

6 Key steps

to getting the most out of your blade



1. Choose the right blade

Use the tooth selection chart on the back of this sheet to give you the correct blade for your job, aim to have 5-8 teeth in the material at all times

2. Ensure the bandsaw machine is cleaned thoroughly before putting the blade on.

Clean the drive and Idler wheels to remove all swarf, the blade needs to sit comfortably on these wheels

- Clean the guide bearings, and ensure they are moving freely
- If your machine has carbide guides, ensure that these are cleaned and aren't too worn out

3. Set up the blade guides correctly

- Adjust the back and side guides to ensure the blade is sitting tight and all vibration is removed where possible

4. Tension the blade correctly

- Get as much tension as possible, a good rule of thumb, is that when placing your palm on the blade and pushing down you should get a maximum of 1mm of movement

5. Run the blade in and use the correct Feeds and Speeds

- For the first 20-30 minutes of cutting run the blade at normal band speed, but only half the down-feed pressure, before gradually increasing to the full speed
- A simple feed and speed chart is on the reverse of this brochure

6. Use a high quality coolant

- Use a coolant that performs 3 key roles
 - i. Cools the cutting tip
 - ii. Lubricates the cutting tip
 - iii. Washes the swarf away
- Ensure that you mix the coolant correctly and keep it clean for the best results.

Helpful Tips

Metal Cutting Tips

Tooth Selection For metal cutting bandsaw blades



SOLIDS			
Vari-Pitch Tothing		TCT Tothing (Materials over 50 HRC)	
Material Diameter (D) mm	Teeth Per Inch	Material Diameter (D) mm	Teeth Per Inch
0-5	18	50-120	3/4
4-8	14	100-250	2/3
2-15	10/14	150-400	1.5/2
8-20	8/12	350-600	1.1/1.6
16-30	6/10	500+	0.85/1.15
25-40	5/8		
35-70	4/6		
60-120	3/4		
80-200	2/3		
120-400	1.5/2		
250+	1.1/1.6		
400+	0.75/1.25		



TUBES AND RHS																
Tube Width (W)mm	Wall Thickness (T)															
	1	1.6	2	2.5	3	4	5	6	7	8	9	10	12	15	20	50
10	14	10/14	10/14													
20	14	10/14	10/14	10/14	8/12											
25	14	10/14	10/14	10/14	8/12	8/12										
30	14	10/14	10/14	10/14	8/12	8/12	6/10									
40	14	10/14	10/14	10/14	8/12	8/12	6/10	5/8	5/8	5/8						
50	14	10/14	10/14	10/14	8/12	8/12	6/10	5/8	5/8	5/8						
60-120	14	10/14	10/14	10/14	8/12	8/12	6/10	5/8	5/8	4/6	4/6	4/6	4/6	3/4	3/4	
130-150		10/14	10/14	10/14	8/12	8/12	6/10	5/8	5/8	4/6	4/6	4/6	4/6	3/4	3/4	3/4
150-180			10/14	10/14	8/12	8/12	6/10	5/8	4/6	4/6	4/6	4/6	4/6	3/4	3/4	2/3
190-300					6/10	6/10	5/8	4/6	4/6	4/6	4/6	4/6	4/6	3/4	3/4	2/3
350-400																
450-500																

Band Speed for Bimetal

MATERIAL

Construction Steel / Machining Steel
Case Hardened Steels / Steels for hardening and tempering
Non-Alloy, Tool Steels / Roller Bearing Steels
Alloyed Tool Steels / High Speed Steels
Rust Resistant Steels
Heat Resistant Steels / High Temp, Alloy Steels

IN M/MIN

80 - 90
45 - 75
40 - 60
30 - 40
20 - 35
15 - 25

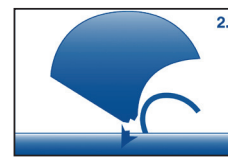
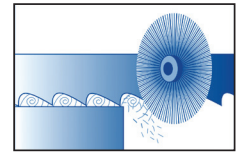
For more detailed information or different types of bandsaw blades check out our website: excision.com.au or phone us 1800 633 448.

Sawing Basic Troubleshooting

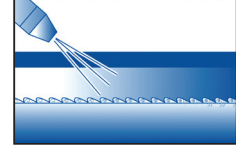
Feed Rate



- Feed rate too light.
- 'Rubs' the tooth dull.



- Feed rate too heavy.
- Premature tooth wear.
- Teeth wear too fast and break off



BRUSHES
Brushes aid in the cleaning of chips from the gullet of the band. This creates less tendency to strip teeth and creates smoother cut surfaces.

COOLANT
Should Wash, Cool, Lubricate the blade as well as the material being cut. We recommend to use XDP 1000 or XDP 2000 - refer to page 38-40.



- Recommended feed rate.
- Optimum life



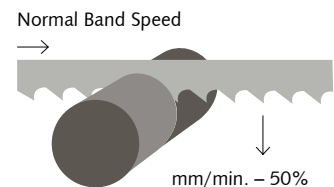
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TENSION
Ensure correct tension. Tension to 300N/mm². A poorly tensioned blade leads to premature wear, blade fatigue and eventual blade breakage.

Bimetal Bandsaw Blade Run In Procedure

The life of an Excision Bi-Alfa bimetal bandsaw blade can be increased significantly by following the recommended running-in procedure. A new saw blade benefits from a short period of cutting at reduced cutting feed rate. Use normal recommended band speed and reduce feed pressure by 50%. After approximately 500cm² of cross sectional area or 15 minutes has been sawn, the feed rate should be gradually increased to maximum. The best material to run-in an Excision blade is round mild steel bar, about 80mm diameter, depending on the tooth pitch.

highly recommended to increase blade life



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