.90	3/4*.035					■ #	
27*0.90	1*.035				■	■	■
34*1.10	1-1/4*.042			■	■	■	■ #
41*1.30	1-1/2*.052			■	■	■	■ #
54*1.60	2*.063		■	■			
67*1.60	2-5/8*.063	■	■				
80*1.60	3*.063	■					

*# non standard tooth, pre-order required



TCB-PRO AL NON-SET STYLE FOR ALUMINUM HIGH SPEED CUTTING



This carbide tipped bandsaw blade with multi chip tooth geometry is specially designed for cutting Aluminum.

Applications:

- Aluminum and non ferrous materials
- Aluminum Foundries

Features:

- High cutting performance on non-ferrous metals,
- Multi-chips tooth design for efficient chip removal



Width*Thickness	Inches	TPI				
		0.75/1.0	1/1.5	1.4/2	2/3	3/4
34*1.10	1-1/4*.042			■ #	■	■
41*1.30	1-1/2*.052			■	■	■ #
54*1.60	2*.063	■ #	■	■		
67*1.60	2-5/8*.063	■	■			

*# non standard tooth, pre-order required



Bandsaw Blade Speed Chart

Materials	Trade Name	German DIN	Japan JIS	Bi-Metal		Carbide bandsaw	
				Band Speed		Band Speed	
				FPM	MPM	FPM	MPM
Aluminum Alloys	2024, 5052, 6061, 7075	3.1355, 3.3525, 3.3211, 3.4365	2024, 5052, 6061, 7075	275-340	84-104	3500-8000*	1000 - 2600 *
Copper Alloys	CDA 220	2.023	C2200	210	64	210	64
	CDA 360	2.0375	C3601	295	89	295	90
	Cu Ni (30%)	2.0835	-	200	61	200	61
Bronze Alloys	Be Cu	-	-	160	49	160	49
	AMPCCO 18	-	-	180	55	180	55
	AMPCCO 21	-	-	160	49	160	49
	AMPCCO 25	-	-	110	34	110	34
	Leaded Tin Bronze	2.1177	-	290	88	290	88
	Al Bronze 865	2.0976	AlBCin1	150	46	150	46
	Mn Bronze	2.0602	-	215	65	215	66
Brass Alloys	932	-	-	280	85	280	85
	937	-	-	250	76	250	76
	Cartridge Brass, Red Brass (85%)	-	BC6	220	67	220	67
Leaded, Free Machining Low Carbon Steels	Naval Brass	-	YCuzSn	200	61	200	61
	1145	-	-	270	82	290	88
Structural Steel	1215	1.0736	SUM 25	325	99	325	99
	12L14	1.0718	SUM 24L	350	107	350	107
Low Carbon Steels	A36	1.0132	-	250	76	-	-
	1008, 1018	1.0310, 1.0453	S9CK	270	82	250	76
	1030	1.1178	S 30 C	250	76	240	73
Medium Carbon Steels	1035	1.0501	S 35 C	240	73	230	70
	1045	1.0503, 1.1191	S 45 C	230	70	220	67
High Carbon Steels	1060	1.0601	S 58 C, S60 CM	200	61	200 **	61 **
	1080	1.1259	1080	195	59	195 **	59 **
	1095	1.0618	SJ1 4	185	56	185 **	56 **
Mn Steels	1541	1.1167	SMn 438 (H)	200	61	-	-
	1524	1.0499	SCMn1, SCMn21	170	52	-	-
Cr-Mn Steels	4140	1.7225	SCM 440 (H)	225	68	-	-
	41L50	-	-	235	71	-	-
	4150H	-	-	200	61	-	-
Cr Alloy Steels	6150	1.8159	SUP 10	190	58	-	-
	52100	1.3505	SUJ 2	160	49	-	-
	5160	1.7176	SUP 9 (A)5	195	59	-	-
Ni-Cr-Mo Steels	4340	1.6565	SNCM 439, SNCM 8	195	59	-	-
	8620	1.6523	SNCM 220H, SNCM 21	215	65	-	-
	8640	1.6546	SNCM 240	185	56	-	-
Low Alloy Tool Steel	E9310	1.6657	-	160	49	-	-
	L-6	1.2714	SKT 4	145	44	192	59

Bandsaw Blade Speed Chart

Water-Hardening Tool Steel	W-1	1.1873	SK 1	148	45	180	55
Cold-Work Tool Steel	D-2	1.2379	SKD 11	98	30	180	55
	A-2	1.2363	SHD 12	164	50	197	60
	A-6	-	-	148	45	180	55
Air-Hardening Tool Steels	A-10	-	-	98	30	131	40
	H-13	1.2344	SKD 61	148	45	180	55
Hot Work Tool Steels	H-25	-	-	98	30	131	40
	O-1	1.251	SKS 3	148	45	197	60
Oil-Hardening Tool Steels	O 2	1.2842	-	148	45	180	55
	M 2, M 10	1.3343	SKH 9	115	35	98	30
High Speed Tool Steels	M-4	1.3348	SKH 5A	98	30	98	30
	T-1	1.3355	SKH 1	98	30	82	25
	T-15	1.3200	SKH 10	66	20	66	20
	P-3	-	-	180	55	164	50
Mold Steels	P-20	1.2328	-	164	50	131	40
	S-1	1.2542	SKS 41	148	45	0	0
Shock Resistant Tool Steels	S-5, S-7	1.2823	-	131	40	0	0
	304	1.4301	SUS 304	82	25	164	50
Stainless Steels	316	1.4401	SUS 316	98	30	131	40
	410	1.4006	SUS 410	148	45	180	55
	440A	1.4106	SUS 440 A	82	25	148	45
	440C	1.4125	SUS 440 C	82	25	148	45
	17-4 PH	1.4942, 1.4960	SUS 630, SUS 631	82	25	115	35
Precipitation Hardening Stainless Steels	15-5 PH	1.4545	-	82	25	98	30
	420F	-	-	164	50	197	60
Free Machining Stainless Steels	301	1.431	-	131	40	164	50
	Monel® K-500	2.4375	-	82	25	98	30
Nickel Alloys	Duracel® 301	-	-	66	20	82	25
	A286	1.488	SUH 660	82	25	82	25
Iron Based Super Alloys	Incoloy® 600	-	-	66	20	82	25
	Pyromet K-15	-	-	82	25	98	30
	Inconel® 600	2.4818, 2.4988	NCF-600	66	20	98	30
Nickel Based Alloys	RENE 41	2.4973	-	66	20	98	30
	Inconel® 625	2.4831	-	82	25	115	35
	Hastelloy D	2.4800	Ni-Mo28	66	20	82	25
	RENE 58	2.4951	-	66	20	82	25
	-	3.7025	-	82	25	164	50
Titanium Alloys	Ti-6Al-4V	3.7615	-	66	20	164	50
	A536 (50-40-18)	0.704	FCO 40	230	70	-	-
Cast Irons	A536 (120-90-02)	0.708	-	115	35	-	-
	AME (L20)	0.901	FC 10	164	50	-	-
	A48 (L40)	0.6025	FC 25	82	25	-	-
	A48 (L80)	0.604	-	98	30	-	-

* For metal cutting saws run between 275 and 350 FPM (88 and 107 FPM)
 ** Typically for hardened and case hardened carbon steels up to 61 HRC

Trouble Shooting Of Bandsawing Operation

▲—major causes △—secondary causes

Causes Type	Trouble descriptions	Early wear	Early tooth Strippage/ chipping	Early breakage	Crooked cut	Rough cut surface	Instability in Bandsawing	Loud cutting Noise	Blade stoppage	Too low efficiency	solutions
Cutting parameters	Too high bandsaw blade speed	▲		△			△	▲			Adjust the speed according to the parameter chart.
	Too low bandsaw blade speed		△				△			▲	Increase the bandsaw blade speed
	Too high feed rate	△	▲	△	▲	▲	△	△	▲		Lower down the feed rate
	Too low feed rate	△								▲	Increase the feed rate
	Improper feed pressure	▲	▲	▲	▲	△	▲	▲	△	△	
Bandsaw machine	Guides too far apart		▲	△	▲	△	▲	▲	△	▲	Adjust the guides
	Too high blade tension			▲				△			Reduce the bandsaw blade tension.
	Too low blade tension		▲		▲	▲	△		▲	▲	Increase the bandsaw blade tension.
	Worn or damaged back-up guide or guide rollers	▲	▲	▲	▲	△	△	▲		▲	Change the worn parts.
	Incorrect blade speed		▲	△	▲	▲	▲	△	△	▲	Check the main drive gears, bearings lifting mechanism of the frame
	Incorrect installed brush		▲		△	▲	▲				Check the brush.
	Inconsistent Saw frame feed	▲	▲	▲		▲	▲	△	△	▲	Check if there is air in the cylinder, whether the oil is deteriorating and the cylinder is worn or not.
	Bandsaw blade rubbing against band saw machine wheel flange			▲			▲	▲			Check the alignment of the band saw machine wheels.
	Poor material clamping		▲	△	▲	△	△		△	▲	Check the vise or repair it.
	Wrong traverse path of the bandsaw	△			▲						Check the perpendicular traverse path of the frame
	Slippage of the driving belt on the driving wheel		▲			△	△		▲	▲	Check the belt tension or check for worn driving wheel
	Vibration of the entire machine	▲	▲	△		▲	▲	▲		▲	The machines maybe installed improperly or there is some vibration source from other parts.
	Lubricant	Wrong cutting fluid	▲	△			△		▲		△
Insufficient cutting fluid supply		▲	△	▲		△		▲		△	Check the fluid hoses, increase the volume of the fluid, both on the cutting section and the insert section.
Improper concentration		▲				▲		△			Adjust the concentration according to the brochure of the lubricant
Selection of bandsaw	Inappropriate blade type or blade pitch	▲	▲			△	▲	△		△	Select the pith and blade type according to the application
	Insufficient break-in process	▲	▲			△					Perform sufficient break in process
	Cut product jamming, too much edged burrs	▲	▲			△		△	△	△	Proper break-in procedure; Proper cutting parameters; Proper lubricant application
	Corroded blade	▲		▲				△			Stored too long. Humidity is too high. Or the lubricant is corrosive.
	Too much wear of the blade		△	▲	▲	△		▲	△	▲	Change the blade
	Damaged teeth	▲	▲				△	△		△	Change the blades
Work material	Bad butt weld	△	▲	▲		△	▲	△		△	Re-weld or change the blades.
	Unknown material	▲	△		△			△		△	Check the details of materials, Set the cutting parameter according to the chart.
	Hard points inside the material or hard surface	▲	▲		△			▲		△	Adjust the parameters, Usually, need to lower down the speed or select a more protective teeth profile.
	Too low rigidity of the material	△	▲			▲	△	▲		△	Proper tooth form and proper parameters. Proper Clamping method.
	Irregular shape		▲	▲	△	△	▲		△	△	Find the right clamping method.
	Finished parts interrupt the band sawing operation		▲	▲					△		Clear the parts and chips in time.



Overseas:

Great Britain, Netherlands, Denmark, Switzerland, Czech Republic, Poland, Greece, Jordan, Russia, Egypt, Iran, South Africa, India, Thailand, Korea, USA, Brazil, Spain, Portugal, Italy, Syria, Israel, Singapore, New Zealand, Canada, Mexico, Argentina, Qatar, United Arab mirates, Turkey, Lebanon Serbia, Pakistan, Malaysia, Australia, Dominica, Columbia, Ecuador, Slovenia, Indonesia, etc.