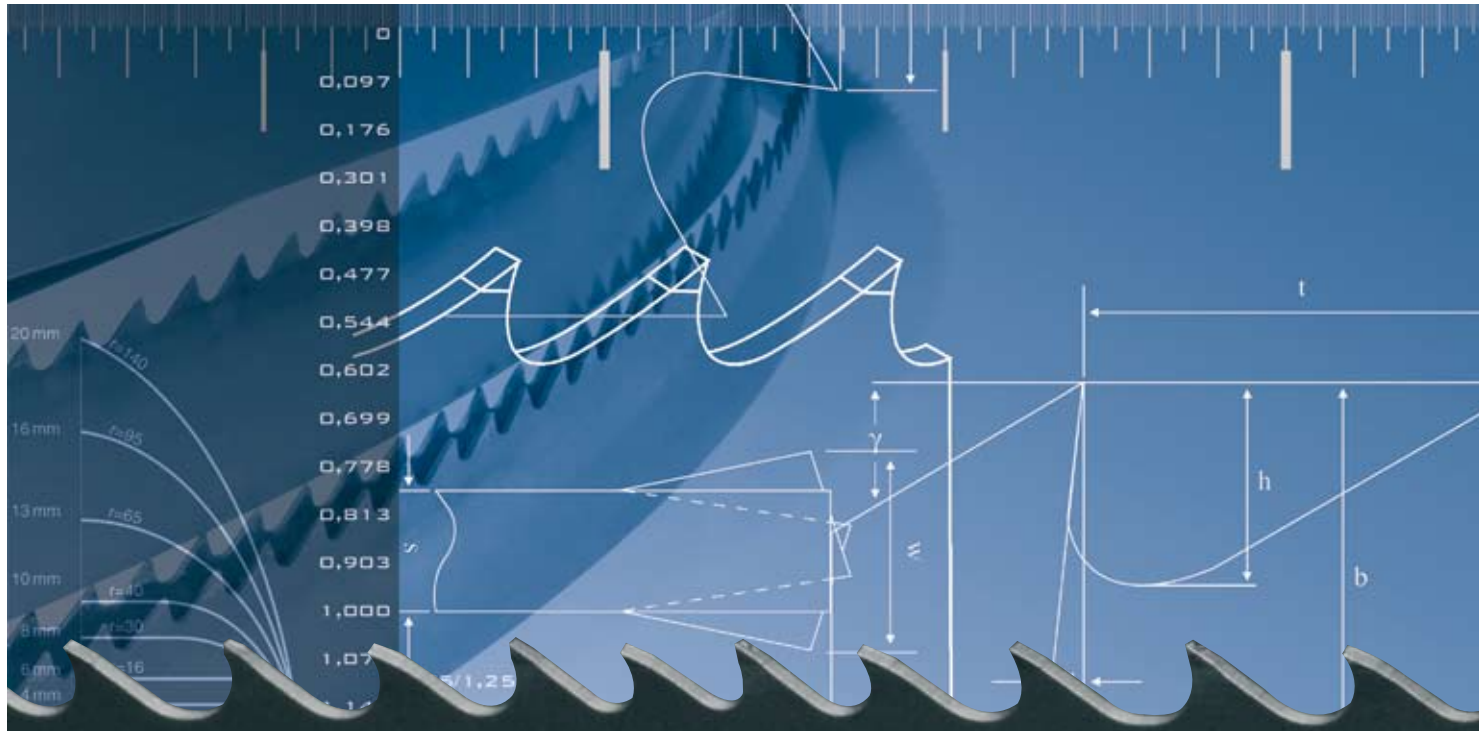


BAND SAW BLADE CHARACTERISTICS



Tooth Forms Where performs the right tooth?

Only correct choice of tooth forms allow efficient cutting with low vibration. Four basic types are available:

0 degree
Standard tooth = S

Designed for:
- short chipping materials
- light wall thickness

Data:
- rake angle 0°
- 3 to 18 tpi

positive
Hook tooth = P

Designed for:
- long chipping materials
- large cross sections

Data:
- positive rake angle
- 0.75 to 6 tpi

0 degree
Variable tooth = V

Designed for:
- low vibration cutting
- structurals

Data:
- rake angle 0°
- variable tooth pitch of 3/4 to 10/14 tpi

positive
Variable tooth = SupV

Designed for:
- low vibration cutting
- solid materials

Data:
- positive rake angle
- variable tooth pitch of 0.55/0.75 to 4/6 tpi

Tooth Pitch Constant or variable?

Constant tooth pitch

The tooth distance is equally spaced. The number of teeth per inch (25.4 mm) denotes the tooth of the saw blade.

Variable tooth pitch

The tooth distances vary within a group of teeth. The smallest and largest tooth pitch denotes the variable tooth of the saw blade.

Tooth Set

What groups and waves can cause.

Apart from tooth pitch and tooth form the exact set is essential for the performance of the sawblade. The correct clearance of back is achieved by the specific set for the cutting application. This is to avoid blade pinching, very important in problematic cutting jobs. Width and type of set are tuned to the cutting application:

Standard-Raker-Set (S, SW)

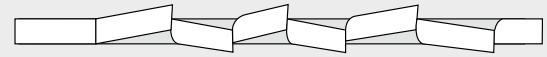
up to 10 tpi
Tooth forms S, P



Standard-Raker-Set

Variable-group-set (G, GW)

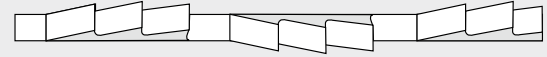
0.75/1.25 to 10/14 tpi
Tooth form SupV, V



Variable-group-set

Wavy set (W)

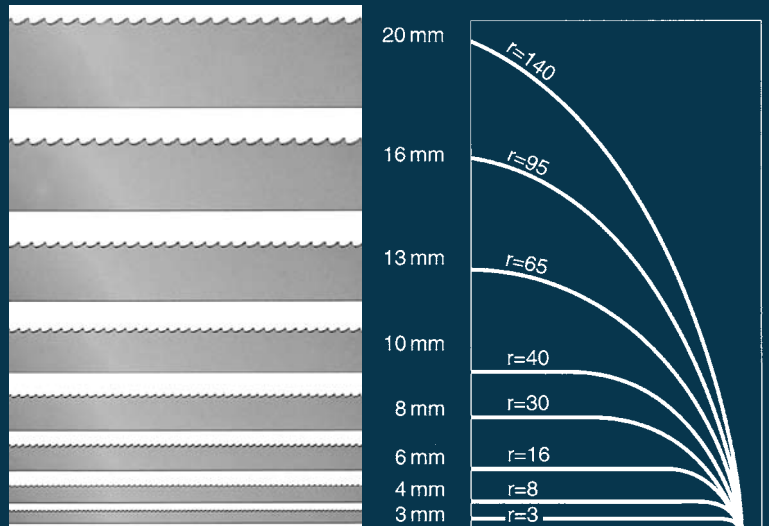
14 to 32 tpi and above
Tooth form S



Wavy set

Band Width

This is the measurement from the tip of the tooth to the back of the blade. The selection of blade is conditioned by the mechanical saw itself. It is recommended to use the maximum width permitted by the machine in order to achieve maximum stability and equilibrium of forces. In cutting contours, the band width is conditioned by the radii. The relationship between widths and radii is established in the RADII TABLE.



Bi-Metal

Why so successful?

M 42

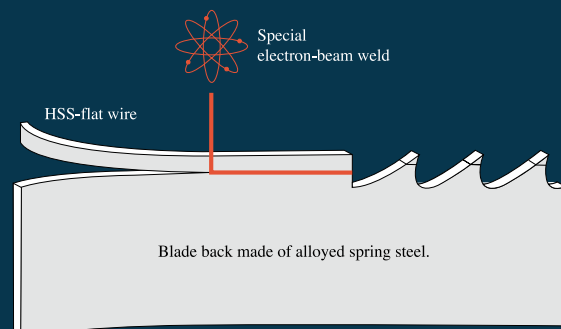
material no. 1.3247
hardness approx. 67-69 HRC

M 51

material no. 1.3207
hardness approx. 69 HRC, with high tungsten- and cobalt content

Flexible:

The blade back of our Bi-Metal band saw blade consists of a special alloyed spring steel. Highly flexible at a hardness of about 50 HRC. The ideal basis for long fatigue life and excellent cutting performance.



Hard and wear resistant:

Tooth tips made of hardened HSS Steel in M 42 or M 51 quality.

Perfectly joint:

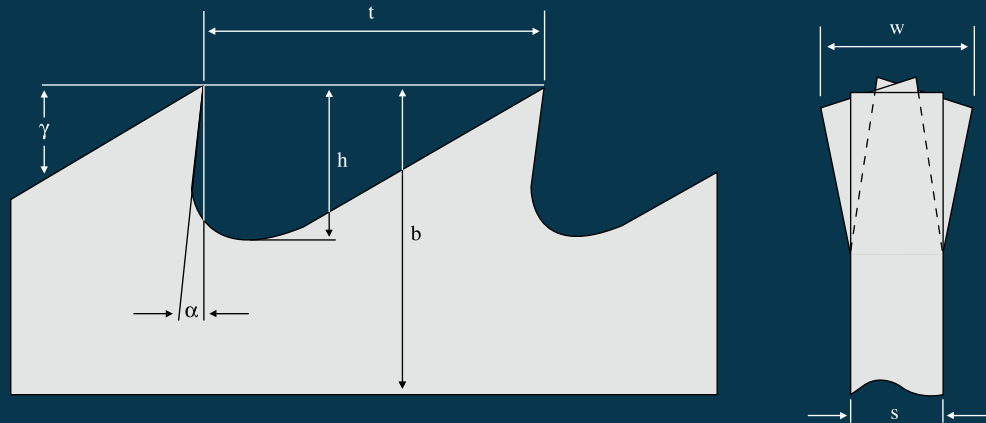
Both materials are undetachably welded together.

All advantages:

The high quality Bi-Metal band combines the flexibility of the spring steel backing with enormous wear resistance of high-speed steel. Each tooth tip is of hardened HSS-steel, extremely durable for best performance.

Band Saw Geometry

- b width of blade
- s thickness of saw blade
- h gullet depth
- t tooth pitch
- α rake angle
- γ clearance angle
- w width of set



Correct tooth pitch - optimum performance

Recommendation to cut solid material

The choice of the right tooth pitch can be decisive to achieve the optimum performance to cut the relevant cross section. Choose either Standard tooth with constant tooth pitch or Variable tooth with unevenly spaced teeth. It is advisable to use Variable tooth to cut problematic workpieces to reduce vibrations.

Constant Tooth Pitch			Variable Tooth Pitch		
cross section	teeth per inch	tooth shape	cross section	teeth per inch	tooth shape
mm	tpi	tooth shape	mm	tpi	tooth shape
up 750	0.75	K	up 550	0.75/1.25	WP
380-800	1.25	K	300-600	1/2	WP
200-400	2	K	120-350	2/3	WP
120-200	3	K, S	80-140	3/4	WP
80-120	4	K, S	60-110	4/6	WP
50-80	6	S	40-70	5/8	W
30-50	8	S	30-60	6/10	W
20-30	10	S	20-40	8/12	W
10-20	14	S	to 25	10/14	W
to 10	18	S			

S = Standard tooth, K = Hook tooth, WP = positive rake angle, W = rake angle 0°

Recommendation to cut tubes and structurals

The choice of the right tooth has special influence on the cutting result on tubes and structurals. Variable tooth has proven to be the most favourable tooth form. Tooth pitches selected are depending on wall thickness and outer dimensions of tubes or structurals. The recommendation shown here refer to single cuts. If two or more tubes or square pipes are cut at a time, double wall thickness to select tooth pitch.

Thin wall structurals (0° rake angle)							
Wall thickness (S) in mm	Diam. of structural (D) in mm						
	20	40	60	80	100	120	150
2	14	14	14	14	14	14	10/14
3	14	14	14	14	10/14	10/14	8/12
4	14	14	10/14	10/14	8/12	8/12	6/10
5	14	10/14	10/14	8/12	8/12	6/10	6/10
6	14	10/14	8/12	8/12	6/10	6/10	5/8
8	14	8/12	6/10	6/10	5/8	5/8	5/8
10	-	6/10	6/10	5/8	5/8	5/8	-

Heavy wall structurals (pos. rake angle)								
Wall thickness (S) in mm	Diam. of structural (D) in mm							
	80	100	120	150	200	300	500	750
10	-	-	-	4/6	4/6	4/6	3/4	3/4
15	4/6	4/6	4/6	4/6	3/4	3/4	2/3	2/3
20	4/6	3/4	3/4	3/4	3/4	2/3	2/3	2/3
30	3/4	3/4	3/4	3/4	2/3	2/3	2/3	1/2
50	-	3/4	3/4	2/3	2/3	2/3	1/2	1/2
80	-	-	-	-	2/3	1/2	1/2	1/2
100	-	-	-	-	-	1/2	0.75/1.25	0.75/1.25

Produce best chip load with the right feed-rate.

Only the perfect relation between feed rate and cutting speed provides ideal chip formation and productive cutting operation. The feed rate, converted to cutting rate (P_s in cm^2/min) is calculated acc. to the following formula:

$$P_{s\text{max.}} = V_c(1.54 - 1.13 \times \lg \text{tpi})$$

$P_{s\text{max.}}$ = maximum cutting rate (cm^2/min)

V_c = cutting speed (m/min)

$\lg\text{-tpi.}$ = logarithm of tooting (tpi)

The exercise factor – short cutting times.

To evaluate calculated data for daily practic, cutting rates can be converted into cutting times.

$$t_h = \frac{S}{P_s}$$

t_h = cutting time (min)

S = cut surface (cm^2)

P_s = cutting rate (cm^2/min)

Tpi	Logarithm
0.75/1.25	0
1.25	0.097
1/2 (1.5)	0.176
2	0.301
2/3 (2.5)	0.398
3	0.477
3/4 (3.5)	0.544
4	0.602
4/6 (5.0)	0.699
6	0.778
5/8 (6.5)	0.813
8 + 6/10	0.903
10 + 8/12	1.000
10/14 (12.0)	1.079
14	1.146

Break-in procedures: For long blade life.

For extended blade life, less blade changes and best payback of your tool cost, special break-in procedures should be adhered to.

Overload of the razor-sharp tooth tips should be avoided at the start of cutting operation.

Aggressive cutting with a new blade lead to premature tooth breakages. Correct break-in will control the gentle rounding of cutting edges.

Starting feed should half of final speed rate at the recommended cutting speed for the first 300 – 500 cm^2 cut surface. After that, feed rate should be gradually increased for maximum cutting rate as mentioned above.

Should vibrations or noises occur at the beginning of the cutting operation, cutting speed should slightly be adjusted.

All Metal Band Saw Blades are supplied as:

- endless welded loops, suitable for your band saw machine
- coils of 30.5/50/100 m
- in production lengths of 50–110 m, depending on band saw sizes

Technical Recommendations

Material Groups	Material Specification DIN	Material-No.	Cutting Speed V_c (m/min)		Cooling Fluids	
			Carbon	Bi-Metal	Cutting oil	Emulsion
Structural steels	St 37 - 2	1.0037	30 - 50	80 - 100		x
	St 50 - 2	1.0050	30 - 45	60 - 85		x
	St 60 - 2	1.0060	30 - 40	50 - 70		x
Case-hardening steels	C 10	1.0301	40 - 60	80 - 100	x	
	14 NiCr 14	1.5752	25 - 30	40 - 55	x	
	21 NiCrMo 2	1.6523	30 - 40	50 - 60	x	
	16 MnCr 5	1.7131	25 - 30	40 - 60	x	
Free-Machining steels	9 S 20	1.0711	40 - 60	80 - 120		x
	45 S 20	1.0727	40 - 60	80 - 120		x
Heat treatable steels	C 45	1.0503	35 - 50	60 - 70		x
	40 Mn 4	1.1157	30 - 40	60 - 70		x
	36 NiCr 6	1.5710	30 - 40	60 - 70		x
	34 CrNiMo 6	1.6582	25 - 35	50 - 65		x
	42 CrMo 4	1.7225	25 - 35	50 - 65		x
Ball bearing steels	100 Cr 6	1.3505	20 - 30	35 - 50		x
	100 CrMn 6	1.3520	20 - 30	35 - 50		x
Spring steels	65 Si 7	1.5028	25 - 35	45 - 60		x
	50 CrV 4	1.8159	25 - 35	45 - 60		x
Unalloyed tool steels	C 125 W	1.1663	20 - 30	40 - 60		x
Cold-Work tool steels	C 75 W	1.1750	20 - 30	40 - 60		x
	125 Cr 1	1.2002	20 - 30	40 - 50	x	x
	X 210 Cr 12	1.2080	15 - 25	30 - 40	x	x
	X 155 CrVMo 12 1	1.2379	15 - 25	30 - 40	dry	x
	X 42 Cr 13	1.2083	20 - 25	35 - 45	x	x
	X 165 CrV 12	1.2201	15 - 25	30 - 45	x	x
	100 CrMo 5	1.2303	15 - 30	30 - 50	x	x
	X 32 CrMoV 3 3	1.2365	25 - 35	45 - 60	x	x
	45 WCrV 7	1.2542	20 - 30	40 - 50	x	x
	56 NiCrMoV 7	1.2714	20 - 30	40 - 50	x	x
Hot-Work tool steels	S 6-5-2-5 (E Mo5 Co5)	1.3243	20 - 30	35 - 45		x
	S 2-10-1-8 (M 42)	1.3247	20 - 30	35 - 45		x
	S 6-5-2 (DMo5)	1.3343	20 - 30	35 - 45		x
Valve Steels	X 45 CrSi 9 3	1.4718	-	30 - 45	x	x
	X 45 CrNiW 18 9	1.4873	-	30 - 40	x	x
High temperature steels	X 20 Cr MoV 12 1	1.4922	-	10 - 30	x	x
	X 5 NiCrTi 26 15	1.4980	-	10 - 30	x	x
	X 10 CrSi 6	1.4712	-	15 - 25	x	x
Heat resistant steels	X 10 CrAl 18	1.4742	-	15 - 25	x	
	X 15 CrNiSi 25 20	1.4841	-	15 - 25	x	
	X 5 CrNi 18 10	1.4301	-	30 - 40	x	x
Stainless steels	X 6 CrNiMoTi 17 12 2	1.4571	-	30 - 40	x	x
	GS-38	1.0420	20 - 30	40 - 60		x
Steel castings	GS-60	1.0558	20 - 30	40 - 60		x
	GG-15	0.6015	25 - 30	30 - 60	dry	
	GG-30	0.6030	25 - 30	30 - 60	dry	
	GGG-50	0.7050	25 - 30	30 - 60	dry	
	GTW-40-05	0.8040	25 - 30	30 - 60	dry	
	GTS-65-02	0.8165	25 - 30	30 - 60	dry	
Copper	KE-Cu	2.0050	100 - 250	100 - 400	x	x
	elektrolyte-copper		100 - 250	100 - 400	x	x
Brass (Copper-Zinc Alloys)	CuZn 10	2.0230	100 - 300	100 - 400		x
	CuZn 31 Si 1	2.0490	100 - 250	100 - 400		x
Aluminium Bronze (Copper-Aluminium Alloys)	CuAl 8	2.0920	20 - 30	35 - 50		x
	CuAl 10 Fe 3 Mn 2	2.0936	20 - 30	35 - 50		x
Bronze (Copper-Tin Alloys)	CuSn 6	2.1020	80 - 100	80 - 150		x
	CuSn 6 Zn 6	2.1080	80 - 100	80 - 150		x
Red Brass (Copper-Cast Alloys)	G-CuSn 10 Zn	2.1086.01	30 - 40	50 - 100		x
	G-CuSn 5 ZnPb	2.1096.01	30 - 40	50 - 100		x
Nickel Base Alloys	NiCr 20 TiAl	2.4631	-	10 - 25	x	x
	NiCr 22 FeMo	2.4972	-	10 - 25	x	x
Aluminium and Alloys	Al 99.5	3.0255.07	80 - 300	80 - 800		x
	AlMgSiPb	3.0615.71	80 - 300	80 - 800		x
	G-AlSi 5 Mg	3.2341.01	80 - 300	80 - 800		x
Titanium Alloys	Ti 99.5	3.7024.1	-	10 - 20	x	x
	TiAl 6 V 4	3.7165	-	10 - 20	x	x
Thermoplastic Plastics	PVC		100 - 400	100 - 400	dry	
	Teflon, Hostalen		100 - 400	100 - 400	dry	
Plastics with fibre inlays	Resitex		50 - 200	50 - 300	dry	
	Novotex		50 - 200	50 - 300	dry	



BAND SAW BLADES





BI-METAL BAND SAW BLADE

Combine the highest cutting efficiency with incredible durability.

The teeth, in cobalt high-speed steel (M42), tempered to 67-69 HRc.

Suitable for large-lot production.

Suitable for a wide selection of materials like steels above 1200 N/mm² and stainless steels up to difficult to cut materials.

Supplied in coils of 100 ft (30.5 m), 250 ft (76 m), 328 ft (100 m) production coils, or in endless welded bands.

M42-Spez V

All purpose blade for material dimensions from 20 to 80 mm maximal contact length. Variable tooth pitch - rake angle 0°.

SPECIAL

Engineered for:

- profiles and solid materials
- all steels up to 45° HRc
- demanding workshop operations

Superior, because:

Cost reduced by using 3% Cr-Backer and optimised producing program. For general purpose up to 45° Rockwell materials.

Ref.	Dimension (mm)	Teeth per inch
B.M42-SpezV-20	20 x 0.90	5/8; 6/10; 8/12; 10/14
B.M42-SpezV-27	27 x 0.90	5/8; 6/10; 8/12; 10/14
B.M42-SpezV-34	34 x 1.10	5/8; 6/10; 8/12
B.M42-SpezV-41	41 x 1.30	

M42-Spez Sup V

All purpose blade for material dimensions from 50 to 350 mm maximal contact length. Variable tooth pitch - rake angle 10° positive.

SPECIAL

Engineered for:

- profiles and solid materials
- all steels up to 45° HRc
- demanding workshop operations

Superior, because:

Cost reduced by using 3% Cr-Backer and optimised producing program.

Ref.	Dimension (mm)	Teeth per inch
B.M42-SpezSupV-20	20 x 0.90	4/6
B.M42-SpezSupV-27	27 x 0.90	3/4; 4/6
B.M42-SpezSupV-34	34 x 1.10	2/3; 3/4; 4/6
B.M42-SpezSupV-41	41 x 1.30	2/3; 3/4; 4/6

M42-Spez ALU

Easy cuts in light metals.
Hook (P); 10° positive rake angle, extra wide set

SPECIAL

Engineered for:

- pure aluminium and aluminium alloys
- all dimensions

Superior, because:

Tooth tips made of HSS M42 / material no. 1.3247.
The positive hook tooth with an extra heavy set performs at all dimensions. Smooth cuts and tool life that convinces.

Ref.	Dimension (mm)	Teeth per inch		
B.M42-SPEZ-ALU-20	20 x 0.90	3	4	
B.M42-SPEZ-ALU-27	27 x 0.90	3	4	
B.M42-SPEZ-ALU-34	34 x 1.10	3		

M42-Construction

Outstanding performance for Heavy Fabricators.
Variable tooth; 6° rake angle, extra wide set

PREMIUM

Engineered for:

- beams
- layer and bundle cuts
- hollow profiles
- angle profiles

Superior, because:

Tooth tips made of HSS M42 / materials no. 1.3247. The variable tooth with slightly positive rake angle and extra heavy group-set shows excellent performance on H-beams and similar shapes.
The M42-Construction avoids blade pinching in beams with inside tension, or in poorly supported profiles. For 90° and miter cutting.

Ref.	Dimension (mm)	Teeth per inch				
B.M42-CONST-20	20 x 0.90			5/7	8/11	12/16
B.M42-CONST-27	27 x 0.90		3/4	5/7	8/11	12/16
B.M42-CONST-34	34 x 1.10	2/3	3/4	5/7	8/11	12/16
B.M42-CONST-41	41 x 1.30	2/3	3/4	5/7	8/11	12/16
B.M42-CONST-54	54 x 1.30	2/3	3/4	5/7		
B.M42-CONST-55	54 x 1.60	2/3	3/4	5/7		

M42-N

All purpose blade for small dimension solid steel.
Standard teeth (S); 0° rake angle

PREMIUM

Engineered for:

- common steel qualities up to 1400 N/mm² tensile strength
- non ferrous metals
- cross sections up to approx. 100 mm (4 inch)
- contour cutting operations

Superior, because:

Tooth tips of HSS M42 / material no. 1.3247. The standard tooth with 0° resp. slightly positive rake angle combined with a standard-raker or wavy set is distinguished to cut short chipping materials and light wall thicknesses. For smooth and burr-free cuts.

Ref.	Dimension (mm)	Teeth per inch						
B.M42-PREM-N-04	4 x 0.90			10	14			
B.M42-PREM-N-05	6 x 0.65				14			
B.M42-PREM-N-06	6 x 0.90			10	14			
B.M42-PREM-N-10	10 x 0.90		8	10	14			
B.M42-PREM-N-12	13 x 0.50				14			
B.M42-PREM-N-13	13 x 0.65			10	14	18		
B.M42-PREM-N-14	13 x 0.90		6	8	10	14		
B.M42-PREM-N-20	20 x 0.90		4	6	8	10	14	18
B.M42-PREM-N-27	27 x 0.90	3	4	6	8	10	14	18
B.M42-PREM-N-28	27 x 1.10		4	6				
B.M42-PREM-N-34	34 x 1.10	3	4	6	8	10	14	
B.M42-PREM-N-41	41 x 1.30	3	4	6				

M42-V

The Structural-Professional blade for efficient cutting on manual machines. Variable tooth pitch, 0° rake angle, BEST SELLER

PREMIUM

Engineered for:

- common steel qualities up to 1400 N/mm² tensile strength
- non ferrous structurals
- single and bundle cuts
- tubes and structurals with light or medium walls
- sheet metal on vertical band saw machines

Superior, because:

Tooth tips of HSS M42 / material no. 1.3247. The variable tooth with 0° rake angle with a special groupset cuts even lightest sections with less vibrations. Short chipping materials are cut without a problem. The M42-V band for long life and low cost cutting.

Ref.	Dimension (mm)	Teeth per inch			
B.M42-PREM-V-05	6 x 0.65			6/10;	10/14
B.M42-PREM-V-06	6 x 0.90				10/14
B.M42-PREM-V-10	10 x 0.90				10/14
B.M42-PREM-V-12	13 x 0.50			8/12;	10/14
B.M42-PREM-V-13	13 x 0.65			6/10;	8/12; 10/14
B.M42-PREM-V-14	13 x 0.90			6/10;	8/12; 10/14
B.M42-PREM-V-20	20 x 0.90		4/6; 5/8;	6/10;	8/12; 10/14
B.M42-PREM-V-27	27 x 0.90	3/4;	4/6; 5/8;	6/10;	8/12; 10/14
B.M42-PREM-V-28	27 x 1.10		4/6		
B.M42-PREM-V-34	34 x 1.10	3/4;	4/6; 5/8;	6/10;	8/12
B.M42-PREM-V-41	41 x 1.30	3/4;	4/6; 5/8;	6/10	
B.M42-PREM-V-54	54 x 1.30		4/6;	6/10	

M42-K

The most various blade. Hook tooth with 10° positive rake angle.

PREMIUM

Engineered for:

- all steels up to 45° HRc
- all workpiece dimensions
- non-ferrous metals
- contour cuts

Superior, because:

Tooth tips of HSS M42. The positive hook tooth in combination with raker set is warranty for the most efficient cut in long chip solid material.

Ref.	Dimension (mm)	Teeth per inch			
B.M42-PREM-K-05	6 x 0.65				6
B.M42-PREM-K-06	6 x 0.90			4	6
B.M42-PREM-K-10	10 x 0.90			4	6
B.M42-PREM-K-13	13 x 0.65			4	6
B.M42-PREM-K-14	13 x 0.90		3	4	6
B.M42-PREM-K-20	20 x 0.90		3	4	6
B.M42-PREM-K-27	27 x 0.90		2	3	4 6
B.M42-PREM-K-28	27 x 1.10		2	3	
B.M42-PREM-K-34	34 x 1.10		1.25	2	3 4
B.M42-PREM-K-41	41 x 1.30		1.25	2	3 4
B.M42-PREM-K-54	54 x 1.30		1.25	2	3
B.M42-PREM-K-55	54 x 1.60		1.25	2	3
B.M42-PREM-K-67	67 x 1.60	0.75	1.25	2	3
B.M42-PREM-K-80	80 x 1.60	0.75	1.25		

M42-Sup V

Most efficient blade for production operation cutting. Variable tooth pitch, 10° positive angle, BEST SELLER

PREMIUM

Engineered for:

- common steel qualities up to 1400 N/mm² tensile strength
- non ferrous metals
- single and bundle cuts
- solid material of medium to large dimensions
- heavy wall tubes
- large construction steel
- large-dimensioned work pieces

Superior, because:

Tooth tips made of HSS M42 / material no. 1.3247. The variable tooth with a positive rake angle with a special group-set cuts solid materials as well as heavy wall structurals and tubing at fast cutting rates, with a smooth surface.

Ref.	Dimension (mm)	Teeth per inch			
B.M42-PREM-SV-27	27 x 0.90		2/3	3/4	4/5 4/6
B.M42-PREM-SV-28	27 x 1.10		2/3	3/4	4/6
B.M42-PREM-SV-34	34 x 1.10		1.4/2	2/3	3/4 4/5 4/6
B.M42-PREM-SV-41	41 x 1.30		1.4/2	2/3	3/4 4/5 4/6
B.M42-PREM-SV-54	54 x 1.30	0.75/1.25	1.4/2	2/3	3/4 4/5 4/6
B.M42-PREM-SV-55	54 x 1.60		1.4/2	2/3	3/4 4/5 4/6
B.M42-PREM-SV-67	67 x 1.60	0.75/1.25	1.4/2	2/3	3/4 4/6
B.M42-PREM-SV-80	80 x 1.60	0.75/1.25	1.4/2	2/3	3/4
B.M42-PREM-SV-125	125 x 2.00	0.75/1.25			

M42-Sup16 V

Most aggressive cutting M42 blade.
Variable tooth pitch, 16° positive angle.

PREMIUM

Engineered for:

- long chipping steels
- stainless steels
- titanium base alloys
- special bronze
- copper alloys
- nickel base alloys
- exotic, difficult to cut alloys
- solid material of medium sections

Superior, because:

Tooth tips of HSS M42. The extra positive variable hook-teeth form in combination with group set teeth is warranty for the most efficient cut in rust and acid-resistant steels and exotic alloys.

Ref.	Dimension (mm)	Teeth per inch		
B.M42-PREM-S16V-27	27 x 0.90		2/3	3/4
B.M42-PREM-S16V-34	34 x 1.10		2/3	3/4
B.M42-PREM-S16V-41	41 x 1.30		1.4/2	2/3 3/4
B.M42-PREM-S16V-54	54 x 1.30		1.4/2	2/3 3/4
B.M42-PREM-S16V-55	54 x 1.60	0.75/1.25	1.4/2	2/3 3/4
B.M42-PREM-S16V-67	67 x 1.60	0.55/0.75	1.4/2	2/3 3/4
B.M42-PREM-S16V-80	80 x 1.60	0.55/0.75	1.4/2	2/3 3/4
B.M42-PREM-S16V-100	100 x 1.60		0.75/1.25	

M42-BIGDIM SC

NEW DESIGN blade for BIG DIMensions. New developed tooth design in combination with a special setting is the warranty of an optimum in cutting performance and tool life.

PREMIUM

Engineered for:

- rust and acid-resistant steels
- steels with high tensile strenght
- nickel base alloys
- brittle and annealed materials
- short-chipping materials

Superior, because:

The combination of tooth design and setting allow user to cut big dimension material in a short time for a low cost price.

Ref.	Dimension (mm)	Teeth per inch		
B.M42-BIGDIM-SC-34	34 x 1.10		2/3	3/4
B.M42-BIGDIM-SC-41	41 x 1.30		2/3	3/4
B.M42-BIGDIM-SC-54	54 x 1.30		2/3	3/4
B.M42-BIGDIM-SC-55	54 x 1.60	0.75/1.25	1.4/2	2/3 3/4
B.M42-BIGDIM-SC-67	67 x 1.60	0.75/1.25	1.4/2	
B.M42-BIGDIM-SC-80	80 x 1.60	0.75/1.25	1.4/2	

Also available as M 51.

M42-BIGDIM LC

NEW DESIGN blade for BIG DIMensions. New developed tooth design in combination with a special setting is the warranty of an optimum in cutting performance and tool life.

PREMIUM

Engineered for:

- rust and acid-resistant steels
- steels with high tensile strenght
- nickel base alloys
- long-chipping materials
- tough materials

Superior, because:

The combination of tooth design and setting allow user to cut big dimension material in a short time at a low cost price.

Ref.	Dimension (mm)	Teeth per inch		
B.M42-BIGDIM-LC-34	34 x 1.10		2/3	3/4
B.M42-BIGDIM-LC-41	41 x 1.30		2/3	3/4
B.M42-BIGDIM-LC-54	54 x 1.30		2/3	3/4
B.M42-BIGDIM-LC-55	54 x 1.60	0.75/1.25	1.4/2	2/3 3/4
B.M42-BIGDIM-LC-67	67 x 1.60	0.75/1.25	1.4/2	
B.M42-BIGDIM-LC-80	80 x 1.60	0.75/1.25	1.4/2	

Also available as M 51.

M42-HIGHPERFORMANCE

Top - high performance blade with borazon-ground tooth, 16° positive rake angle and special setting geometry.

PREMIUM

Engineered for:

- rust and acid-resistant steels
- titanium alloys
- nickel base alloys
- large work pieces
- high tensile strength steels

Superior, because:

The best accuracy cutting finish with a bi-metal M42 blade you can get. Because of the optimum in chip division (trapeze tooth form) in combination with extreme positive tooth design the fastest cut you can do with a bi-metal M42 blade.

Ref.	Dimension (mm)	Teeth per inch			
B.M42-HIPO-27	27 x 0.90			3/4	
B.M42-HIPO-34	34 x 1.10		2/3	3/4	
B.M42-HIPO-41	41 x 1.30	1.4/2	2/3	3/4	
B.M42-HIPO-54	54 x 1.30		1.4/2	2/3	
B.M42-HIPO-55	54 x 1.60	0.75/1.25	1.4/2	2/3	3/4
B.M42-HIPO-67	67 x 1.60	0.75/1.25	1.4/2	2/3	
B.M42-HIPO-80	80 x 1.60	0.75/1.25	1.4/2		

M51-Sup V

Extra wear resistant teeth for hard materials production cutting. Variable tooth pitch, 10° positive angle

PREMIUM

Engineered for:

- rust- and acid-resistant
- steels of medium and large bundle and profile dimensions
- nickel base alloys (Inconel, Hastelloy, Nimonic)
- titanium and special bronze materials
- steels up to 50° HRc.

Superior, because:

The best possible combination between 10° positive variable teeth, extrem hard M51 and the geometry of group set teeth allows to cut extreme steels at a low cost price.

Ref.	Dimension (mm)	Teeth per inch			
B.M51-PREM-SV-27	27 x 0.90		3/4	4/6	
B.M51-PREM-SV-34	34 x 1.10		2/3	3/4	4/6
B.M51-PREM-SV-41	41 x 1.30	1.4/2	2/3	3/4	4/6
B.M51-PREM-SV-54	54 x 1.60	1.4/2	2/3	3/4	
B.M51-PREM-SV-67	67 x 1.60	1.4/2	2/3		
B.M51-PREM-SV-80	80 x 1.60	1.4/2			

M51-HIGHPERFORMANCE

Extra wear resistant
Top - high performance blade with borazon-ground tooth, 16° positive rake angle and special setting geometry.

PREMIUM

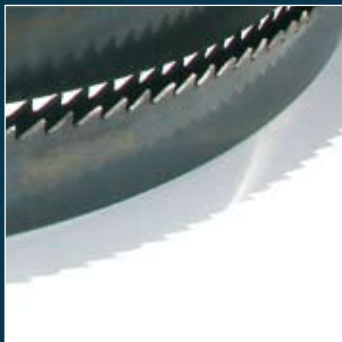
Engineered for:

- rust- and acid-resistant
- steels of medium and large bundle and profile dimensions
- nickel base alloys (Inconel, Hastelloy, Nimonic)
- titanium and special bronze materials
- steels up to 50° HRc.

Superior, because:

The best accuracy cutting finish with a bi-metal M51 blade you can get. Because of the optimum in chip division in combination with extreme positive tooth design the fastest cut you can do with a bi-metal M51 blade.

Ref.	Dimension (mm)	Teeth per inch			
B.M51-HIPO-27	27 x 0.90			3/4	
B.M51-HIPO-34	34 x 1.10		2/3	3/4	
B.M51-HIPO-41	41 x 1.30	1.4/2	2/3	3/4	
B.M51-HIPO-54	54 x 1.30		1.4/2	2/3	
B.M51-HIPO-55	54 x 1.60	0.75/1.25	1.4/2	2/3	3/4
B.M51-HIPO-67	67 x 1.60	0.75/1.25	1.4/2	2/3	
B.M51-HIPO-80	80 x 1.60	0.75/1.25	1.4/2		



CARBIDE TIPPED BANDSAW BLADES

HM-MULTI-CHIP To cut solid steels.

Engineered for:

- titanium
- stainless steels
- nickel base alloys
- heat resistant steels
- exotic, difficult to cut alloys

Superior, because:

Carbide tips welded to the blade back by latest technologies.
Carbide teeth precision ground in triple-chip geometry for fastest cutting rates at minimum vibration.

Ref.	Dimensions		Variable tooth pitch				Constant tooth pitch	
	(mm)	inch	0.85/1.15	1 1/2	2 1/3	3/4	2	3
B.HM-MCG-27	27 x 0.90	1 1/16 x 0.035				x		x
B.HM-MCG-34	34 x 1.10	1 3/8 x 0.042			x	x	x	x
B.HM-MCG-41	41 x 1.30	1 5/8 x 0.050		x	x	x	x	x
B.HM-MCG-54	54 x 1.30	2 1/8 x 0.050	x	x	x			
B.HM-MCG-55	54 x 1.60	2 1/8 x 0.063	x	x	x			
B.HM-MCG-67	67 x 1.60	2 5/8 x 0.063	x	x	x			
B.HM-MCG-80	80 x 1.60	3 1/8 x 0.063	x	x				

HM-TRIPLE-CHIP To cut non ferrous metals.

Engineered for:

- pure aluminium and alloys
- aluminium bronze and ampco
- copper and copper alloys
- brass
- sand contained aluminium and magnesium castings

Ref.	Dimensions		Variable tooth pitch			
	(mm)	inch	0.85/1.15	1 1/2	2 1/3	3/4
B.HM-TRG-13	13 x 0.80	1/2 x 0.032				x
B.HM-TRG-20	20 x 0.80	3/4 x 0.032				x
B.HM-TRG-27	27 x 0.90	1 1/16 x 0.035			x	x
B.HM-TRG-34	34 x 1.10	1 3/8 x 0.042		x	x	x
B.HM-TRG-41	41 x 1.30	1 5/8 x 0.050		x	x	x
B.HM-TRG-54	54 x 1.30	2 1/8 x 0.050		x	x	
B.HM-TRG-55	54 x 1.60	2 1/8 x 0.063	x	x	x	
B.HM-TRG-67	67 x 1.60	2 5/8 x 0.063	x	x	x	
B.HM-TRG-80	80 x 1.60	3 1/8 x 0.063	x	x		

GRIT on request.

ALLOY STEEL BANDSAW BLADES

TUNGSTEN CARBON

- 2% tungsten steel alloy band saw blade, with tempered teeth and flexible back.
- Great durability.
- Due to the special characteristics of this tungsten steel and the delicacy of its welding, we recommend ordering bands in this quality welded to the desired length.
- Recommended for cutting of series and for harder materials requiring a blade that withstands higher cutting pressures or speeds.
- Supplied in coils of 100 ft (30.5 m), 250 ft (76 m), 328 ft (100 m) production coils, or in endless welded bands.

Regular teeth (S)

Ref.	Dimension (mm)	Teeth per inch
B.BS3-T16N	16 x 0.80	4; 6; 8; 10; 14; 18; 22; 32
B.BS3-T20N	20 x 0.80	3; 4; 6; 8; 10; 14; 18; 22; 32
B.BS3-T25N	25 x 0.90	3; 4; 6; 8; 10; 14; 18; 22; 32
B.BS3-T32N	32 x 1.10	4; 6; 8

Skip (A) & Hook teeth (P)

Ref.	Dimension (mm)	Teeth per inch	
		A	P
B.BS3-T16	16 x 0.80		3; 4; 6
B.BS3-T20	20 x 0.80		3; 4; 6
B.BS3-T25	25 x 0.90		2; 3; 4; 6
B.BS3-T32	32 x 1.10		2; 3; 4; 6

CARBON FLEX BACK

- Carbon-steel band saw blade with high carbon content (1.25%), tempered teeth, flexible back, designed for solving normal cutting problems.
- Recommended for cutting alloy or non-alloy steels with hardness lower than 80 kg/mm².
- Supplied in coils of 100 ft (30.5 m), 250 ft (76 m), 328 ft (100 m) production coils, or in endless welded bands.

Also available for wood (wide set). Please order ref. number + „wood“.

Regular teeth (S)

Ref.	Dimension (mm)	Teeth per inch
B.BS2-04N	4 x 0.63	10; 14; 18; 22; 32
B.BS2-06N	6 x 0.63	8; 10; 14; 18; 22; 32
B.BS2-08N	8 x 0.63	6; 8; 10; 14; 18; 22; 32
B.BS2-10N	10 x 0.63	4; 6; 8; 10; 14; 18; 22; 32
B.BS2-13N	13 x 0.63	4; 6; 8; 10; 14; 18; 22; 32
B.BS2-15N	16 x 0.63	4; 6; 8; 10; 14; 18; 22; 32
B.BS2-16N	16 x 0.80	4; 6; 8; 10; 14; 18; 22; 32
B.BS2-20N	20 x 0.80	4; 6; 8; 10; 14; 18; 22; 32
B.BS2-25N	25 x 0.90	3; 4; 6; 8; 10; 14; 18; 22; 32
B.BS2-32N	32 x 1.10	3; 4; 6; 8

Skip (A) & Hook teeth (P)

Ref.	Dimension (mm)	Teeth per inch	
		A	P
B.BS2-04	4 x 0.63		
B.BS2-06	6 x 0.63	4; 6	6
B.BS2-08	8 x 0.63	4; 6	4; 6
B.BS2-10	10 x 0.63	3; 4; 6	3; 4; 6
B.BS2-13	13 x 0.63	3; 4; 6	3; 4; 6
B.BS2-15	16 x 0.63	3; 4; 6	3; 4; 6
B.BS2-16	16 x 0.80	3; 4; 6	3; 4; 6
B.BS2-20	20 x 0.80	3; 4; 6	3; 4; 6
B.BS2-25	25 x 0.90	3; 4; 6	3; 4; 6
B.BS2-32	32 x 1.10	3; 4; 6	3; 4; 6

CARBON HARD BACK

- Carbon-steel band saw blade, with high carbon content (1.25%), tempered teeth and annealed back.
- Due to its special heat treatment, it is especially recommended for workshops or factories whose
- Specific cutting conditions cause higher than normal tensions in the band.
- Supplied in coils of 100 ft (30.5 m), 250 ft (76 m), 328 ft (100 m) production coils, or in endless welded bands.

Regular teeth (S)

Ref.	Dimension (mm)	Teeth per inch
B.BS3-03N	3 x 0.63	10; 14; 18; 22; 32
B.BS3-04N	4 x 0.63	8; 10; 14; 18; 22; 32
B.BS3-06N	6 x 0.63	6; 8; 10; 14; 18; 22; 32
B.BS3-08N	8 x 0.63	4; 6; 8; 10; 14; 18; 22; 32
B.BS3-10N	10 x 0.63	4; 6; 8; 10; 14; 18; 22; 32
B.BS3-13N	13 x 0.63	4; 6; 8; 10; 14; 18; 22; 32

Skip (A) & Hook teeth (P)

Ref.	Dimension (mm)	Teeth per inch	
		A	P
B.BS3-03	3 x 0.63		
B.BS3-04	4 x 0.63		
B.BS3-06	6 x 0.63	4; 6	6
B.BS3-08	8 x 0.63	4; 6	4; 6
B.BS3-10	10 x 0.63	3; 4; 6	3; 4; 6
B.BS3-13	13 x 0.63	3; 4; 6	3; 4; 6



KOMET UNIVERSAL

WOOD, FISH and MEAT cutting bandsaw blades



KOMET-UNIVERSAL is a new product made by KOMET which makes the most perfect cutting of three different materials possible.

The bandsaw blade consists of alloyed carbon steel and has a hardened and tempered blade body and inductively hardened teeth.

Due to these facts, connected with the sharpness of the teeth – which is well known for KOMET bandsaw blades – KOMET-UNIVERSAL has considerable advantages with regard to the other special bandsaw blades which are in the market.



On cutting of

WOOD a longer blade life in comparison to conventional wood cutting bandsaw blades.

FISH a higher wear resistance and a straighter cut due to an optimum induction hardening and tempered back for greater stiffness.

MEAT the best combination of wear resistance and hardness for an optimum blade life achieved through our induction hardening technology under a special atmosphere.

Our KOMET-UNIVERSAL-blade is also very suitable for cutting of non-ferrous metals of vertical and horizontal small bandsaw machines.

Ref.	Dimension (width x thickness)		Tooth spacing	
	mm	inch	6 mm	8 mm
B.Universal-10	10 x 0.50	3/8 x 0.020	K	K
B.Universal-12	12 x 0.50	1/2 x 0.020	K	K
B.Universal-16	16 x 0.50	5/8 x 0.020	K	K
B.Universal-20	20 x 0.60	3/4 x 0.024	K	K
B.Universal-25	25 x 0.70	1 x 0.028	K	K
B.Universal-32	32 x 0.80	1 1/4 x 0.032	K	K

K = Hook tooth with positive rake angle