

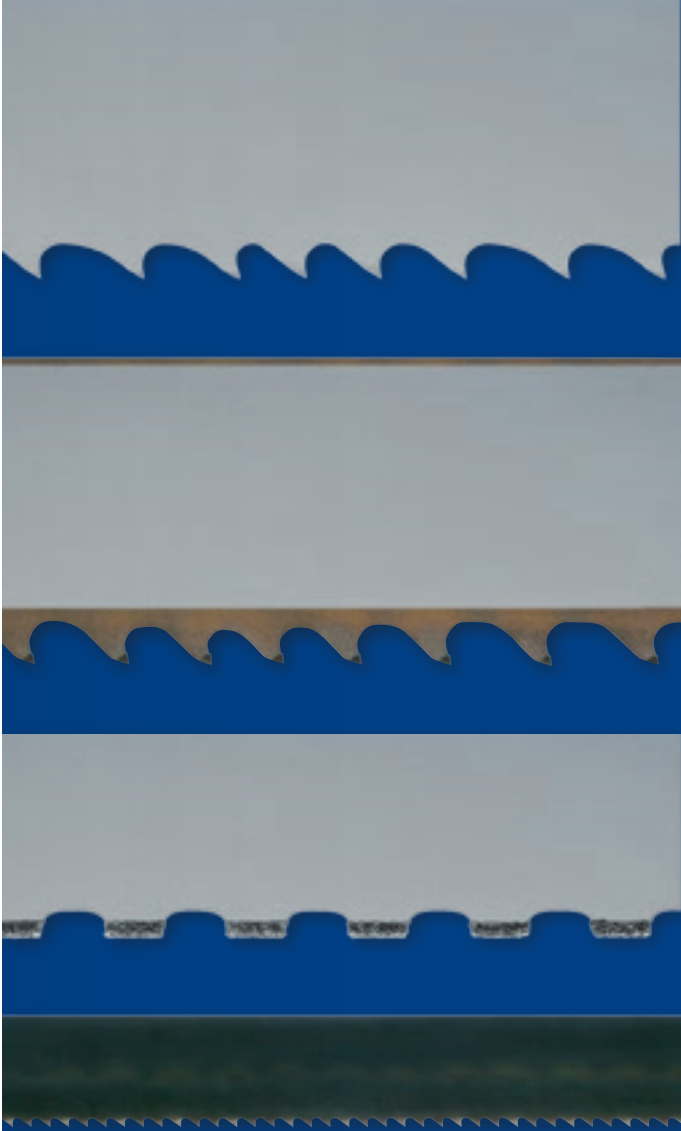


PRECISION
BAND SAW BLADES



Valid from:
01.10.2015

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TOP QUALITY MADE IN SPANGENBERG

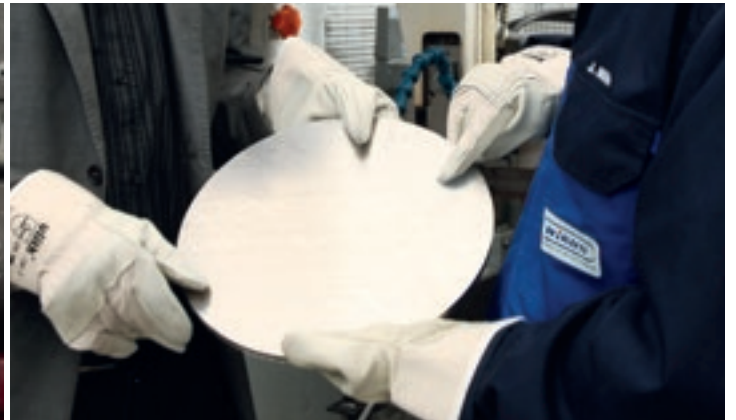
Wilhelm H. Kullmann founded the WIKUS saw factory in Spangenberg back in 1958. Today, the name WIKUS stands for maximum precision, quality and performance. Our family business has made a name for itself all over the world with these values.

We owe our success story mainly to the high qualifications and outstanding know-how of our employees. With representations around the world and sales and service companies in Europe and overseas, we offer our customers expert advice and personal service.

Our international presence is just as important to us as our ties to the region: as a family business, we feel responsible for the city and region we live in. Together with our employees, we support local projects and initiatives in social, cultural and ecological areas.

Please visit our website: www.wikus.com

- More than 50 years of experience in developing and manufacturing high-performance tools
- The first European band saw manufacturer to be certified according to the DIN EN ISO 9001 standard
- Continuous development of innovations
- Highly qualified employees in all positions
- Environmentally friendly manufacturing techniques



WIKUS GLOBAL SERVICES CENTERED AROUND YOUR NEEDS

Customer satisfaction always comes first for us. For this reason, our products and technologies are developed and manufactured in Germany on the basis of the highest standards for quality.

Cost optimization and conservation of resources are the success factors for efficient manufacturing processes. Combining high-tech products with outstanding service is the key to meeting the rising demands for the quality of cutting and the need for higher efficiency.

Benefit from our broad personal advice. We offer excellent solutions custom-designed to meet your needs. You will be very happy with the results: not only will you increase your productivity, but also save time and money.

You can depend on partnering with WIKUS. We will help you to increase the accuracy of all your cutting activities.

Our services:

- Representations all over the world
- Outstanding industry know-how
- Sampling
- Cutting tests and analyses on site and at the WIKUS Sawing Center in Spangenberg
- Training at the WIKUS Training Center in Spangenberg
- Commercial and technical support

WIKUS PARAMASTER® 3.0 ONLINE CUTTING DATA PROGRAM

LOWER OVERALL CUTTING COSTS

We can rely on more than 50 years of experience in developing and manufacturing high-performance tools. Our product line includes just the right product for every application. Customers around the world from many different industries depend on our innovative band saw solutions.

A practical software bundles our product variety and vast applications know-how:

ParaMaster® 3.0, the online cutting data program from WIKUS, provides you with efficient support on optimizing your cutting processes. You will be pleasantly surprised, not only with the results, but also the ease-of-use and cost savings we can offer you.

Use is free of charge for WIKUS customers.

You don't have access to the system yet?

Register now under: www.paramaster.de

The benefits ParaMaster® 3.0 offers:

- A database that is up-to-date every day: more than 150 000 materials, 3 000 band saw machines and plenty of additional information
- Easy to use: all of the information at a glance and a self-explanatory interface
- Applications: solid materials (round or square), tubes (round or square), beams, single and layer cuts
- Analysis of cutting costs



WIKUS
ONLINE SERVICE
www.wikus.com

You'll find an interactive overview of the most common band saw machines together with the appropriate band saw dimensions for WIKUS band saw blades on our website.

SELECTING THE RIGHT BAND SAW BLADE

Sawing is a science - a variety of factors and their interplay determine what results you will achieve with sawing.

Every user places his own individual demands on the tool, for example:

- Tool Life
- Cutting time
- Tool Cost
- Surface finish / cut quality

Other factors in the selection process

Besides your specific objectives, the following conditions also influence product selection:




- The band saw machine
- The material
- The dimensions and shape of the workpiece
- Cutting of individual sheets, layers or bundles

WIKUS constantly gears its product portfolio toward customer needs and offers a wide range of:

- Bandwidths
- Tooth shapes
- Tooth pitches
- Tooth sets
- Specially designed products


Product classification as a decision aid

To make it easier for you to select the right products, WIKUS groups its band saw blades into three performance classes:

- **Level 1**  Standard band saw blades that can be used universally
- **Level 2**  Band saw blades that offer high performance
- **Level 3**  High-tech band saw blades that meet the highest standards

The WIKUS product line also includes **special designs** for use in individual applications. But please note that not all special designs are available for every band saw.

Furthermore, WIKUS also offers **special blades**:

- **Special**  Special products for use in high-performance sawing technology and very special applications

CHANGES TO THE PRODUCT RANGE

New and further developments:

Besides the new bimetal saw blade "SKALAR[®]," we are also expanding our carbide product range to include the new band saw blade "TAURUS[®]." We have also added the two coated band saw blades "DUROSET[®] PREMIUM" and "PROFLEX[®] PREMIUM M42" to our catalog.

Name changes:

As part of the systematic standardization of our product names, we have renamed the following blades: "FUTURA[®] PLUS" is now called "FUTURA[®] NE."

Band saw qualities that are being discontinued:

The products "VECTOR[®]" and "GIGANT[®]" will no longer be manufactured and are being omitted completely from the product range. They will be replaced by the newly developed band saw blade „SKALAR[®]“.

WIKUS Service

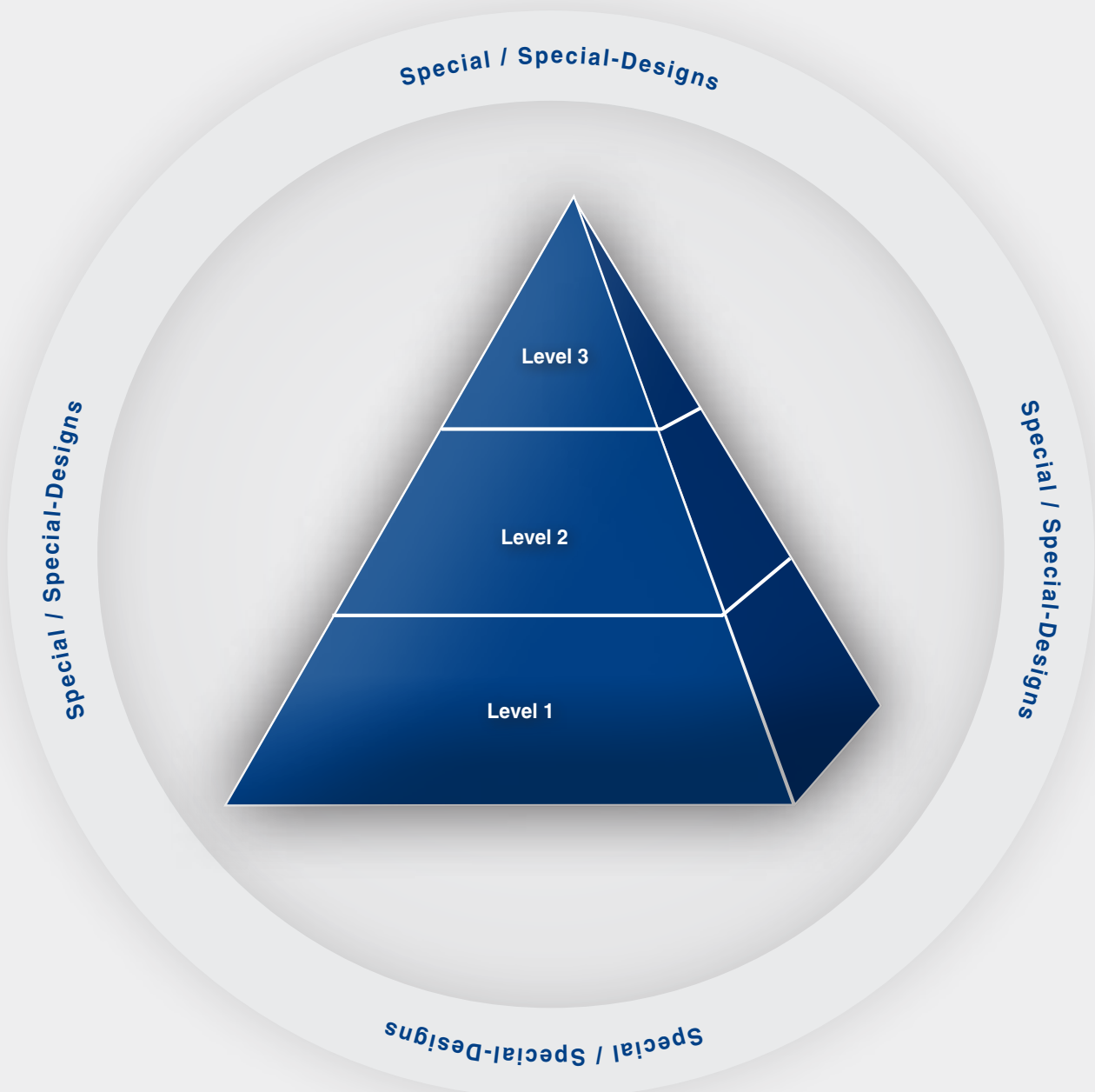
Besides the classification in this catalog, WIKUS also offers the online cutting data program Para Master 3.0 for optimal blade selection. It combines all of the influencing factors with more than 55 years of expertise in sawing applications. Read more about it on page 5.

Finally, the experts on application technology at WIKUS also offer excellent advice on additional technical questions pertaining to blade selection and use, if necessary.










Your optimal WIKUS product

WIKUS provides you with help in the selection process on the next two pages.

Based on the combination of the type, the work piece and the task for the band saw blade, users can select the right WIKUS band saw blade at a quick glance.



BLADE SELECTOR

ASSORTMENT	BIMETAL					
APPLICATION						
Nickel-based alloys						
Duplex and heat-resistant steels						
Titanium, titanium alloys						
Aluminum bronze						
Hardened and tempered steels (over 1000 N/mm ²)						
Stainless and acid-resistant steels (austenitic)						
Stainless and acid-resistant steels (ferritic)						
Nitriding and high-speed steels						
Cast iron						
Tool steels						
Hardening steels Spring and ball bearing steels						
Carbon and heat-treated steels						
Construction, deep-drawing and cutting steels						
Non-ferrous metals						
Aluminum / aluminum alloys						
CLASSIFICATION	 Level 2		 Level 3		 Level 1	

MARATHON® X3000

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NEW: SKALAR® X3000

Will replace
VECTOR® X3000
and GIGANT® X3000
in the future

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SELEKTA® GS X3000

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VARIO® M42

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PROFLEX® M42

14

MARATHON® M42

13

NEW: SKALAR® M42

Will replace
VECTOR® M42
and GIGANT® M42
in the future

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SELEKTA® GS M42

18

ECOFLEX® M42











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CARBIDE





















							
		<p>FUTURA® 718</p> <p>31</p>					
		<p>FUTURA® VA</p> <p>30</p>					
<p>DUROSET®</p> <p>26</p>				<p>NEW: TAURUS®</p> <p>28</p>			
		<p>FUTURA®</p> <p>27</p>	<p>PROFIDUR®</p> <p>29</p>			<p>ARION®</p> <p>34</p>	
<p>ECODUR®</p> <p>32</p>		<p>FUTURA® NE Renamed: previously called FUTURA® PLUS</p> <p>33</p>					
 Level 2		 Level 3		 Level 1		 Special	

PRODUCT OVERVIEW







BIMETAL BAND SAW BLADES

	VARIO® M42 (528)		p. 12
	MARATHON® M42 (529) / MARATHON® SW M42 (529)		p. 13
	PROFLEX® M42 (524) / PROFLEX® PREMIUM M42 (624)		p. 14
	PROFLEX® SW M42 (524) / PROFLEX® PREMIUM SW M42 (624)		p. 15
	VECTOR® M42 (534) / GIGANT® M42 (532)		p. 16
	NEW: SKALAR® M42 (634) / NEW: SKALAR® PREMIUM M42 (635)		p. 17
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	MARATHON® X3000 (631)		p. 21
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CARBIDE TIPPED BAND SAW BLADES

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	FUTURA® 718 (718)		p. 31
	ECODUR® (542) / DUROSET® NE (541)		p. 32
	FUTURA® NE (546) / FUTURA® NE RS (546)		p. 33
	ARION® FG (668) / ARION® EG (668) / ARION® PG (668)		p. 34
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	TCT® (540)		p. 36
	TCTYRE® (549)		p. 37

DIAMOND COATED BAND SAW BLADES

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	DIAGRIT® S (572) / DIAGRIT® S VA (572)		p. 40
	DIAGRIT® U (574)		p. 41

CARBON STEEL BAND SAW BLADES

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	DIAMANT (510)		p. 44
	JET (515)		p. 45

BIMETAL BAND SAW BLADES

CUTTING MATERIAL M42



- The perfect product portfolio for standard and special applications
- The back of the blade is made of alloyed steel that offers excellent continuous operation properties
- Proven cutting material M42 with superior wear resistance in conventional applications
- Coated versions for maximum cutting performance and longer tool life

Sales units:	<ul style="list-style-type: none">• Coils in fixed lengths and manufacturing coils of up to 120 m, depending on the width• Welded-to-length band saw blades
Band widths:	6 to 80 mm
Tooth shapes:	S, P, K, HV, VA See page 48 for explanations
Tooth pitches:	0.7-1.0 to 12-16 teeth per inch (tpi) See page 49 for explanations
Types of tooth set:	SD See page 49 for explanations
Qualities:	M42: 68-69 HRC, approx. 980 HV
Special designs:	<ul style="list-style-type: none">• PW available for article groups: VECTOR® M42, GIGANT® M42, SKALAR® M42, SKALAR® PREMIUM M42, SELEKTA® GS M42• PE available for article groups: VARIO® M42, MARATHON® M42

VARIO® M42



- For universal use in single and serial cutting
- For profiles and solid materials
- For layer and bundle cutting



Dimensions Width x Thickness		Tooth pitch in tpi					
		10-14	8-12	6-10	5-8	4-6	3-4
6 x 0.65	1/4 x 0.025	S					
6 x 0.90	1/4 x 0.035	S					
10 x 0.90	3/8 x 0.035	S					
13 x 0.65	1/2 x 0.025	S	S	S			
13 x 0.90	1/2 x 0.035	S	S	S			
20 x 0.90	3/4 x 0.035	S	S	S	S	S	
27 x 0.90	1-1/16 x 0.035	S	S	S	S	S	S
34 x 1.10	1-3/8 x 0.042		S	S	S	S	S
41 x 1.30	1-5/8 x 0.050			S	S	S	S
54 x 1.30	2-1/8 x 0.050			S			
Contact length		< 20 mm	10-30 mm	20-50 mm	30-60 mm	50-90 mm	90-150 mm

S = Standard tooth



MARATHON® M42



- For universal use in single and serial cutting
- For profiles and solid materials
- For layer and bundle cutting



Dimensions Width x Thickness		Tooth pitch in tpi						
mm	Inch	5-8	4-6	3-4	2-3	1.4-2	1.0-1.4	0.75-1.25
27 x 0.90	1-1/16 x 0.035	K	K	K	K			
34 x 1.10	1-3/8 x 0.042	K	K	K	K	K		
38 x 1.30	1-1/2 x 0.050			K	K			
41 x 1.30	1-5/8 x 0.050	K	K	K	K	K		
54 x 1.30	2-1/8 x 0.050		K	K	K	K		
54 x 1.60	2-1/8 x 0.063		K	K	K	K	K	
67 x 1.60	2-5/8 x 0.063		K	K	K	K	K	K
80 x 1.60	3-1/8 x 0.063			K	K	K	K	K
Contact length		30-60 mm	50-90 mm	90-150 mm	150-290 mm	290-550 mm	540-1020 mm	570-1180 mm

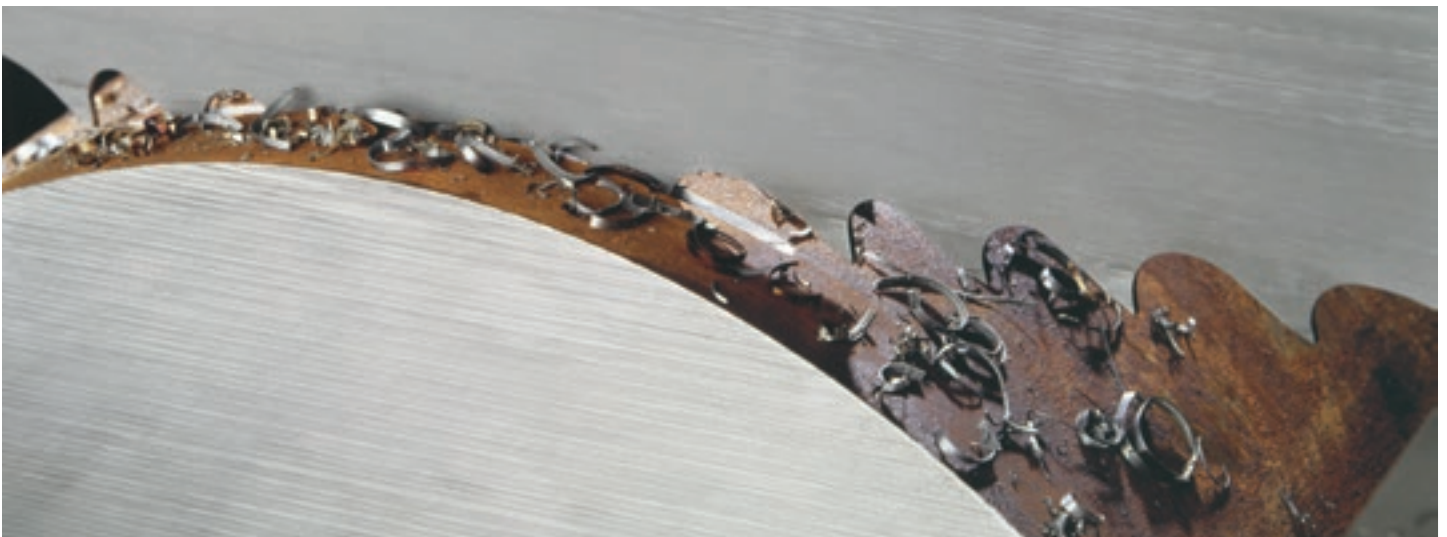
MARATHON® SW M42

- Wide set
- For material with internal stress

Dimensions Width x Thickness		Tooth pitch in tpi						
mm	Inch	5-8	4-6	3-4	2-3	1.4-2	1.0-1.4	0.75-1.25
34 x 1.10	1-3/8 x 0.042		K					
41 x 1.30	1-5/8 x 0.050		K	K	K			
54 x 1.60	2-1/8 x 0.063			K	K			
67 x 1.60	2-5/8 x 0.063			K	K			
Contact length		30-60 mm	50-90 mm	90-150 mm	150-290 mm	290-550 mm	540-1020 mm	570-1180 mm

K = Hook tooth

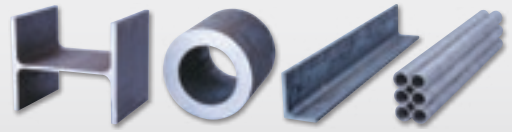
Photo below: MARATHON® M42



PROFLEX® M42



- Extra strong tooth geometry to prevent tooth breakage
- For workshop operation
- For profiles and beams



Dimensions Width x Thickness		Tooth pitch in tpi					
mm	Inch	12-16	8-11	5-7	4-6	3-4	2-3
20 x 0.90	3/4 x 0.035	P	P	P			
27 x 0.90	1-1/16 x 0.035	P	P	P	P	P	
34 x 1.10	1-3/8 x 0.042		P	P	P	P	P
41 x 1.30	1-5/8 x 0.050			P		P	P
54 x 1.30	2-1/8 x 0.050			P		P	P
54 x 1.60	2-1/8 x 0.063			P		P	P
67 x 1.60	2-5/8 x 0.063					P	P
Contact length		< 20 mm	10-40 mm	40-70 mm	50-90 mm	90-160 mm	160-310 mm

PROFLEX® PREMIUM M42

- Coated version
- For increased cutting performance and longer tool life
- For reduced noise levels

Dimensions Width x Thickness		Tooth pitch in tpi					
mm	Inch	12-16	8-11	5-7	4-6	3-4	2-3
34 x 1.10	1-3/8 x 0.042				P	P	
41 x 1.30	1-5/8 x 0.050					P	P
54 x 1.30	2-1/8 x 0.050					P	
54 x 1.60	2-1/8 x 0.063					P	P
67 x 1.60	2-5/8 x 0.063					P	P
Contact length		< 20 mm	10-40 mm	40-70 mm	50-90 mm	90-160 mm	160-310 mm

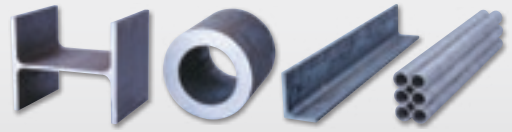
P = Profile tooth
Photo below: PROFLEX® M42



PROFLEX® SW M42



- Extra wide set
- For girders with internal stress



Dimensions Width x Thickness		Tooth pitch in tpi					
		12-16	8-11	5-7	4-6	3-4	2-3
mm	Inch						
34 x 1.10	1-3/8 x 0.042					P	
41 x 1.30	1-5/8 x 0.050					P	P
54 x 1.30	2-1/8 x 0.050					P	
54 x 1.60	2-1/8 x 0.063					P	P
67 x 1.60	2-5/8 x 0.063					P	P
Contact length		< 20 mm	10-40 mm	40-70 mm	50-90 mm	90-160 mm	160-310 mm

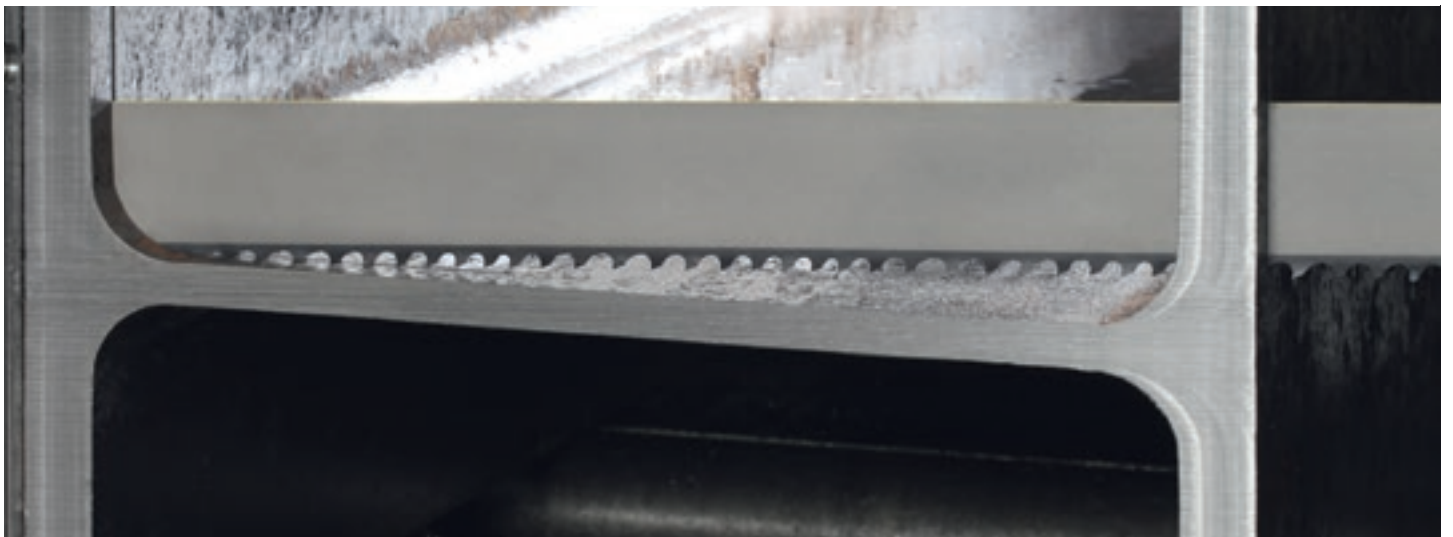
PROFLEX® PREMIUM SW M42

- Coated version
- For increased cutting performance and longer tool life
- For reduced noise levels

Dimensions Width x Thickness		Tooth pitch in tpi					
		12-16	8-11	5-7	4-6	3-4	2-3
mm	Inch						
41 x 1.30	1-5/8 x 0.050					P	P
54 x 1.30	2-1/8 x 0.050					P	
54 x 1.60	2-1/8 x 0.063					P	P
67 x 1.60	2-5/8 x 0.063					P	P
Contact length		< 20 mm	10-40 mm	40-70 mm	50-90 mm	90-160 mm	160-310 mm

P = Profile tooth

Photo below: PROFLEX® PREMIUM SW M42



VECTOR® M42



- For performance-related use
- For rustproof and acid-resistant steels (VA)
- For engineering, heat-treatable and tool steels (HV)



Dimensions Width x Thickness		Tooth pitch in tpi					
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.75-1.25	0.7-1.0
27 x 0.90	1-1/16 x 0.035	HV					
34 x 1.10	1-3/8 x 0.042	HV, VA	HV, VA				
41 x 1.30	1-5/8 x 0.050	HV, VA	HV, VA				
54 x 1.30	2-1/8 x 0.050		HV				
54 x 1.60	2-1/8 x 0.063		HV				
Contact length		120-200 mm	200-340 mm	300-550 mm	500-1000 mm	700-1500 mm	950-3000 mm

GIGANT® M42

- For performance-related use
- For rustproof and acid-resistant steels (VA)
- For engineering, heat-treatable and tool steels (HV)

Dimensions Width x Thickness		Tooth pitch in tpi					
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.75-1.25	0.7-1.0
41 x 1.30	1-5/8 x 0.050			HV			
54 x 1.30	2-1/8 x 0.050			VA			
54 x 1.60	2-1/8 x 0.063			HV, VA			
67 x 1.60	2-5/8 x 0.063			HV, VA	HV	HV	
80 x 1.60	3-1/8 x 0.063			HV	HV	HV	HV
Contact length		120-200 mm	200-340 mm	300-550 mm	500-1000 mm	700-1500 mm	950-3000 mm

HV = Tooth shape HV, VA = Tooth shape VA
 Photo below: VECTOR® M42



NEW: SKALAR® M42



- Ground tooth geometry
- For performance-related use
- For universal use



Dimensions Width x Thickness		Tooth pitch in tpi					
		2.5-3.4	1.8-2.5	1.4-1.8	1.2-1.6	1.0-1.4	0.7-1.0
mm	inch						
27 x 0.90	1-1/16 x 0.035	K					
34 x 1.10	1-3/8 x 0.042	K	K				
41 x 1.30	1-5/8 x 0.050	K	K	K			
54 x 1.30	2-1/8 x 0.050		K	K			
54 x 1.60	2-1/8 x 0.063	K	K	K	K	K	
67 x 1.60	2-5/8 x 0.063			K	K	K	K
80 x 1.60	3-1/8 x 0.063				K	K	K
Contact length		120-200 mm	200-340 mm	300-550 mm	400-700 mm	500-1000 mm	950-3000 mm

NEW: SKALAR® PREMIUM M42

- Coated version
- For increased cutting performance
- For a longer tool life

Dimensions Width x Thickness		Tooth pitch in tpi					
		2.5-3.4	1.8-2.5	1.4-1.8	1.2-1.6	1.0-1.4	0.7-1.0
mm	inch						
27 x 0.90	1-1/16 x 0.035	K					
34 x 1.10	1-3/8 x 0.042	K	K				
41 x 1.30	1-5/8 x 0.050	K	K				
54 x 1.60	2-1/8 x 0.063		K	K	K		
67 x 1.60	2-5/8 x 0.063			K	K	K	
Contact length		120-200 mm	200-340 mm	300-550 mm	400-700 mm	500-1000 mm	950-3000 mm

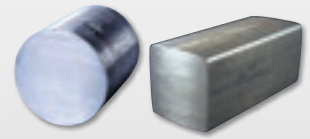
K = Hook tooth

Photo below: SKALAR® PREMIUM M42



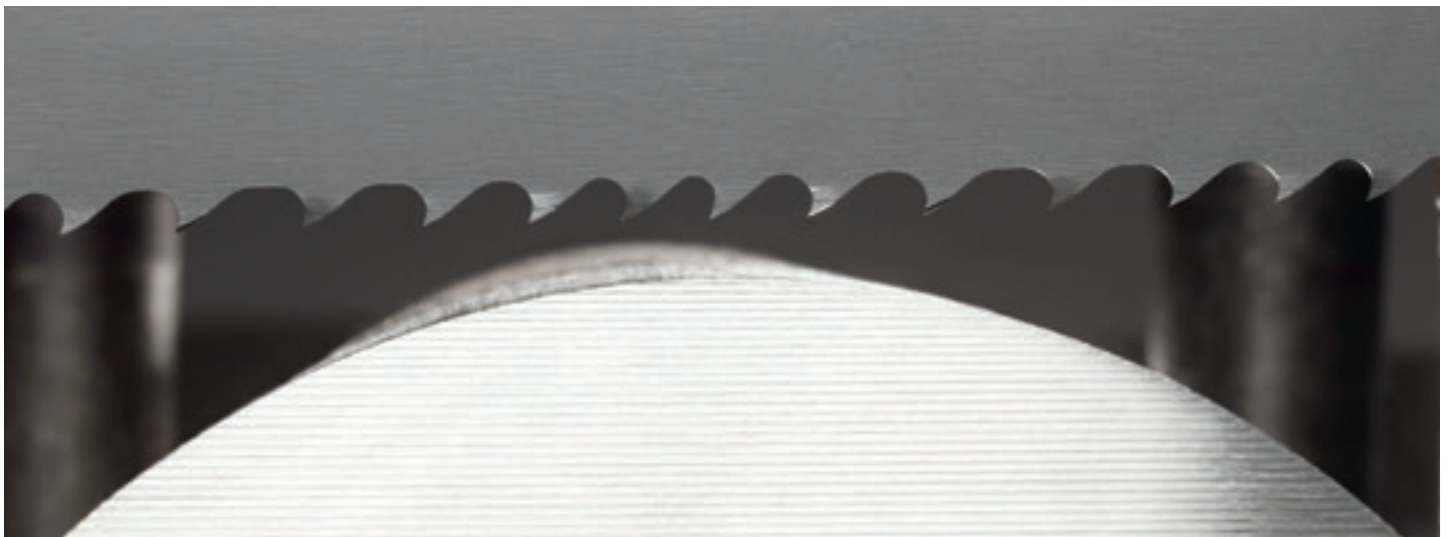
SELEKTA® GS M42

- For performance-related use
- For excellent surface quality
- For perfect cutting performance



Dimensions Width x Thickness		Tooth pitch in tpi					
		4-6	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
mm	inch						
27 x 0.90	1-1/16 x 0.035	K	K	K			
34 x 1.10	1-3/8 x 0.042	K	K	K			
41 x 0.90	1-5/8 x 0.035		K	K			
41 x 1.30	1-5/8 x 0.050	K	K	K	K		
54 x 1.30	2-1/8 x 0.050		K	K	K		
54 x 1.60	2-1/8 x 0.063		K	K	K	K	
67 x 1.60	2-5/8 x 0.063				K	K	K
80 x 1.60	3-1/8 x 0.063				K	K	K
Contact length		50-90 mm	90-150 mm	150-290 mm	290-550 mm	500-1000 mm	950-3000 mm

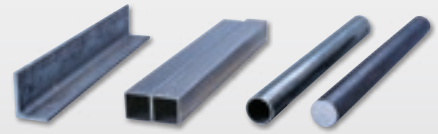
K = Hook tooth



ECOFLEX® M42



- For basic workshop operations
- For profiles and solid materials



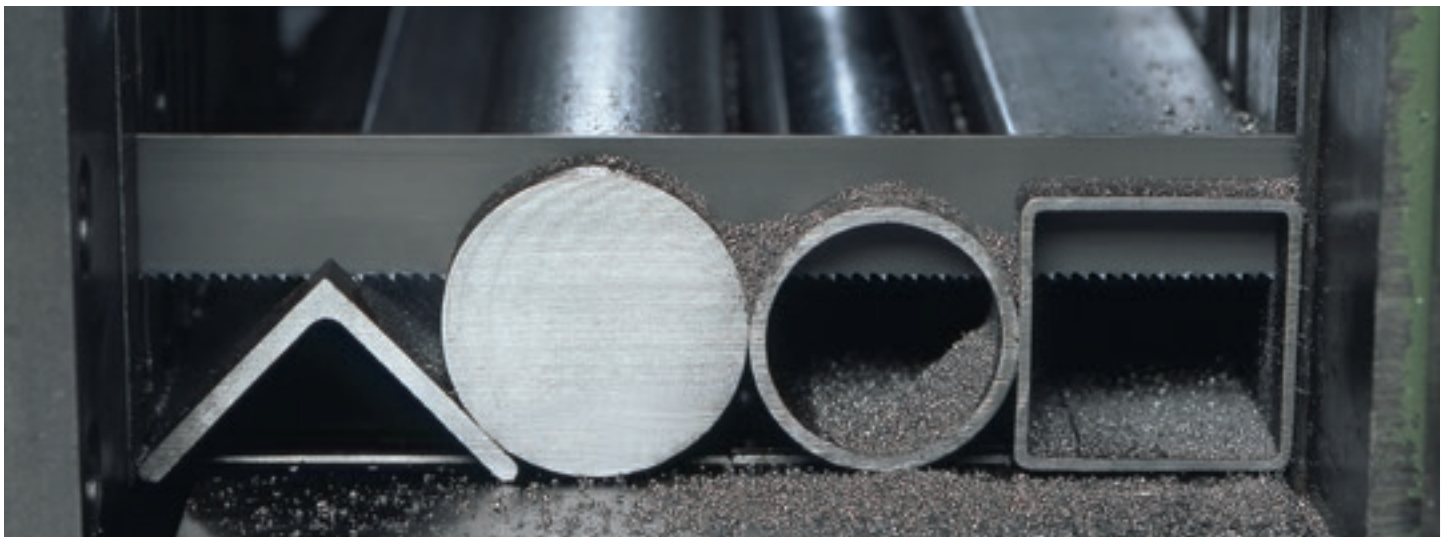
Dimensions Width x Thickness		Tooth pitch in tpi								
mm	Inch	10-14	8-12	6-10	5-8	4-6	3-4	2-3	1.4-2	1.0-1.4
13 x 0.65	1/2 x 0.025	S	S	S						
20 x 0.90	3/4 x 0.035	S	S	S	S	K				
27 x 0.90	1-1/16 x 0.035	S	S	S	S	K	K			
34 x 1.10	1-3/8 x 0.042		S	S	S	K	K	K		
41 x 1.30	1-5/8 x 0.050					K	K	K		
54 x 1.60	2-1/8 x 0.063							K	K	
67 x 1.60	2-5/8 x 0.063								K	K
Contact length		< 20 mm	10-30 mm	20-50 mm	30-60 mm	50-90 mm	90-150 mm	150-290 mm	290-550 mm	500-1000 mm

ECOFLEX® NE M42

- For non-ferrous metals
- For manual operation

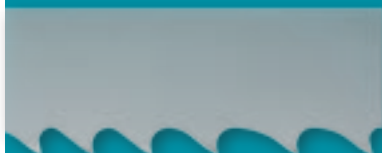
Dimensions Width x Thickness		Tooth pitch in tpi		
mm	Inch	4	3	2
20 x 0.90	3/4 x 0.035		K	
27 x 0.90	1-1/16 x 0.035	K	K	K
34 x 1.10	1-3/8 x 0.042		K	
Contact length		80-120 mm	120-200 mm	200-400 mm

S = Standard tooth, K = Hook tooth
 Photo below: ECOFLEX® M42



BIMETAL BAND SAW BLADES

CUTTING MATERIAL X3000



- The perfect product portfolio for standard and special applications
- The back of the blade is made of alloyed steel that offers excellent continuous operation properties
- Modified cutting material X3000 (exclusive to WIKUS) with high hardness and excellent toughness
- High cutting edge stability
- For materials that are difficult to machine and special alloys

Sales units:	<ul style="list-style-type: none">• Coils in fixed lengths and manufacturing coils of up to 120 m, depending on the width• Welded-to-length band saw blades
Band widths:	27 to 100 mm
Tooth shapes:	K, HV, VA See page 48 for explanations
Tooth pitches:	0.7-1.0 to 5-8 teeth per inch (tpi) See page 49 for explanations
Types of tooth set:	SD See page 49 for explanations
Qualities:	X3000: approx. 70 HRC, approx. 1000 HV (for steels and non-ferrous metals up to 45 HRC)
Special designs:	PW available for article groups: SKALAR® X3000, SELEKTA® GS X3000

MARATHON® X3000

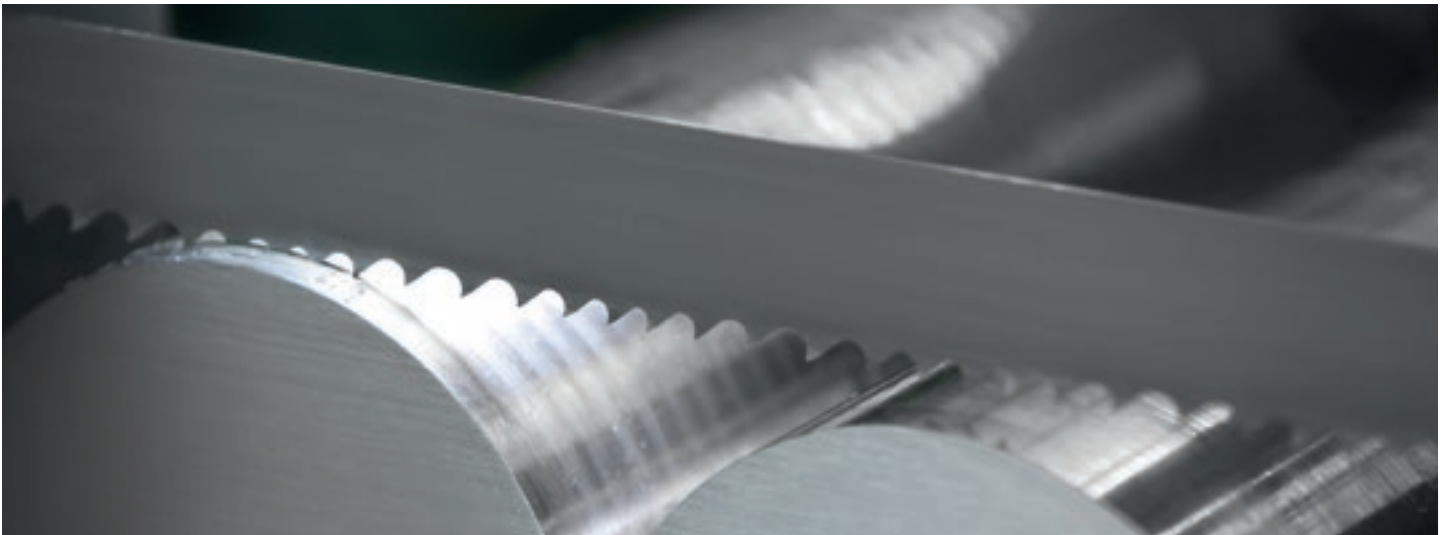


- For universal use in single and serial cutting
- For profiles and solid materials
- For layer and bundle cutting



Dimensions		Tooth pitch in tpi				
Width x Thickness		5-8	4-6	3-4	2-3	1.4-2
mm	Inch					
27 x 0.90	1-1/16 x 0.035	K	K	K		
34 x 1.10	1-3/8 x 0.042		K	K	K	
41 x 1.30	1-5/8 x 0.050		K	K	K	
54 x 1.60	2-1/8 x 0.063		K	K	K	K
67 x 1.60	2-5/8 x 0.063			K	K	K
Contact length		30-60 mm	50-90 mm	90-150 mm	150-290 mm	290-550 mm

K = Hook tooth



VECTOR® X3000



- For performance-related use
- For rustproof and acid-resistant steels as well as special alloys (VA)
- For quenched and tempered steels (HV)



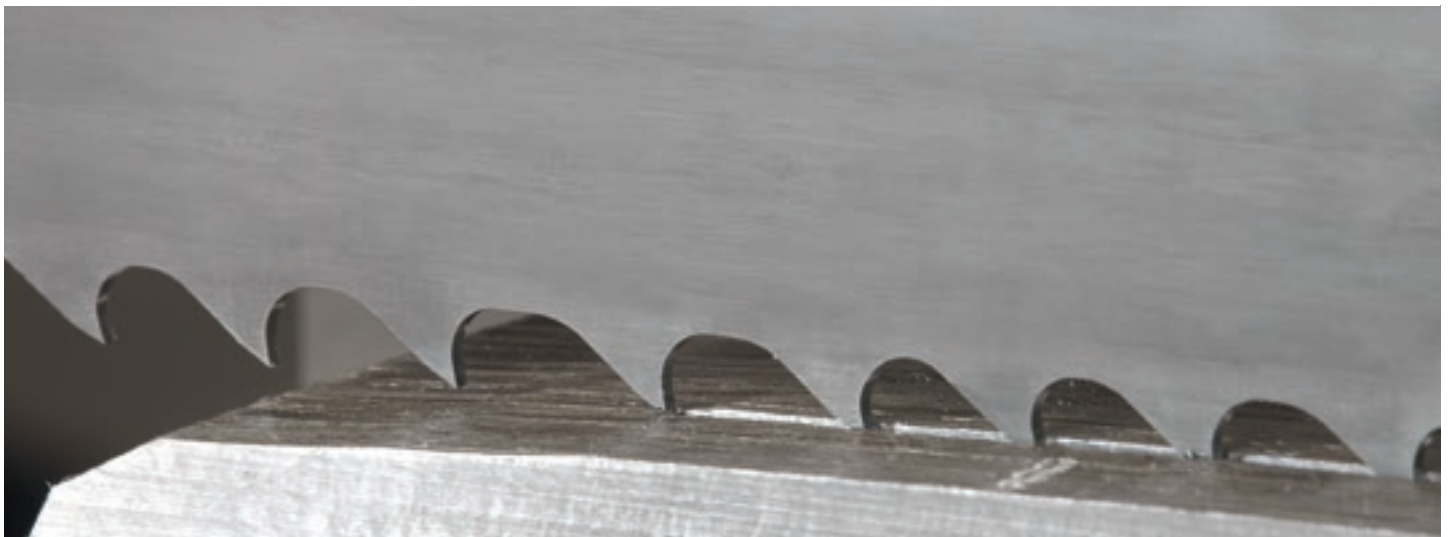
Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
27 x 0.90	1-1/16 x 0.035	HV				
34 x 1.10	1-3/8 x 0.042	VA	VA			
41 x 1.30	1-5/8 x 0.050	HV, VA	HV, VA			
54 x 1.60	2-1/8 x 0.063		HV			
Contact length		120-200 mm	200-340 mm	300-550 mm	500-1000 mm	950-3000 mm

GIGANT® X3000

- For performance-related use
- For rustproof and acid-resistant steels as well as special alloys (VA)
- For quenched and tempered steels (HV)

Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
41 x 1.30	1-5/8 x 0.050			VA		
54 x 1.60	2-1/8 x 0.063			HV, VA	VA	
67 x 1.60	2-5/8 x 0.063			HV, VA	VA	
80 x 1.60	3-1/8 x 0.063			VA	HV, VA	HV, VA
100 x 1.60	4 x 0.063					HV
Contact length		120-200 mm	200-340 mm	300-550 mm	500-1000 mm	950-3000 mm

HV = Tooth shape HV, VA = Tooth shape VA
 Photo below: GIGANT® X3000



NEW: SKALAR® X3000



- For universal use with materials that are difficult to machine
- Ground tooth geometry
- For performance-related use



Dimensions Width x Thickness		Tooth pitch in tpi					
		2.5-3.4	1.8-2.5	1.4-1.8	1.2-1.6	1.0-1.4	0.7-1.0
mm	inch						
27 x 0.90	1-1/16 x 0.035	K					
34 x 1.10	1-3/8 x 0.042	K	K				
41 x 1.30	1-5/8 x 0.050	K	K	K			
54 x 1.30	2-1/8 x 0.050		K	K			
54 x 1.60	2-1/8 x 0.063	K	K	K	K	K	
67 x 1.60	2-5/8 x 0.063			K	K	K	K
80 x 1.60	3-1/8 x 0.063			K	K	K	K
100 x 1.60	4 x 0.063						K
Contact length		120-200 mm	200-340 mm	300-550 mm	400-700 mm	500-1000 mm	950-3000 mm

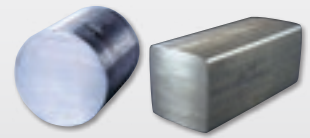
K = Hook tooth



SELEKTA® GS X3000

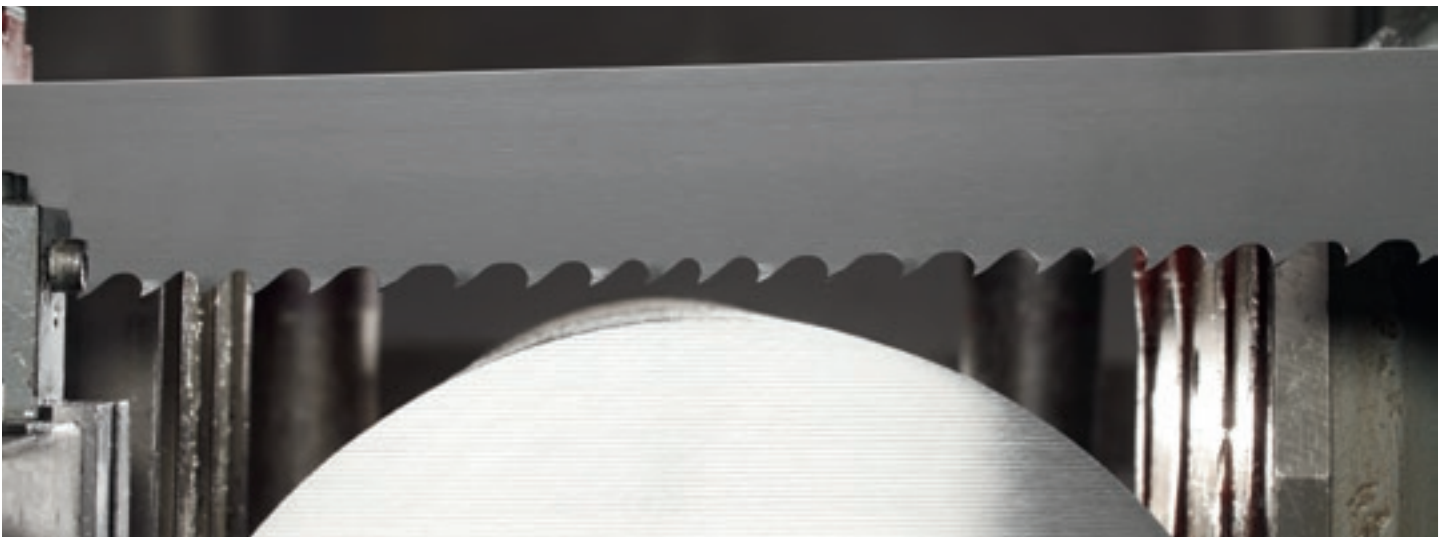


- For performance-related use
- For excellent surface quality
- For perfect cutting performance

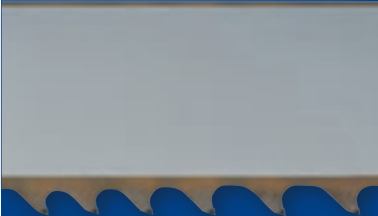


Dimensions Width x Thickness		Tooth pitch in tpi					
mm	inch	4-6	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
27 x 0.90	1-1/16 x 0.035	K	K	K			
34 x 1.10	1-3/8 x 0.042	K	K	K			
41 x 1.30	1-5/8 x 0.050	K	K	K	K		
54 x 1.30	2-1/8 x 0.050			K	K		
54 x 1.60	2-1/8 x 0.063		K	K	K	K	
67 x 1.60	2-5/8 x 0.063			K	K	K	K
80 x 1.60	3-1/8 x 0.063					K	K
Contact length		50-90 mm	90-150 mm	150-290 mm	290-550 mm	500-1000 mm	950-3000 mm

K = Hook tooth



CARBIDE TIPPED BAND SAW BLADES



- Available in specially ground and / or set tooth geometries
- Excellent results in every application thanks to the different degrees of hardness and compositions of the carbides used
- Very high cutting performance for increased machine productivity
- Coated premium blades for maximum cutting performance
- long running times and extremely high performance from our high-tech products by choosing the right substrate

Sales units:	<ul style="list-style-type: none">• Coils of up to a max. of 50 m• Welded-to-length band saw blades
Band widths:	13 to 100 mm
Tooth shapes:	S, K, T, TSN See page 48 for explanations
Tooth pitches:	Constant: 1.25 to 4 teeth per inch (tpi) Variable: 0.7-1.0 to 3-4 tpi See page 49 for explanations
Types of tooth set:	SD See page 49 for explanations
Special designs:	PW available for article groups: DUROSET®, FUTURA®, FUTURA® PREMIUM, FUTURA® VA, FUTURA® PREMIUM VA

DUROSET®



- Straight-set version
- Suited for band saw machines without a carbide package
- For universal use with steels



Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
27 x 0.90	1-1/16 x 0.035	K	K			
34 x 1.10	1-3/8 x 0.042	K	K			
41 x 1.30	1-5/8 x 0.050	K	K	K		
54 x 1.30	2-1/8 x 0.050	K	K			
54 x 1.60	2-1/8 x 0.063		K	K		
67 x 1.60	2-5/8 x 0.063			K	K	
80 x 1.60	3-1/8 x 0.063				K	K
Contact length		120-200 mm	200-340 mm	300-550 mm	500-1000 mm	950-3000 mm

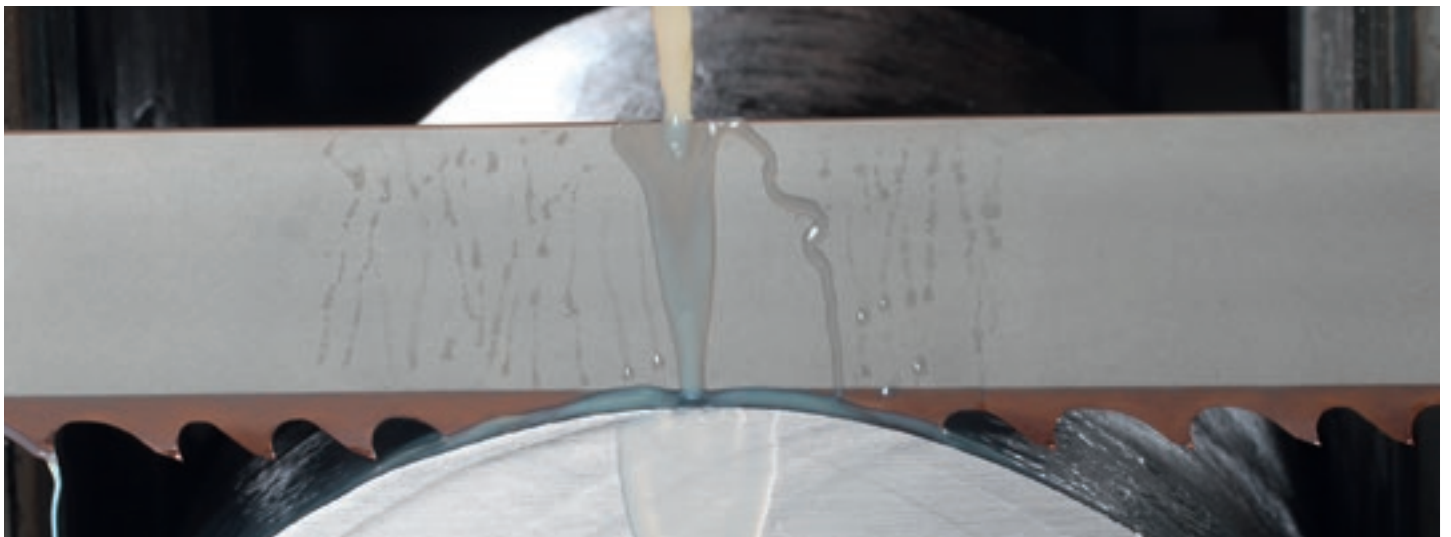
DUROSET® PREMIUM

- Coated version
- For a longer tool life

Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
34 x 1.10	1-3/8 x 0.042		K			
41 x 1.30	1-5/8 x 0.050		K	K		
54 x 1.60	2-1/8 x 0.063		K	K		
67 x 1.60	2-5/8 x 0.063			K	K	
80 x 1.60	3-1/8 x 0.063				K	K
Contact length		120-200 mm	200-340 mm	300-550 mm	500-1000 mm	950-3000 mm

K = Hook tooth

Photo below: DUROSET® PREMIUM



FUTURA®



- Ground trapezoid teeth
- For performance-related use
- For universal use with steels



Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.85-1.15
27 x 0.90	1-1/16 x 0.035	T				
34 x 1.10	1-3/8 x 0.042	T				
41 x 1.30	1-5/8 x 0.050	T	T			
54 x 1.30	2-1/8 x 0.050		T	T		
54 x 1.60	2-1/8 x 0.063		T	T	T	
67 x 1.60	2-5/8 x 0.063		T	T	T	T
80 x 1.60	3-1/8 x 0.063			T	T	T
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	700-1500 mm

FUTURA® PREMIUM

- Coated version
- For outstanding cutting performance
- For a longer tool life

Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.85-1.15
34 x 1.10	1-3/8 x 0.042	T	T			
41 x 1.30	1-5/8 x 0.050	T	T	T		
54 x 1.30	2-1/8 x 0.050		T	T		
54 x 1.60	2-1/8 x 0.063		T	T	T	
67 x 1.60	2-5/8 x 0.063		T	T	T	T
80 x 1.60	3-1/8 x 0.063				T	T
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	700-1500 mm

T = Trapezoid tooth
Photo below: FUTURA® PREMIUM



NEW: TAURUS®



- For universal use



Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
27 x 0.90	1-1/16 x 0.035	T				
34 x 1.10	1-3/8 x 0.042	T	T			
41 x 1.30	1-5/8 x 0.050	T	T	T		
54 x 1.60	2-1/8 x 0.063		T	T		
67 x 1.60	2-5/8 x 0.063			T	T	
80 x 1.60	3-1/8 x 0.063				T	T
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	950-3000 mm

NEW: TAURUS® PREMIUM

- Coated version
- For a longer tool life

Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
34 x 1.10	1-3/8 x 0.042	T	T			
41 x 1.30	1-5/8 x 0.050		T	T		
54 x 1.60	2-1/8 x 0.063		T	T		
67 x 1.60	2-5/8 x 0.063			T	T	
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	950-3000 mm

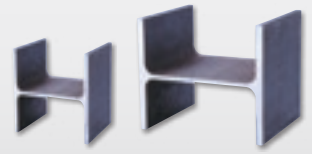
T = Trapezoid tooth
Photo below: TAURUS®



PROFIDUR®

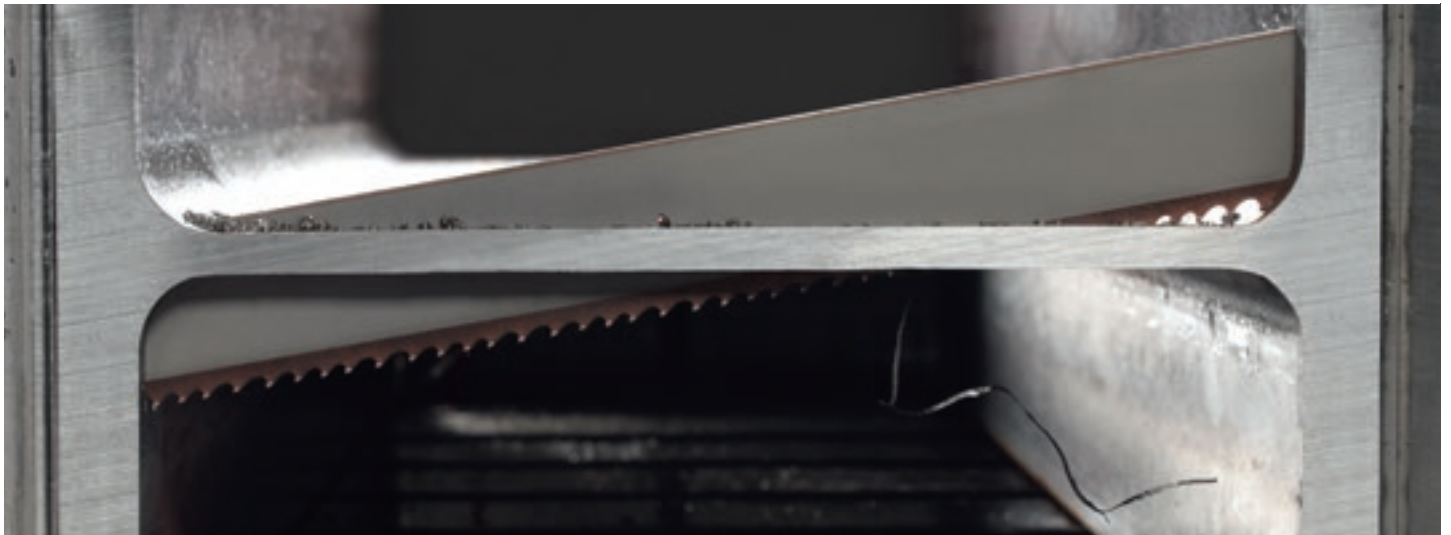


- For high-performance sawing of beams and profiles
- For burr sawing
- For excellent surface quality



Dimensions		Tooth pitch in tpi	
Width x Thickness			
mm	Inch	3-4	2-3
54 x 1.30	2-1/8 x 0.050		T
54 x 1.60	2-1/8 x 0.063	T	T
67 x 1.60	2-5/8 x 0.063		T
Contact length		90-150 mm	150-270 mm

T = Trapezoid tooth



FUTURA® VA

- Optimized tooth geometry
- For rust and acid-resistant steels
- For heat-resistant steels and special alloys



Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.85-1.15
34 x 1.10	1-3/8 x 0.042		T			
41 x 1.30	1-5/8 x 0.050	T	T	T		
54 x 1.30	2-1/8 x 0.050		T	T		
54 x 1.60	2-1/8 x 0.063		T	T		
67 x 1.60	2-5/8 x 0.063			T	T	T
80 x 1.60	3-1/8 x 0.063					T
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	700-1500 mm

FUTURA® PREMIUM VA

- Coated version
- For a longer tool life

Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.85-1.15
41 x 1.30	1-5/8 x 0.050	T	T	T		
54 x 1.60	2-1/8 x 0.063		T	T		
67 x 1.60	2-5/8 x 0.063			T	T	
80 x 1.60	3-1/8 x 0.063					T
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	700-1500 mm

T = Trapezoid tooth
Photo below: FUTURA® PREMIUM VA



FUTURA® 718



- Novel back of the blade processing
- For high cutting performance
- For nickel-based alloys and duplex steels



Dimensions Width x Thickness		Tooth pitch in tpi		
		2-3	1.4-2	1.0-1.4
mm	Inch			
41 x 1.30	1-5/8 x 0.050	T	T	
54 x 1.30	2-1/8 x 0.050	T	T	
54 x 1.60	2-1/8 x 0.063	T	T	
67 x 1.60	2-5/8 x 0.063	T	T	T
80 x 1.60	3-1/8 x 0.063			T
Contact length		150-270 mm	270-550 mm	500-1000 mm

T = Trapezoid tooth



ECODUR®



- Universal use with steels and non-ferrous metals



Dimensions Width x Thickness		Tooth pitch in tpi			
mm	Inch	3-4	2-3	1.4-2	0.85-1.15
13 x 0.80	1/2 x 0.032	T			
20 x 0.80	3/4 x 0.032	T			
27 x 0.90	1-1/16 x 0.035	T	T		
34 x 1.10	1-3/8 x 0.042	T	T	T	
41 x 1.30	1-5/8 x 0.050	T	T	T	
54 x 1.30	2-1/8 x 0.050		T	T	
54 x 1.60	2-1/8 x 0.063		T	T	T
67 x 1.60	2-5/8 x 0.063			T	
Contact length		90-150 mm	150-270 mm	270-550 mm	550-1600 mm

DUROSET® NE

- Extra wide set
- For non-ferrous metals
- For manual sawing applications

Dimensions Width x Thickness		Tooth pitch in tpi Extra wide set	
mm	Inch	3	2
20 x 0.90	3/4 x 0.035	K	
27 x 0.90	1-1/16 x 0.035	K	
34 x 1.10	1-3/8 x 0.042	K	K
Contact length		120-200 mm	200-400 mm

T = Trapezoid tooth, K = Hook tooth
Photo below: ECODUR®



FUTURA® NE



- High cutting performance with non-ferrous metals
- For excellent surface quality
- For foundry applications and aluminum blocks



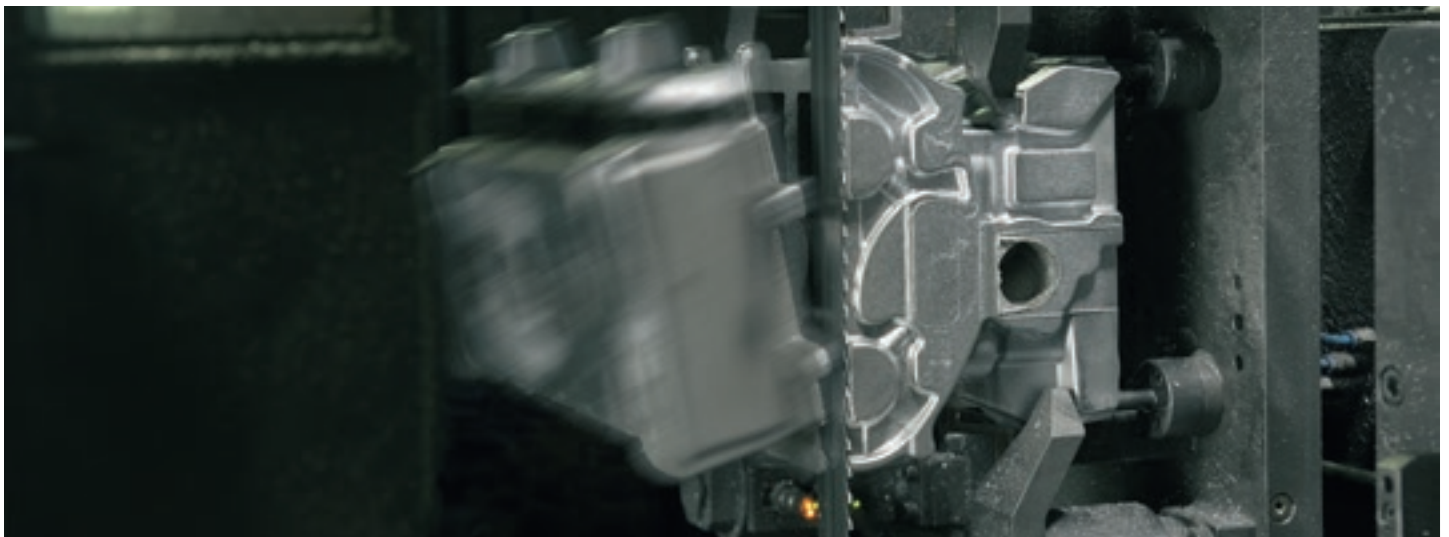
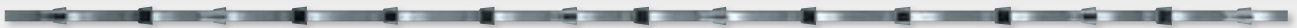
Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	0.85-1.15	0.7-1.0
27 x 0.90	1-1/16 x 0.035	T				
34 x 1.10	1-3/8 x 0.042		T	T		
41 x 1.30	1-5/8 x 0.050		T	T		
54 x 1.60	2-1/8 x 0.063			T	T	
67 x 1.60	2-5/8 x 0.063			T		
80 x 1.60	3-1/8 x 0.063				T	T
Contact length		90-150 mm	150-270 mm	270-550 mm	550-1600 mm	950-3000 mm

FUTURA® NE RS

- Reduced cutting channel width
- For aluminum blocks

Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	0.85-1.15	0.7-1.0
41 x 1.30	1-5/8 x 0.050			T		
54 x 1.30	2-1/8 x 0.050			T		
54 x 1.60	2-1/8 x 0.063				T	T
80 x 1.10	3-1/8 x 0.042			T		T
Contact length		90-150 mm	150-270 mm	270-550 mm	550-1600 mm	950-3000 mm

T = Trapezoid tooth
Photo below: FUTURA® NE



ARION® FG



- Coated band saw blade for maximum cutting performance on high-performance band saws
- For mass cuts and short product production
- For engineering, heat-treatable and tool steels



Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
54 x 1.10	2-1/8 x 0.042		T	T		
67 x 1.10	2-5/8 x 0.042	T	T	T		
80 x 1.10	3-1/8 x 0.042		T	T	T	
100 x 1.10	4 x 0.042		T	T	T	T
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	950-3000 mm

ARION® EG

- For optimal surface quality

Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
54 x 1.10	2-1/8 x 0.042	T	T			
67 x 1.10	2-5/8 x 0.042	T	T	T		
80 x 1.10	3-1/8 x 0.042		T	T	T	
100 x 1.10	4 x 0.042		T	T	T	T
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	950-3000 mm

ARION® PG

- For tubes and profiles

Dimensions Width x Thickness		Tooth pitch in tpi				
mm	Inch	3-4	2-3	1.4-2	1.0-1.4	0.7-1.0
54 x 1.10	2-1/8 x 0.042	T	T			
67 x 1.10	2-5/8 x 0.042	T	T			
Contact length		90-150 mm	150-270 mm	270-550 mm	500-1000 mm	950-3000 mm

T = Trapezoid tooth
Photo below: ARION® FG



FUTURA® SN

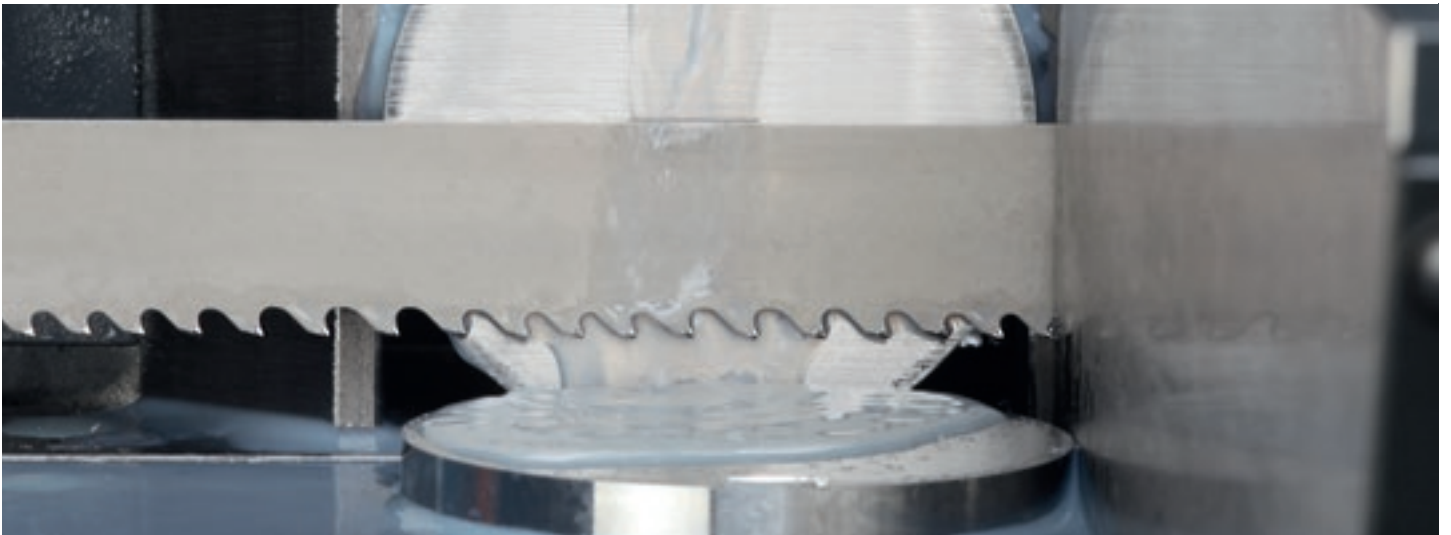


- Special geometry for surface hardened components
- For steels up to 65 HRC
- For high-performance requirements



Dimensions		Tooth pitch in tpi	
Width x Thickness			
mm	Inch	3-4	2-3
27 x 0.90	1-1/16 x 0.035	TSN	
34 x 1.10	1-3/8 x 0.042	TSN	TSN
41 x 1.30	1-5/8 x 0.050	TSN	TSN
54 x 1.60	2-1/8 x 0.063		TSN
Contact length		40-150 mm	150-270 mm

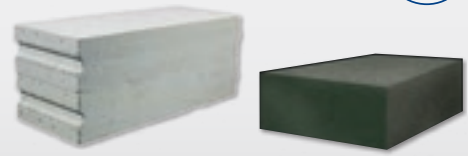
TSN = Tooth shape TSN



TCT®



- Set carbide band saw blade for cutting building materials
- For abrasive and mineral materials
- For graphite
- For sanded gray iron



Dimensions Width x Thickness		Tooth pitch in tpi			
mm	Inch	4	3	2	1.25
13 x 0.80	1/2 x 0.032	S			
20 x 0.80	3/4 x 0.032	S	S		
27 x 0.90	1-1/16 x 0.035	S	S, K	K	
34 x 1.10	1-3/8 x 0.042		S, K	K	
41 x 1.30	1-5/8 x 0.050			K	K
Contact length		80-120 mm	120-200 mm	200-400 mm	300-800 mm

S = Standard tooth, K = Hook tooth



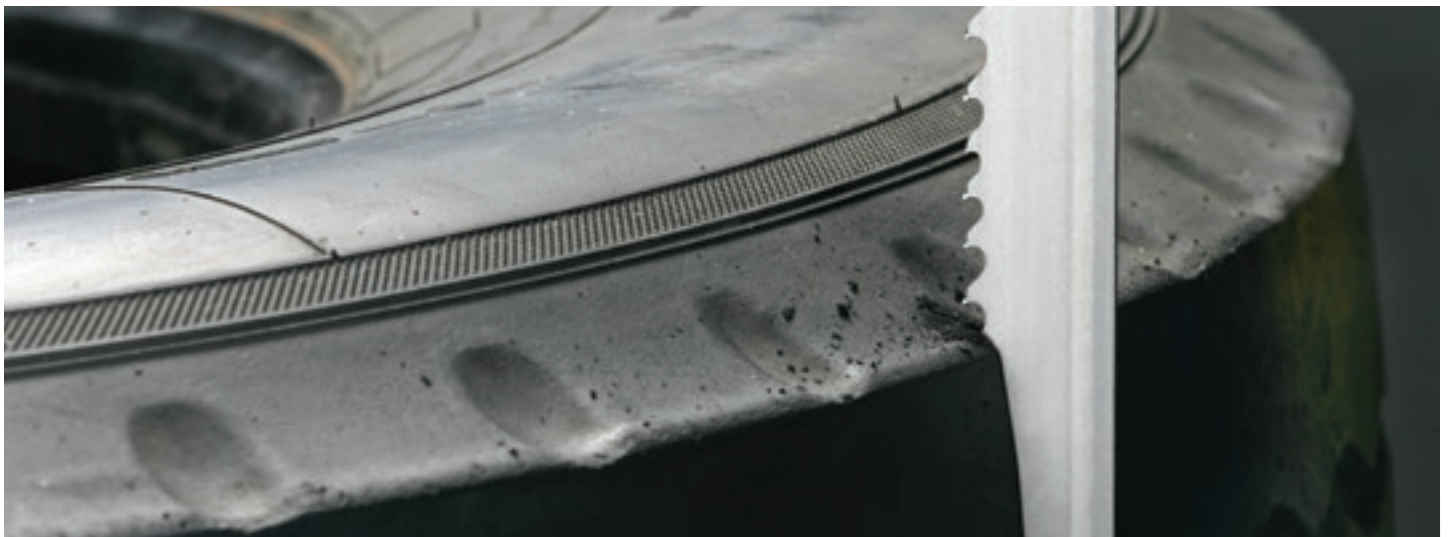
TCTYRE®

- A specially developed band saw blade for cutting tires



Dimensions		Tooth pitch in tpi	
Width x Thickness			
mm	Inch	3-4	2-3
27 x 0.90	1-1/16 x 0.035	T	T
34 x 1.10	1-3/8 x 0.042	T	T
41 x 1.30	1-5/8 x 0.050	T	T
54 x 1.60	2-1/8 x 0.063		T
Contact length		90-150 mm	150-270 mm

T = Trapezoid tooth



DIAMOND COATED BAND SAW BLADES



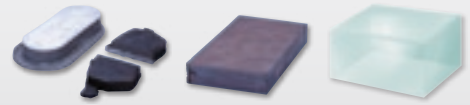
- As the hardest material known to man, diamonds are capable of cutting any material, as well as alloys.
- The unique properties of the backing materials developed for WIKUS are perfectly suited for standing up to the stress these extremely high cutting speeds cause.
- Due to the rather unique applications of DIAGRIT, we generally recommend that you contact us for advice on grain sizes to coordinate combinations of grain size and diameter of the blade to suit your application.

Sales units:	Welded-to-length band saw blades
Band widths:	10 to 100 mm
Diamond coating:	Continuous (K), segmented (S), intermittent (U), with 6 to 30 mm pitch
Grain sizes:	D64, D91, D126, D151, D181, D252, D301, D356, D426, D501, D601
Areas of application:	Silicon, Glass, Fiberglass, Natural stone
Option:	Alternative band dimensions upon request

DIAGRIT® K



- Continuous coating
- For performance-related use
- For small workpiece dimensions



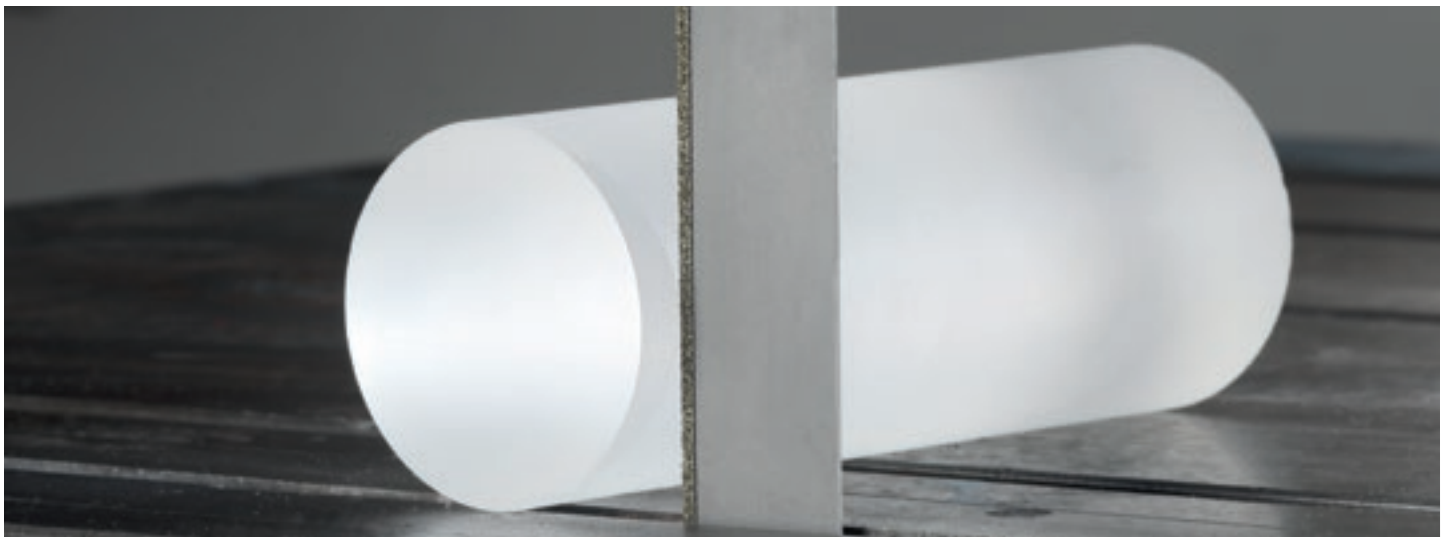
Dimensions Width x Thickness		Dimensions Width x Thickness	
mm	Inch	mm	Inch
10 x 0.50	3/8 x 0.020	27 x 0.90	1-1/16 x 0.035
13 x 0.50	1/2 x 0.020	34 x 1.10	1-3/8 x 0.042
13 x 0.65	1/2 x 0.025	41 x 0.50	1-5/8 x 0.020
16 x 0.50	5/8 x 0.020	41 x 0.80	1-5/8 x 0.032
20 x 0.50	3/4 x 0.020	41 x 1.30	1-5/8 x 0.050
20 x 0.80	3/4 x 0.032	50 x 0.90	2 x 0.035
27 x 0.50	1-1/16 x 0.020	54 x 1.10	2-1/8 x 0.042
27 x 0.70	1-1/16 x 0.028		

DIAGRIT® K VA

- The back of the blade is made of stainless steel

Dimensions Width x Thickness		Dimensions Width x Thickness	
mm	Inch	mm	Inch
13 x 0.50	1/2 x 0.020	41 x 0.50	1-5/8 x 0.020
20 x 0.50	3/4 x 0.020	54 x 1.10	2-1/8 x 0.042
27 x 0.50	1-1/16 x 0.020	60 x 0.50	2-1/3 x 0.020

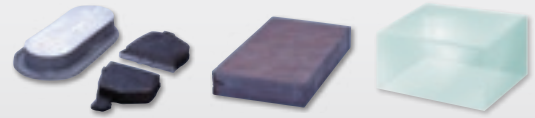
Grain sizes: D64, D91, D126, D151, D181, D252, D301, D356, D426, D501, D601
Alternative band dimensions upon request



DIAGRIT® S



- Segmented coating in rectangular or semi-circular shape
- For performance-related use
- For average workpiece dimensions



Dimensions Width x Thickness		Dimensions Width x Thickness	
mm	Inch	mm	Inch
10 x 0.50	3/8 x 0.020	27 x 0.90	1-1/16 x 0.035
13 x 0.50	1/2 x 0.020	34 x 1.10	1-3/8 x 0.042
13 x 0.65	1/2 x 0.025	41 x 0.50	1-5/8 x 0.020
16 x 0.50	5/8 x 0.020	41 x 0.80	1-5/8 x 0.032
20 x 0.50	3/4 x 0.020	41 x 1.30	1-5/8 x 0.050
20 x 0.80	3/4 x 0.032	50 x 0.90	2 x 0.035
27 x 0.50	1-1/16 x 0.020	54 x 1.10	2-1/8 x 0.042
27 x 0.70	1-1/16 x 0.028		

DIAGRIT® S VA

- The back of the blade is made of stainless steel

Dimensions Width x Thickness		Dimensions Width x Thickness	
mm	Inch	mm	Inch
13 x 0.50	1/2 x 0.020	41 x 0.50	1-5/8 x 0.020
20 x 0.50	3/4 x 0.020	54 x 1.10	2-1/8 x 0.042
27 x 0.50	1-1/16 x 0.020	60 x 0.50	2-1/3 x 0.020

Grain sizes: D64, D91, D126, D151, D181, D252, D301, D356, D426, D501, D601
Alternative band dimensions upon request



DIAGRIT® U

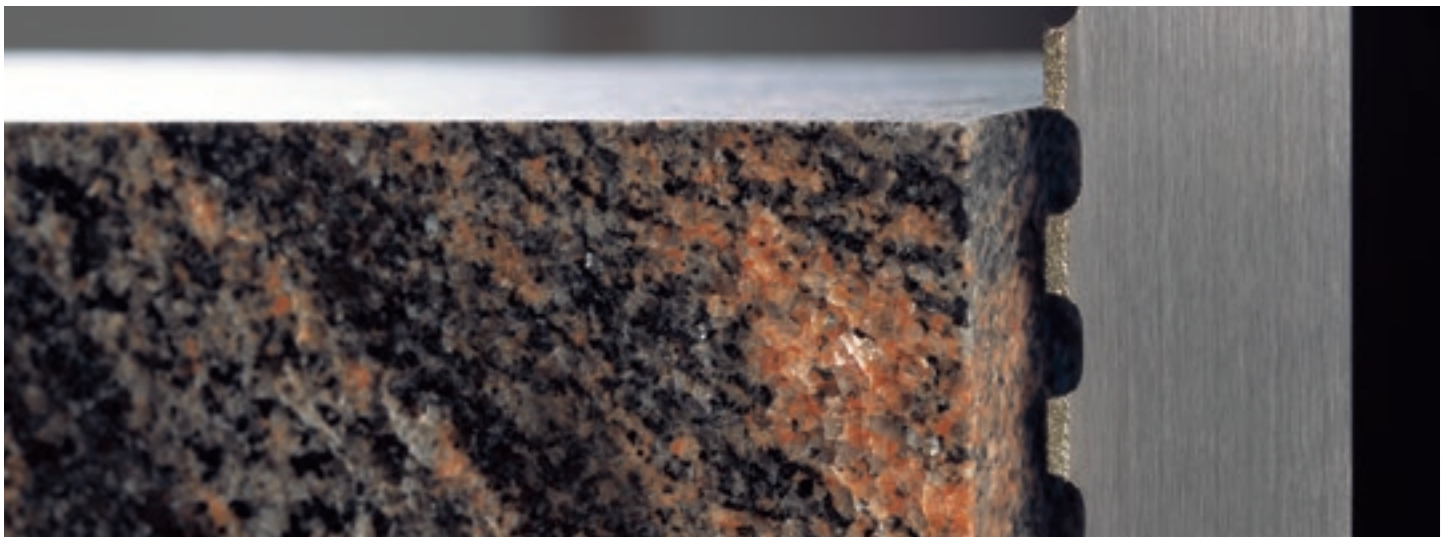


- Intermittent coating
- For performance-related use
- For large workpiece dimensions



Dimensions Width x Thickness		Pitch T	Dimensions Width x Thickness		Pitch T
mm	Inch	mm	mm	Inch	mm
10 x 0.50	3/8 x 0.020	6	41 x 0.50	1-5/8 x 0.020	20
13 x 0.50	1/2 x 0.020	8	41 x 0.80	1-5/8 x 0.032	20
13 x 0.65	1/2 x 0.025	8	41 x 1.30	1-5/8 x 0.050	20
20 x 0.50	3/4 x 0.020	8	50 x 0.90	2 x 0.035	20
20 x 0.80	3/4 x 0.032	8	54 x 1.10	2-1/8 x 0.042	20
27 x 0.70	1-1/16 x 0.028	12	80 x 1.10	3-1/8 x 0.042	12
27 x 0.90	1-1/16 x 0.035	12	100 x 0.90	4 x 0.035	12
34 x 1.10	1-3/8 x 0.042	20	100 x 1.10	4 x 0.042	12

Grain sizes: D64, D91, D126, D151, D181, D252, D301, D356, D426, D501, D601
 Alternative band dimensions upon request



CARBON STEEL BAND SAW BLADES



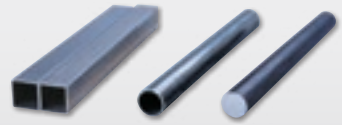
- Well-suited for tasks that include everything from basic workshop operations to machining of composite materials
- Hardened tooth tips and an extremely flexible blade body ensure high reliability

Sales units:	<ul style="list-style-type: none">• Coils in fixed lengths and manufacturing coils of up to 120 m, depending on the width• Welded-to-length band saw blades
Band widths:	5 to 25 mm
Tooth shapes:	L, S, K See page 48 for explanations
Tooth pitches:	3 to 24 teeth per inch (tpi) See page 49 for explanations
Types of tooth set:	SD, WS, GS See page 49 for explanations

EXTRA

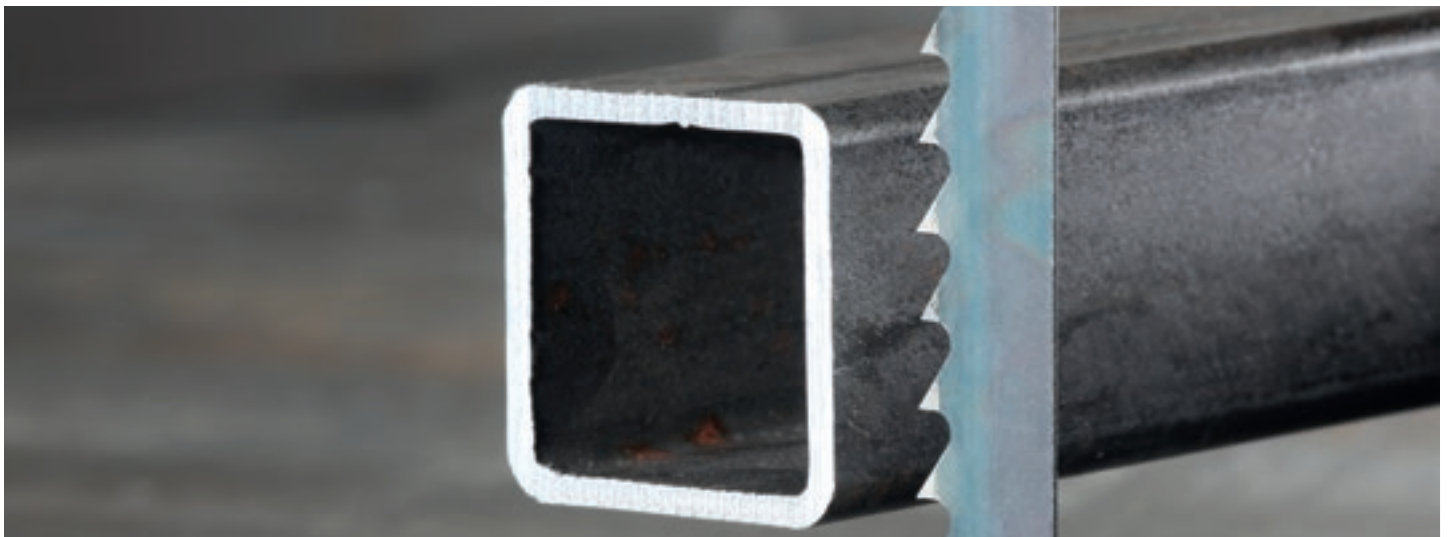


- For basic sawing applications
- For unalloyed steels of low strength



Dimensions Width x Thickness		Tooth pitch in tpi		
mm	Inch	6	SD 4	3
8 x 0.65	5/16 x 0.025	S	L	
10 x 0.65	3/8 x 0.025	S	S,L	L
13 x 0.65	1/2 x 0.025	S	S,L	L
16 x 0.80	5/8 x 0.032	S	S	L
20 x 0.80	3/4 x 0.032	S	S,L	L

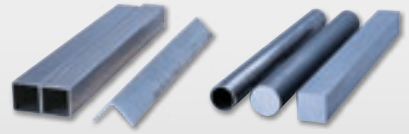
L = Skip tooth, S = Standard tooth



DIAMANT



- For basic workshop operations
- For low alloy, medium strength steels



Dimensions Width x Thickness		Tooth pitch in tpi										
mm	Inch	18	14	10	SD 8	6	4	3	WS		GS 4	
5 x 0.40	3/16 x 0.016		S						S			
5 x 0.65	3/16 x 0.025		S	S					S			
6 x 0.40	1/4 x 0.016					K						
6 x 0.65	1/4 x 0.025	S	S	S	S	K			S		K	
8 x 0.65	5/16 x 0.025	S	S	S	S	K	K		S		K	
10 x 0.65	3/8 x 0.025		S	S	S	K	K	K	S			
13 x 0.65	1/2 x 0.025		S	S	S	K	K	K	S			
16 x 0.50	5/8 x 0.020	S			S							
16 x 0.65	5/8 x 0.025			S		K	K	K		S		
16 x 0.80	5/8 x 0.032			S		K	K	K		S		
20 x 0.80	3/4 x 0.032			S	S	K	K	K		S		
25 x 0.90	1 x 0.035			S	S	S	K	K				

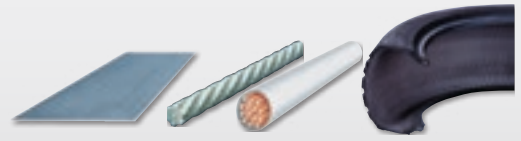
S = Standard tooth, K = Hook tooth



JET



- For fusion cutting operations
- For steels of up to 30 mm in thickness
- For composite materials



Dimensions		SD	Tooth pitch in tpi			GS
Width x Thickness			RL			
mm	Inch	14	10	8	6	4
10 x 0.65	3/8 x 0.025	S				
16 x 0.80	5/8 x 0.032		S			
20 x 0.80	3/4 x 0.032	S				
25 x 0.90	1 x 0.035			S	S	S

S = Standard tooth



SELECTING THE RIGHT BAND SAW BLADE

1. Band length

The dimensions of the band will depend on what band saw machine you are using – you will find an interactive overview of the most popular band saw machines and appropriate dimensions of WIKUS band saw blades on our website: www.wikus.com.

2. Band width

- Horizontal machines: band width specified by the manufacturer
- Vertical band saw machines: higher variations in band width are possible, please see the manufacturer's information
- Band width: the wider the band saw blade, the more stability it will have
- Contour cuts: the smallest radius to be cut is the limiting factor for the band width

3. Cutting edge material

WIKUS offers four main groups of cutting edge materials:

- **Bimetal (HSS)**
- **Carbide**
- **Diamond**
- **Carbon steel**

The machinability of the material to be cut determines what cutting material you should choose.

4. Tooth pitch

The length of engagement of the saw blade in the workpiece represents the most important parameter for choosing the tooth pitch.

The material to be sawed and the type of saw blade used also play a role in selecting the right pitch.

You will find the different engagement lengths listed with upper and lower limits in the tables on the individual products that WIKUS offers. We specify our recommended tooth pitch here.

The table to the side is used to determine the appropriate tooth pitch when cutting solid material at a constant pitch.

When cutting pipes, the outside diameter and wall thickness are the defining parameters for choosing the right tooth pitch.

Please refer to our recommendations in the table shown opposite.

Constant tooth pitch tpi	Contact length (mm)	
	from	to
24		6
18		10
14		15
10	15	30
8	30	50
6	50	80
4	80	120
3	120	200
2	200	400
1,25	300	800

5. Tooth shape

The combination of our various tooth shapes, cutting-edge materials and band saw dimensions allows for the highest possible cutting performance.

6. Types of tooth set

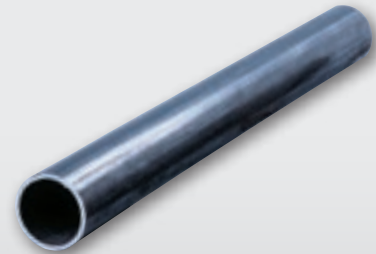
For a more detailed description, please turn the page.



s mm	Cutting of tubes																
	Outer diameter of the tube (mm) / Tooth pitch Tz in tpi																
	20	40	60	80	100	120	150	200	300	400	500	600	700	800	900	1000	1500
2	14	14	14	14	14	14	10-14	10-14	8-12	8-12	6-10	6-10	5-8	5-8	5-8	5-8	5-8
3	14	14	10-14	10-14	10-14	10-14	8-12	8-12	6-10	6-10	5-8	5-8	5-8	4-6	4-6	4-6	4-6
4	14	14	10-14	10-14	8-12	8-12	8-12	8-12	5-8	5-8	4-6	4-6	4-6	4-6	4-6	4-6	3-4
5	14	10-14	10-14	10-14	8-12	8-12	8-12	6-10	5-8	5-8	4-6	4-6	4-6	4-6	3-4	3-4	3-4
6	14	10-14	10-14	8-12	8-12	8-12	8-12	5-8	5-8	4-6	4-6	4-6	3-4	3-4	3-4	3-4	3-4
8	14	10-14	8-12	8-12	8-12	6-10	6-10	5-8	4-6	4-6	4-6	3-4	3-4	3-4	3-4	2-3	2-3
10		8-12	6-10	6-10	6-10	5-8	5-8	4-6	4-6	4-6	3-4	3-4	3-4	3-4	2-3	2-3	2-3
12		8-12	6-10	6-10	5-8	5-8	4-6	4-6	4-6	3-4	3-4	3-4	3-4	2-3	2-3	2-3	2-3
15		8-12	6-10	5-8	5-8	4-6	4-6	4-6	3-4	3-4	3-4	2-3	2-3	2-3	2-3	2-3	2-3
20			6-10	5-8	4-6	4-6	4-6	3-4	3-4	3-4	2-3	2-3	2-3	2-3	2-3	2-3	2-3
30				4-6	4-6	4-6	3-4	3-4	3-4	2-3	2-3	2-3	2-3	2-3	2-3	2-3	1.4-2
50						3-4	3-4	3-4	2-3	2-3	2-3	2-3	2-3	2-3	1.4-2	1.4-2	1.4-2
75								2-3	2-3	2-3	2-3	2-3	1.4-2	1.4-2	1.4-2	1.4-2	1.4-2
100									2-3	2-3	1.4-2	1.4-2	1.4-2	1.4-2	1.4-2	1.4-2	1.4-2
150										2-3	1.4-2	1.4-2	1.4-2	1.4-2	1.0-1.4	1.0-1.4	1.0-1.4
200											1.4-2	1.4-2	1.4-2	1.0-1.4	1.0-1.4	1.0-1.4	0.75-1.25
250												1.4-2	1.0-1.4	1.0-1.4	1.0-1.4	0.75-1.25	0.75-1.25
300													1.0-1.4	1.0-1.4	0.75-1.25	0.75-1.25	0.75-1.25
350														1.0-1.4	0.75-1.25	0.75-1.25	0.7-1.0
400															0.75-1.25	0.75-1.25	0.7-1.0
450																0.7-1.0	0.7-1.0
500																	0.7-1.0

s = Wall thickness

If you need to cut two or more tubes that are lying side by side, please use this table that takes the double wall thickness into consideration (s).



TOOTH SHAPES

Skip tooth (L)



Rake angle: 0°, for:

- flexible materials (aluminum and wood)
- only available from the tool steel assortment

Standard tooth (S)



Rake angle: 0°, for:

- short-chipping materials
- steels with a high carbon content
- tool steel and cast iron
- materials with small cross-sections
- thin-walled profiles

Profile tooth (P)



Rake angle: positive, for:

- hollow and angle profiles
- steel beams
- bundle and layer cuts
- applications that are susceptible to vibrations

Hook tooth (K)



Rake angle: positive, for:

- universal use
- non-ferrous metals and steels
- profiles and solid materials

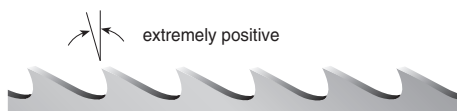
Tooth shape (HV)



Rake angle: positive and there is a distinct difference in tooth, for:

- high cutting performance
- solid materials
- short-chipping materials
- tempered steels

Tooth shape (VA)



Rake angle: extremely positive and there is a distinct difference in tooth, for:

- high cutting performance
- solid materials
- long-chipping materials
- rustproof and acid-resistant steels
- superalloys

Trapezoid tooth (T)



Rake angle: positive, for:

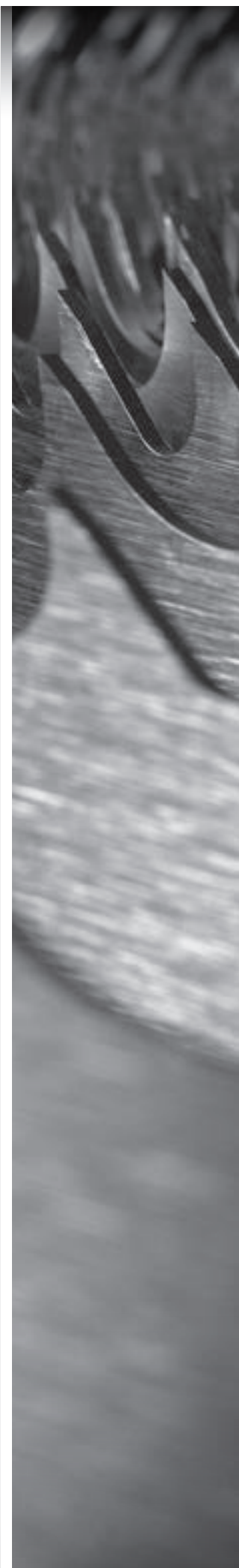
- high cutting performance
- optimal surface finishes

Tooth shape TSN (Trapezoid tooth)



Rake angle: negative, especially for:

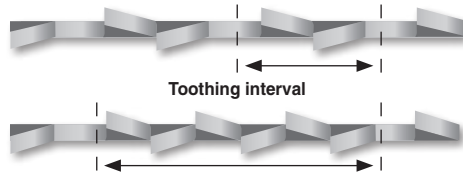
- surface-hardened shafts
- hardened steels up to 62 HRC, hard manganese steels, hard-chrome plated workpieces
- diameters of up to 300 mm



TYPES OF TOOTH SET

The free-cutting action of the band saw blade is achieved by means of the tooth set, where the teeth protrude alternately left and right beyond the blade body.

Standard set (SD)



All-purpose set for cutting thicknesses of more than 5 mm with steels, castings and hard non-ferrous metals.

Constant tooth pitch: set sequence is left/right/straight.

Variable tooth pitch: one tooth in each toothing interval is unset, the remaining teeth in the interval are recurrently set left/right or in the reverse order.

Group set (GS)



For band saw blades in the tooth pitch range of 4-18 tpi, improved surface quality is obtained using the group set.

Wavy set (WS)



We recommend wavy set for material dimensions of up to 5 mm, like sheets, thin-walled tubes and profiles.

TOOTH PITCH (T_z)

Tooth pitch refers to the number of teeth per inch (tpi). 1 inch equates to 25.4 mm.

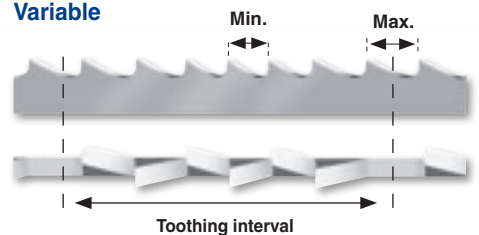
A distinction is made between constant tooth pitches with a uniform tooth distance, 2 tpi for example, and variable tooth pitches with different tooth distances within one toothing interval.

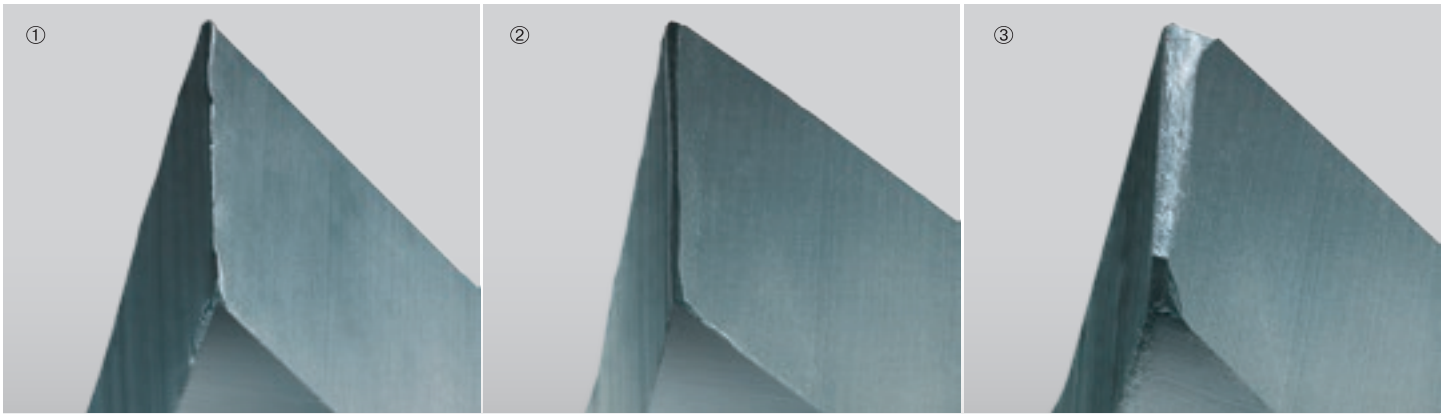
Variable tooth pitches, for instance 2-3 tpi, can be characterized by two measures: 2 tpi stands for the maximum tooth distance and 3 tpi stands for the minimum tooth distance in the toothing interval.

Constant



Variable





BREAKING IN YOUR BAND SAW BLADES

Sharp cutting edges that have extremely small edge radii are the ideal prerequisites for high cutting ability and a long service life. This is ensured by breaking in the blades properly. See pictures above:

1. New cutting edge with a very small edge radius
2. Proper breaking in of the band saw blade creates a stable cutting edge
3. Excessive strain due to improper breaking in leads to micro-breakages of the cutting edge

Before you use them for the first time:

- Band tension should be about 300 N/mm²
- Check and adjust the oil content of the cooling lubricant by using a hand refractometer
- The recommended oil content of the cooling lubricant can be found in the cutting data slide rule or in ParaMaster® 3.0

BIMETAL BAND SAW BLADES

- Determine the right cutting speed and feed rate (using the WIKUS bimetal cutting data slide rule, for instance) based on the material to be cut and its dimensions.
- Important: Use a new blade with approx. 100% of the cutting speed (m/min) and approx. 50% of the feed rate (mm/min)
- With small workpiece dimensions, approx. 300 cm² of the material should be cut to break in the blade.
- With large workpiece dimensions, we recommend breaking in over a period of about 15 min.
- After breaking in, slowly increase the cutting speed (m/min) to the determined value and then gradually increase the feed rate (mm/min) to the value that you determined before.

CARBIDE BAND SAW BLADES

- Determine the right cutting speed and feed rate (using the WIKUS carbide cutting data slide rule, for instance) based on the material to be cut and its dimensions.
- Important: Use a new blade with approx. 75% of the cutting speed (m/min) and approx. 50% of the feed rate (mm/min)
- Very important: band saw blades can be prone to vibration and vibration noise - Help: To resolve this issue, reduce the cutting speed (m/min) once again

The cutting data slide rule that WIKUS has developed for bimetal and carbide band saw blades can be of practical assistance. Or use ParaMaster® 3.0, the online cutting data program from WIKUS that features a wide variety of different functions. More information can be found on page 5 or register directly under www.paramaster.de



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- Entry / change of customer data

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