

**PRODUCT SELECTION:**

**FIRST:** Analyze the sawing application

Machine: For most situations, knowing the blade dimensions (length x width x thickness) is all that is necessary.

Material: Find out the following characteristics of the material to be cut.

- Grade
- Hardness (if treated)
- Shape
- Size

Is the material to be stacked (bundled) or cut one at a time:

Customer needs: the specifics of the application should be considered.

Production or utility - general purpose sawing operation?

What is more important, fast cutting or tool life?

Is material finish important?

**SECOND:** Determine the proper number of teeth per inch

A general rule for bundles

Determine the correct teeth per inch for one piece, and choose one pitch coarser for the bundle.

For easier to cut materials, one tooth pitch can cut a wider variety of material sizes.

For difficult to cut materials, blade life will suffer if the tooth pitch is not correct.

**NOTE:** If having difficulty choosing between two pitches, the finer of the two will generally give better blade life.

**THIRD:** Determine which blade type to use.

Use the chart (BI-METAL PRODUCT LINE SELECTION) shown below.

Find the material type to be cut in the top row.

Read down the chart to find which blade type is recommended.

For further assistance, contact us using one of our 800 numbers listed on the front of the catalog.

**FOURTH:** Make sure the product type and tooth per inch chosen is available in the required blade width. When compromise is necessary, choose the correct tooth per inch first.

**FIFTH:** Don't forget to order Lenox sawing fluids and lubricants. Any blade you select will work better with a fluid.

**BENEFITS of Bi-Metal Blades:**

The tooth tips are made of high speed steel that is electron beam welded to a high strength spring steel alloy backing material. The result is a durable, fatigue resistant blade able to withstand the heat generated when cutting steels and other alloys.

Most metalworking applications

- Carbon steels
- Alloy and tool steels
- Stainless steels
- Nickel base alloys

**BI-METAL PRODUCT LINE SELECTION: DIN 85970 AISI**

General Purpose Cutting	Structural Steels	Carbon Steels	Aluminum and Light Alloy Steels	Alloy and Mold Steels	Tool Steels	Stainless Steels	Nickel Base Alloys	Titanium Alloys
Machines in Poor Condition	A36	1010, 1020, 1045	6061, 2011, 2024, 5052	4040 P20	A2, H13, S7, M-Series	316, 304 17-4 PH, 15-5 PH	Inconel, Monel, Waspalloy	Ti-6Al-4V
		040A22 080A42		708M40, 805M17		315S16, 304S15		
		Ck45 C16.8	AlCuBiPb AlCuMg2	42CrMo4 41CrMo4	X155CrVMoV51, (G)X40C4MoV51	S5CrNiMo18 10, X5CrNi18 10	NiCr19NbMo, NiCr19Co14Mo4Ti	
CLASSIC			LPX					
	RX						CONTESTOR / GT	

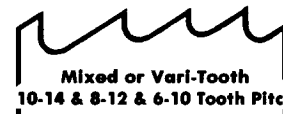
Follow these guidelines to determine which type and size bandsaw you require. After you figure it out or if you need help figuring it out give us a call and we will gladly get you out what you need. Give us a call using any of our toll free numbers listed on the front of this catalog and a qualified technician will help you.

**TROUBLESHOOTING: QUICK REFERENCE CHART**

OBSERVATION # & DESCRIPTION	Band Speed	Band Wheels	Break-in Proced.	Chip Brush	Cutting Fluid	Feeding Rate	Side Guides	Back-up Guides	Preload Condition	Band Tension	Band Tracking	Tooth Pitch
#1 Heavy even wear on tips & corners of teeth	X		X		X	X						
#2 Wear on both sides of teeth							X	X				
#3 Wear on one side of teeth		X					X					
#4 Chipped or broken teeth			X			X						X
#5 Discolored tips of teeth due to excessive frictional heat	X				X	X						
#6 Tooth strippage	X		X	X	X	X						X
#7 Chips welded to tooth tips	X			X	X	X						
#8 Gullets loading up with material				X	X	X						X
#9 Heavy wear on both sides of band					X		X					
#10 Uneven wear or scoring on sides of the band							X					
#11 Body breakage or cracks from gullets							X		X	X		
#12 Body breakage - fracture traveling in angular direction							X		X			
#13 Body breakage or cracks from back edge						X		X	X	X	X	
#14 Heavy wear and/or swaging on back edge						X		X	X		X	
#15 Butt weld breakage						X	X	X	X	X	X	
#16 Used band is "long" on the tooth edge		X				X	X		X		X	
#17 Used band is "short" on the tooth edge		X				X	X					
#18 Band is twisted into figure "8" configuration		X				X	X	X	X	X	X	
#19 Broken band shows a twist in band length		X				X	X	X	X	X	X	
#20 Heavy wear in only the smallest gullets	X					X						X

# V4 LENOX ELECTRON EDGE VARI-TOOTH WELDED EDGE BI-METAL BANDSAW BLADES

Flexible Alloy Steel Back and Welded Tool Steel Edge  
 Less than 3 teeth in the work will strip out teeth,  
 More than 24 teeth in the work will cause problems



This composite welded edge band blade may well be the most important band blade development of the 80's. Combining a remarkable new metallurgy with an interrupted-tooth cutting edge (Mix-Tooth) and electron-beam welding the cutting edge to a special alloy back, has produced a tough, wear-resistant blade that gives astonishing performance in cutting materials of varying cross-section such as pipe, tubing, structurals, etc. as well as solids because you can increase blade speed and feed pressure. The Matrix Modified Mix-Tooth Blade can be run at higher speeds with heavier feeds because its tough high Cobalt content Mix-Tooth cutting edge resists shock and vibration which leads to tooth chipping and stripping.

Length Ft & In	x	Width Inches	For Bandsaw Type
3-8-7/8	x	1/2	Black & Decker 3121, 3123, Milwaukee Portaband Rigid 941, 942, 943, Rockwell Portaband 725, 726, 524
4-5-3/4	x	1/2	Black & Milwaukee, Rockwell 728, Greenlee 531, Rigid 944
4-6	x	1/2	DoAll Portaband, Ensley 721, 722, Miller Falls 9954
5-0	x	1/2	Wellsaw, 49A, 49, Junior 300 Sears
5-4	x	1/2	Wellsaw 57
5-4-1/2	x	1/2	Bainbridge Rigid 945, Wilton 3073, Emerson 4525A, 10-1465, 10-1466, 10-1451, 10-1455
6-1	x	1/2	Wilton 3130, 3230, 3110
7-5	x	1/2	Kalamazoo 610, 7A-D, 7A-W, C7A-D, M7A-D, M7A-W, Kysor Johnson BD1, BW3, MB1, B, M
7-5	x	5/8	Kalamazoo 7AD, 7AW, C7AD, M7A-D, M7A-W
7-9	x	1/2	Wellsaw 58B, Rockwell 28300
7-9	x	3/4	Kysor Johnson MR1, RD1, RW3
7-10	x	1/2	W.F.Wells A7, A, A6, Keller B-11
7-11	x	1/2	Rockwell 7V-20900
8-2	x	3/4	Startrite H175D, H175W, H175MD, H175MW
8-2-1/2	x	1/2	Wellsaw 5
8-2-1/2	x	3/4	Wellsaw 600
8-2-1/2	x	5/8	Wellsaw 600
8-5	x	3/4	Wilton 3500, 3535
8-10	x	3/4	Marvel 612, Olson 0100
8-10	x	5/8	Marvel 612, Olson 0100
8-11	x	3/4	Emerson 10-2720 Dry, 10-2721, 10-1700, 10-1701, Ridgid 970, Rockwell 6W
9-0	x	1/2	HEM 500
9-7	x	3/4	Carolina HD-9
9-8	x	3/4	Carolina HD-10
9-9	x	3/4	Olson 912
9-9	x	5/8	Olson 912
10-5	x	3/4	Kalamazoo 816
10-9	x	3/4	Rockwell 20916L, 20916
10-10-1/2	x	3/4	Kalamazoo 8C, 9A, 9AD, 9AW
10-10-1/2	x	1	Kalamazoo H9AD, H9AW, H9A, AH9AW
11-0	x	3/4	HEM 750, 750A, DoAll C-5A, C-10
11-0	x	1	DoAll C-4, C4A, C5A, C12, C410A, Rockwell 7, 7A, Startrite H225D, H225W
11-5	x	3/4	Johnson J, Kysor Johnson KJ10D1, KJ1DW3
11-5	x	1	Kysor Johnson KJ10HW3, JH
11-6	x	3/4	Johnson J, Wellsaw 8, 875, 7A, 7B, W.F.Wells W, L9, L, M, W9, H
11-6	x	1	Johnson High Speed A-12, JH, HSA, HS, M12, Wellsaw New 8, Wellsaw 800, 850, 1000, 1075, US Amada, H2505A, W.F.Wells L9
11-7	x	1	W.F.Wells, L9 Alternate
11-9	x	1	Wilton 3600, 3610
12-0	x	1	DoAll C41 through C80, C169, C170, C180, C1216, Peerless 1214, 1216, 1216M, 1216MH, 1200, 1200M, 1400, 2216, Emerson 10-2000, 10-2001, Olson 1216, Johnson Amada CHA 3005, Pehaka HSE260, HSL260, ROB200SL, 250SL.250S, GBS150
12-1	x	1	Kalamazoo H8A-D, H8AW, HEM 1000, Olson 1216
12-6	x	1	Kalamazoo H10M, H10A, Marvel Series 13A, Rockwell 10-10A, 12A, 2B-340, 2B-345
12-10	x	1	HEM 1000A, 1000AH, Wellsaw 54G, DoAll 2012-2A
13-4	x	1	DoAll C7, C8, C8A, C9, C9A, C9V, C9AV, C1212A, C1212M
13-6	x	1	HEM 1000LA, Wells 1200, 1270, 1272
13-11	x	1	Kalamazoo 1220, 13AD, 13AW, 13A
14-3	x	1	DoAll TF14 Series
14-6	x	1	W.F.Wells Q14, Marvel 18 Mark 1, Series 81, 81A, DoAll MX-20, 36-3
14-8	x	3/4	Marvel 8 Standard
15-0	x	1	DoAll TF20, 18A, Milband A50, A60
15-6	x	1	Kalamazoo 14A with 1" Blade, Marvel 8/M2 Mark 1, Series 15, 15A, DoAll 26-3
15-8	x	3/4	Marvel 8/M2, 8MG1, 8/M2/M8
16-2	x	1	Kalamazoo VTH21M, VTH21A, VTH215A
250 ft.Coil	x	1/2	For welding your own blades
250 ft.Coil	x	5/8	For welding your own blades
250 ft.Coil	x	3/4	For welding your own blades
250 ft.Coil	x	1	For welding your own blades