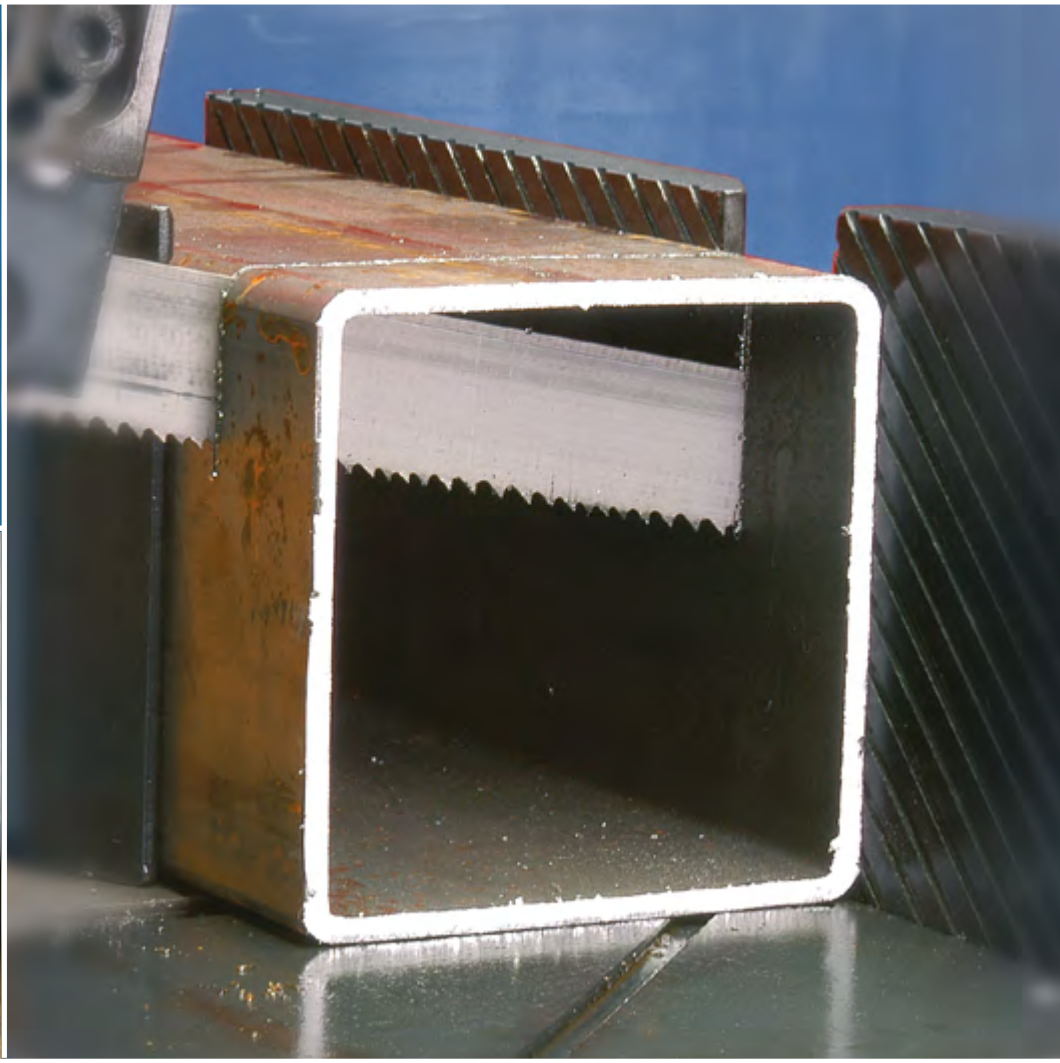
IPC Individual® Performance Cutting.

METAL BANDSAW BLADES

STANDARD | IPC-OPTIONS



2018 | 2019

WESPA®

VALUE ADDED CUTTING

STANDARD BANDSAW BLADE PROGRAM

Bi-Metal Bandsaw Blades							CARBIDE BANDSAW BLADES					CARBON BANDSAW BLADES
450 BITEC	455 BITEC PRO	452 BITEC PLUS	453 SUPER SCL	454 XENOTEC	456 XTREMA	460 DUROTEC SCL	471 GALAXY HMS	473 GALAXY HMD	475 GALAXY HMQ	476 GALAXY HMC	480 SAPHIR	410 LG SUPER 420 SPEZIAL
□ ○ ▬ ●	■ ● □ ○	■ ● ⁂ ◯		⁂ ⊞ ︽	H L U				■ ●			□ ○ ▬ ●
□ ○ ▬ ●	■ ● □ ○	■ ● ⁂ ◯		⁂ ⊞ ︽	H L U				■ ●			□ ○ ▬ ●
□ ○ ▬ ●		■ ● ⁂ ◯							■ ●			
□ ○ ▬ ●		■ ● ⁂ ◯				■ ●			■ ●			
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□ ○ ▬ ●			■ ●			■ ●		■ ●	■ ●			
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□ ○ ▬ ●			■ ●			■ ●		■ ●	■ ●	■ ●		
			■ ●			■ ●		■ ●	■ ●	■ ●		
			■ ●			■ ●		■ ●	■ ●	■ ●		
□ ○ ● [illegible] ▬		[illegible] ■ ● ⁂ ◯					■ ● ▬ [illegible]			■ ●		□ ○ ● [illegible] ▬
						■ ●		■ ●	■ ●			
□ ○ ▬ ●		■ ● ⁂ ◯					■ ● ▬	■ ●	■ ●			□ ○ ▬ ●
□ ○ ▬ ●		■ ● ⁂ ◯					■ ● ▬					
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IPC | INDIVIDUAL PERFORMANCE CUTTING® BANDSAW BLADE PROGRAM

Bi-Metal Bandsaw Blades							Carbide Bandsaw Blades			
450-IPC BITEC	455-IPC BITEC PRO	452-IPC BITEC PLUS	453-IPC SUPER SCL	454-IPC XENOTEC	456-IPC XTREMA	460-IPC DUROTEC SCL	471-IPC GALAXY HMS	473-IPC GALAXY HMD	475-IPC GALAXY HMQ	476-IPC GALAXY HMC
□ ○ ▬ ●	■ ● □ ○	■ ● ⁙ ○		⁙ ▦ ⩓	H L U				■ ●	
□ ○ ▬ ●	■ ● □ ○	■ ● ⁙ ○		⁙ ▦ ⩓	H L U				■ ●	
□ ○ ▬ ●		■ ● ⁙ ○							■ ●	
□ ○ ▬ ●		■ ● ⁙ ○	■ ●			■ ●			■ ●	
□ ○ ▬ ●		■ ● ⁙ ○							■ ●	
□ ○ ▬ ●		■ ● ⁙ ○	■ ●			■ ●		■ ●	■ ●	
□ ○ ▬ ●		■ ● ⁙ ○	■ ●			■ ●		■ ●	■ ●	■ ●
□ ○ ▬ ●		■ ● ⁙ ○	■ ●			■ ●		■ ●	■ ●	■ ●
			■ ●			■ ●		■ ●	■ ●	■ ●
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□ ○ ● ⊥ ▬		⊥ ■ ● ⁙ ○					■ ● ▬ ⊥			■ ●
			■ ●			■ ●		■ ●	■ ●	
□ ○ ▬ ●		■ ● ⁙ ○					■ ● ▬	■ ●	■ ●	
□ ○ ▬ ●		■ ● ⁙ ○					■ ● ▬			
							⌂	◉		
□ ○ ▬ ●		■ ● ⁙ ○					■ ● ▬ ⌂			

IPC bandsaw blades: Customized bandsaw blades based on material grade and customer targets for cutting application.
The sawing performance is depend from operating conditions. Support and recommendation you can receive from WESPA service or certified IPC partner.

VALUE ADDED CUTTING

is a promise about the benefits and added value that a customer receives by sawing with our band saw blades or services.“

WESPA
VALUE ADDED CUTTING

WESPA

PRODUCTS

BI-METAL BANDSAW BLADES

CARBIDE BANDSAW BLADES

CARBON BANDSAW BLADES

TECHNOLOGY

Top-quality tools made in Germany: manufacturing location Melsungen.

From a small local manufacturer to a worldwide technology partner.

65 years ago, WESPA started in Hessen's Spangenberg with the production of hand hacksaws; today we are a reliable technology partner in worldwide demand.

WESPA is one of the leading global manufacturers of bandsaw blades. More than 100 employees are producing an unmatched range of products in the headquarters in Melsungen, Germany. Which meet the requirements of numerous different sectors.

Famous global players rely on the bandsaw blades manufactured by WESPA, from automotive and aviation to the mechanical engineering industry, to name but a few. As a full-range provider, we are offering customized solutions to improve our customers' competitiveness. Our comprehensive sales network in over 60 countries guarantees fast availability, short delivery times and extensive service.

Success based on trust.

WESPA‘s customers can rely unconditionally on our products. Already the quality and performance of our standard products is excellent. Moreover, customers are able to further enhance the features of the bandsaw blade by specific product modifications depending on their requests. These modifications can minimize tool costs, increase the maximum throughput, decrease the running machine cost or improve the quality of the surface.

WESPA offers customized solutions for all possible sawing applications, which increase the production processes efficiency. The customers express their trust in us by choosing our products worldwide.

For long-term success.

At WESPA we are interested in a long-term success of our customers. Competent and individual costumer service means for us that we can match client-specific applications and requirements and suggest appropriate bandsaw blades. Accurately fitting system solutions with additional benefit and longtime partnerships are the results of our efforts.

A comprehensive service package completes WESPA's business activities. From performance checks, specialized delivery and maintenance services to training: WESPA is there to help their customers in words and deed throughout of the products economic life-time.

We support companies to reduce their manufacturing costs by significantly reducing the cutting times with customized band saw blades.
We give companies with our products and services a much higher competitiveness.

Wespa reacts flexible on changes of customer's requirements in the worldwide market.

Continuous investments and innovations in production process guarantees first-class quality by Wespa | Made in Germany.

Individual highly efficient solutions, innovation, customer proximity, comprehensive service package, continuous investments in our production location in Germany, dedicated employees and the exact knowledge of worldwide market requirements makes WESPA to a strong partner.

This is our benefit from over 65 years of experience in the production of bandsaw blades.

CONTACT

WESPA Metallsägenfabrik
Simonds Industries GmbH

Spangenberger Straße 61
D – 34212 Melsungen, Germany
Phone +(49) 5661 – 92 63 0
Fax +(49) 5661 – 92 63 166

www.wespa-simonds.de
info@wespa-simonds.de

Company was founded 1950
founded in Spangenberg Loenz Weisel
a Pioner for metal sawing in Germany

1992 Integration
in SIMONDS Group Global supply

1950 | 1963 | 1974 | 1987 | 1992

Production Bandsaw machines
New factory 4
1974 in Spangenberg

Bi-Metal production
Start BI-Metal bandsaw blade production
building extension

WESPA®

PROFESSIONAL CUTTING

WESPA®

VALUE ADDED CUTTING

Intruduction IPC
IP (Individual Performance Cutting)
New Performance and Services

Factory Extension
Manufacturing Area 9.000 m²
Upgrade with new production technology

2005 | 2011 | 2013 | 2016 | 2017

Moving in new Factory Melsungen
New Lean Production

New Bandsaw Blade Generation
Start new bandsaw blade generation

Individual Performance Cutting®

IPC

Individual ®
Performance
Cutting.

IPC | Individual Performance Cutting is a unique industry bandsaw blade program for customized bandsaw blades. The IPC-Options (customization) is selected for specific customer targets, performance improvements and competitive business development.

Individual Performance Cutting® Options*

- **A** For longer blade life, no break in time at solid material
- **C** Higher cutting rate, reduce cut time, longer blade life at solid material
- **G** Longer blade life, better surface
- **H** For longer blade life, no break in time at structural steel and thin material
- **S** High productivity and reduce cut time at solid material and large dimension
- **X** Tooth protection and no blade pinching at structural steel cutting and solid material

* IPC options are available depending on size and tooth by product. (see catalog pages)

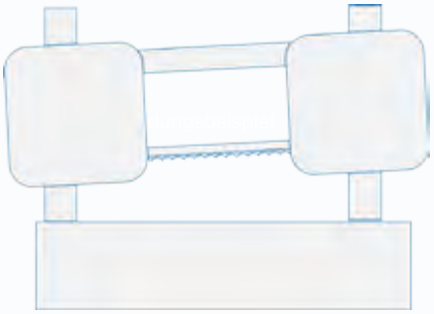
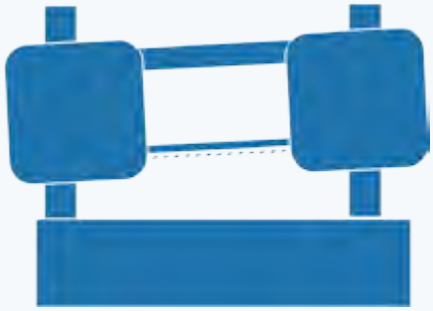
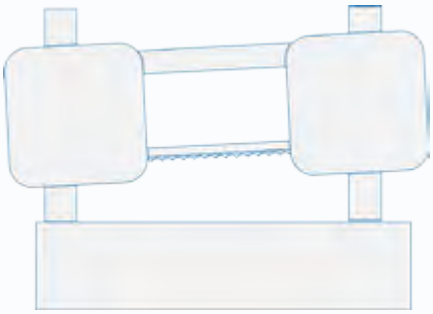
Anwendungsbeispiel

Advantages of A and C

- Higher feed rates and shorter cutting times
- Longer blade life
- Increased productivity and reduced manufacturing costs
- Profitable alternative to HM saw blades
- Shorter delivery periods by reduction of cutting times
- Higher quality of manufacture and product
- Increased manufacturing accuracy
- More flexible Work scheduling
- Protection of environment and resources

Due to a better performance of our tools, the performance requirements are quickly adjust depending on the assignment or shift work can be organized more efficiently.

The new generation of band saw blades achieves significantly higher cutting values. This results in most improvements being with regard to sawing times and service lifetimes, tool changing and finally also eco friendliness, energy and resource management. The recommended option can be chosen jointly with WESPA: „using configuration software, we will evaluate the performance, query the desired targets and then fulfil them based on the product options." Depending on the configuration, this can result in other benefits, such as better surfaces or less operation noise.

Standard with Carbide Bandsaw Blades	The new class in Band Saw Technology	Standard with BI-METAL Bandsaw Blades
Bandsaw Machine with **Carbide Bandsaw Blade**	Bandsaw Machine with **IPC-Performance Bandsaw Blade**	Bandsaw Machine with **BI-Metal Bandsaw Blade**
		
Carbide Performance and Bladelife	Increase of Perfromance* and Bladelife* for BI-Metal Bandsaw Machines *depending on material grade and machinetype	Standard BI-Metal Performance and Bladelife

IPC (Individual Performance Cutting) customized Bandsaw blades working significantly different compare to conventional bandsaw blades.
For operator and cutting application support are different APPs and Services for optimal cutting parameters available.
Our sales and service team would support you.

WESPA®
VALUE ADDED CUTTING

BANDSAW BLADE ADVICE

These symbols help you to select the best bandsaw blades.

Material Shape
These symbols help you to select the best bandsaw blades.

2

Material Group
With the numbers from material groups you can see the machinability range - from very easy to very difficult to cut. (see flip page left side)

z. B.:
6/10

Teeth per Inch (TPI) by bandsaw blade dimension
Please select the correct Teeth per inch (TPI). For requirements TPI by Material dimension, please see pages 44-46.

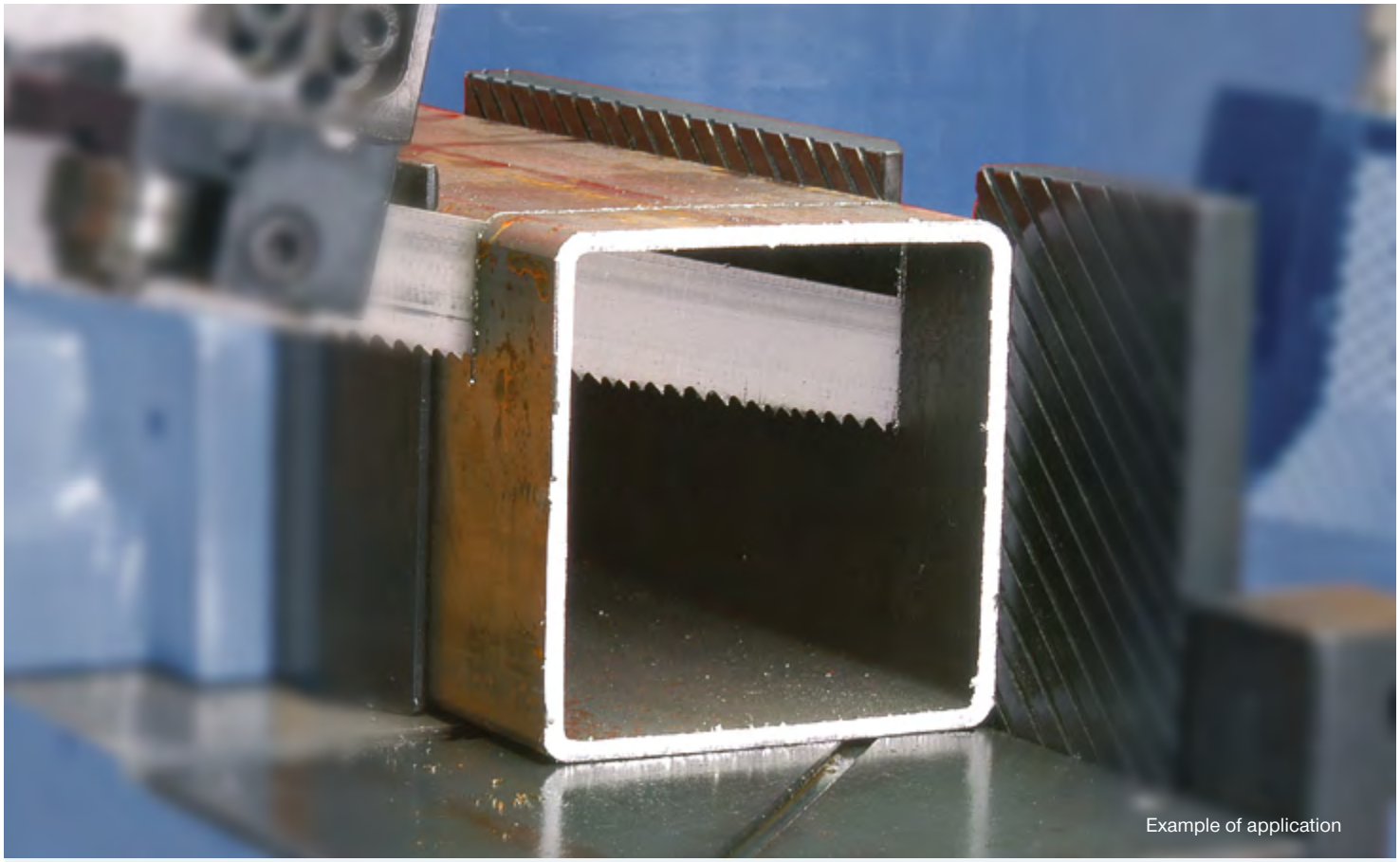
z. B.:
27 x 0,90

Bandsaw Blade Dimension
Please select in horizontal line the available TPI by Bandsaw blade dimension.

IPC

IPC | Individual Performance Cutting® Options (A, C, G, S, X)
IPC | Individual Performance Cutting is a unique industry bandsaw blade program for customized bandsaw blades. The IPC-Options (customization) is selected for specific customer targets, performance improvments and competitive business development.

For support and selecting the best possible bandsaw blade, please contact our customer service center or our distribution partner in your country.



Bi-Metal Bandsaw Blades Standard

WESPA BITEC M 42

Product Group 450

Top performance bandsaw blade, particularly wear-resistant, high cutting accuracy, in a great variety of dimensions and tooth numbers.
Particularly suitable for vibration-reduced cutting of thin or medium materials.

Width x thickness		teeth per inch I Combi Tooth												
mm	inch	3/4	4	4/6	5/8	6/10	6	8/12	8	10/14	10	14	18	14/18
6 x 0,90	1/4" x 0,035									□	□	□		
10 x 0,90	3/8" x 0,035										□	□		
13 x 0,65	1/2" x 0,025					■		■		■	■	■	■	
13 x 0,90	1/2" x 0,035					■		■		■		■		
19 x 0,90	3/4" x 0,035			■	■	■	■	■	■	■	■	■		■
27 x 0,90	1" x 0,035	■	■	■	■	■	■	■	■	■	■	■		■
34 x 1,10	1 1/4" x 0,042	■	■	■	■	■		■						
41 x 1,30	1 1/2" x 0,050	■		■	■									

□ on request (no stock item)

1 2 3 4 5 6 7 8 11 13 14 fe

Example of application

Bi-Metal Bandsaw Blades | IPC

WESPA BITEC M 42 IPC

Product Group 450 - IPC

A For longer blade life, no break in time at solid material to 500 N/mm²

C Higher cutting rate, reduce cut time, longer blade life at solid material for easy and medium machinebility to 1000 N/mm²

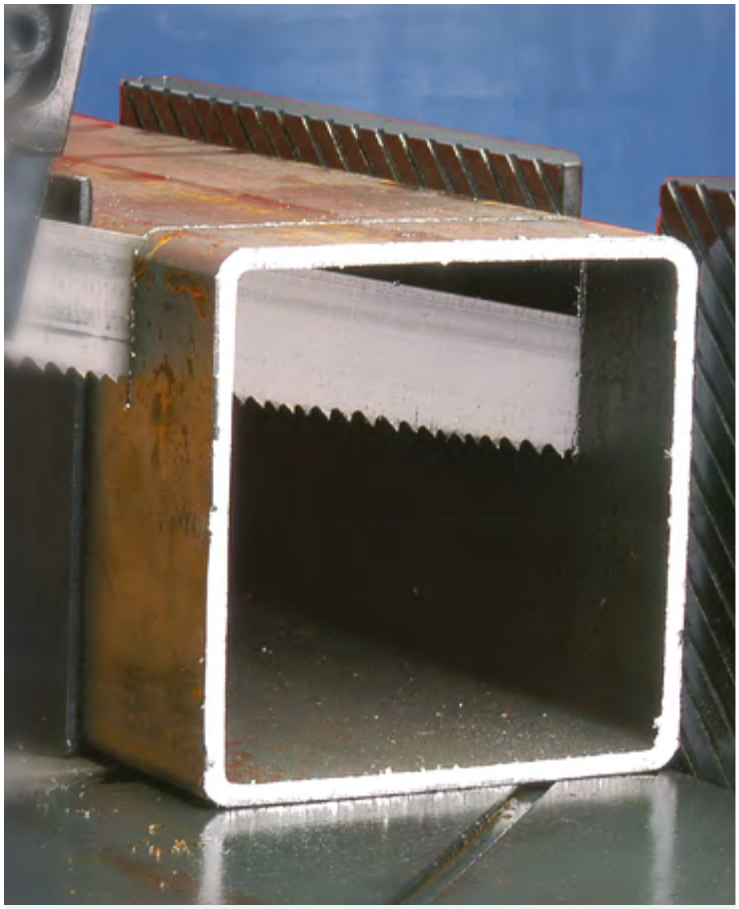
H For longer blade life, no break in time at structural steel and thin material

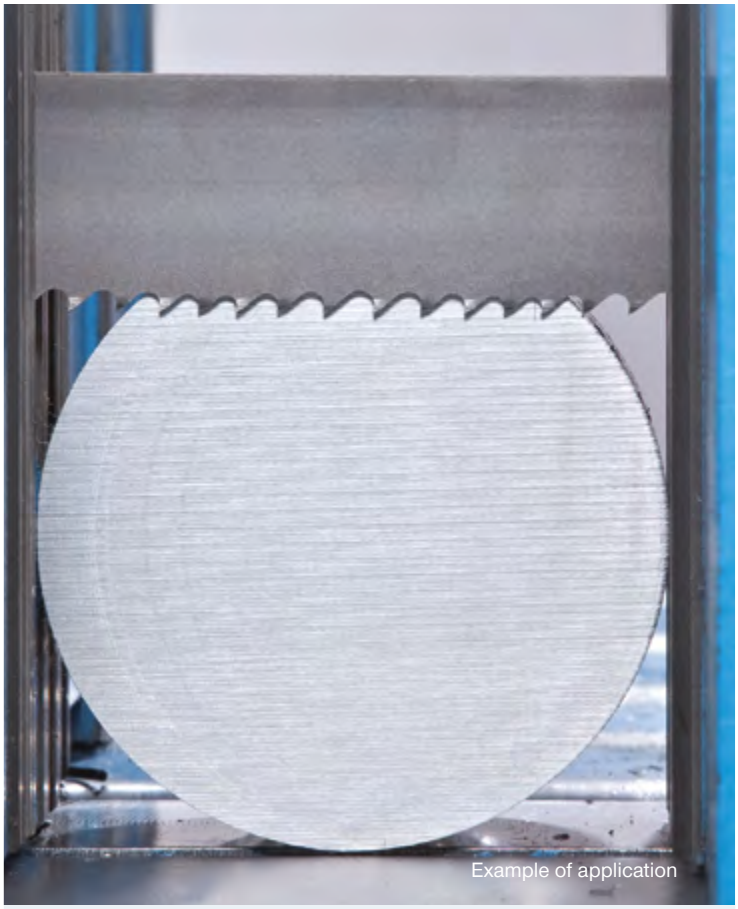
width x thickness

mm	inch	3/4	4/6	5/8	6/10	8/12
19 x 0,90	3/4" x 0,035				A	A
27 x 0,90	1" x 0,035			H	A	A
34 x 1,10	1/4" x 0,042	H	A H	A H	A	A
41 x 1,30	1 1/2" x 0,050	C H	C H	H		

1 2 3 4 5 6 7 8 11 13 14 fe

☐ Option on request





Bi-Metal Bandsaw Blades Standard

WESPA BITEC PRO M42

Product Group 455

Universal Bi-Metal bandsaw blade with high cutting accuracy.
For materials with easy machinability and mixing shapes.
Available as welded loop or „EcoCoil“.

width x thickness

mm	inch	3/4	4/6	5/8
27 x 0,90	1" x 0,035	■	■	■
34 x 1,10	1 1/4“ x 0,042	■	■	■
41 x 1,30	1 1/2“ x 0,050	■	■	■

1 2

● ■ □ ○

Example of application

Bi-Metal Bandsaw Blades | IPC

WESPA BITEC PRO M42 IPC

Product Group 455 - IPC

A For longer blade life, no break in time at solid material to 500 N/mm²

width x thickness				
mm	inch	3/4	4/6	5/8
27 x 0,90	1“ x 0,035	A	A	A
34 x 1,10	1 1/4“ x 0,042	A	A	A
41 x 1,30	1 1/2“ x 0,050	A	A	A

1 2

☐ Option on request

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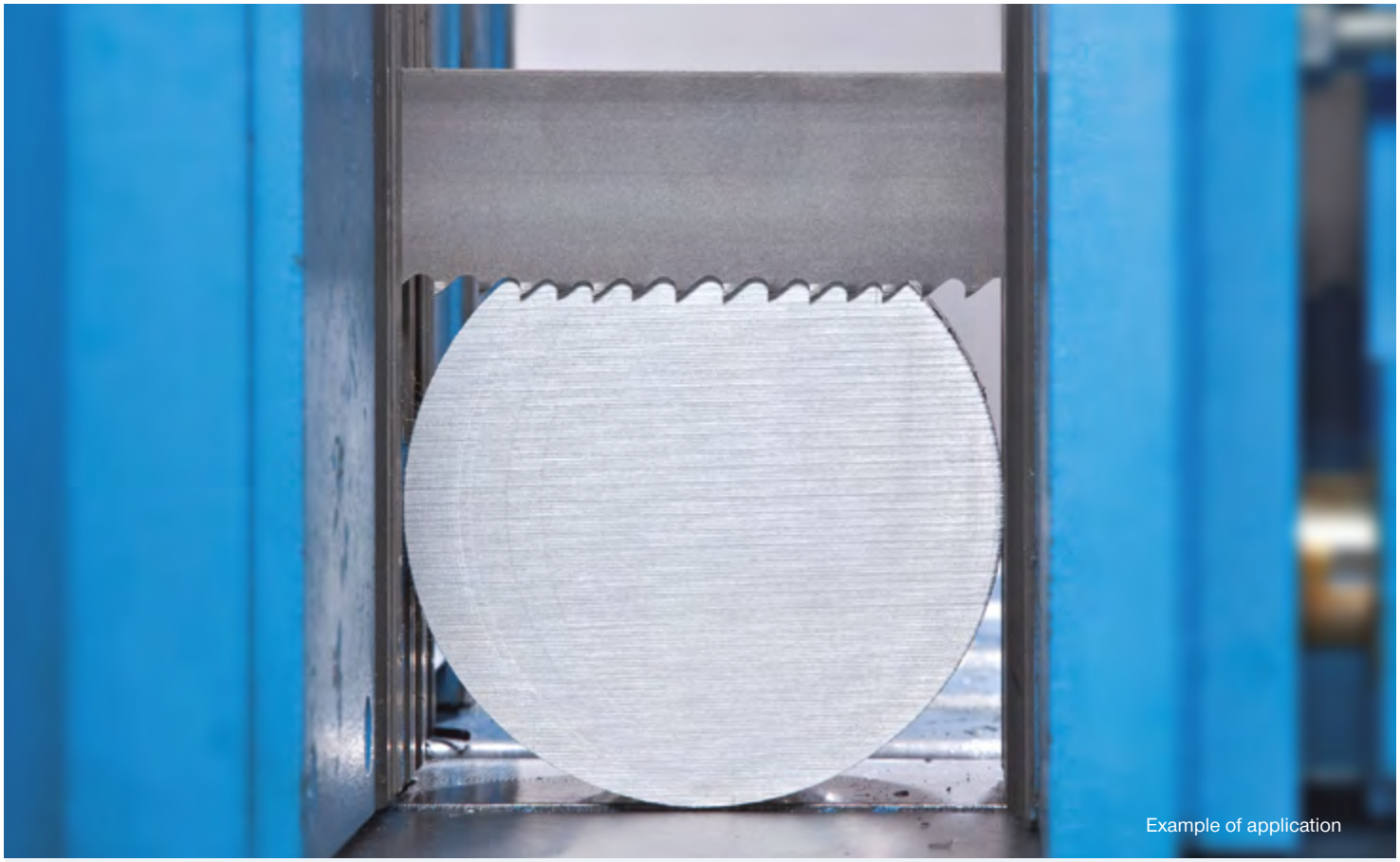


Bi-Metal Bandsaw Blades Standard

WESPA BITEC M 42 plus

Product Group 452

Top performance bandsaw blade with positive rake angle, ensuring a high cutting performance and long blade life. It is particularly wear-resistant and provides for high cutting accuracy. Available in a great variety of dimensions and tooth numbers.

width x thickness		Teeth per inch I Combi Tooth positive											
mm	inch	0,75/1,25	1,1/1,4	1,25	1,4/2	2/3	2	3/4	3	4/6	4	5/8	6
6 x 0,90	1/4" x 0,035												□
10 x 0,90	3/8" x 0,035										□		□
13 x 0,65	1/2" x 0,025										■		■
13 x 0,90	1/2" x 0,035								■		■		■
19 x 0,90	3/4" x 0,035								■	■	■	■	
27 x 0,90	1" x 0,035					■		■	■	■	■	■	■
34 x 1,10	1 1/4" x 0,042			□		■		■	■	■		■	
41 x 1,30	1 1/2" x 0,050			□	■	■	□	■		■		■	
54 x 1,30	2" x 0,050			■	■	■		■		■			
54 x 1,60	2" x 0,062	■	■	■	■	■		■		■			
67 x 1,60	2 5/8" x 0,062	■	■	■	■	■		■		□			
80 x 1,60	3 1/8" x 0,062	■	■		■								

□ on request (no stock item)

1 2 3 4 5 11 13 14 fe

Example of application

Bi-Metal Bandsaw Blades | IPC

WESPA BITEC M 42 plus IPC

Product Group 452 - IPC

A For longer blade life, no break in time at solid material to 500 N/mm²

C Higher cutting rate, reduce cut time, longer blade life at solid material at solid material for easy and medium machinebility to 1000 N/mm²

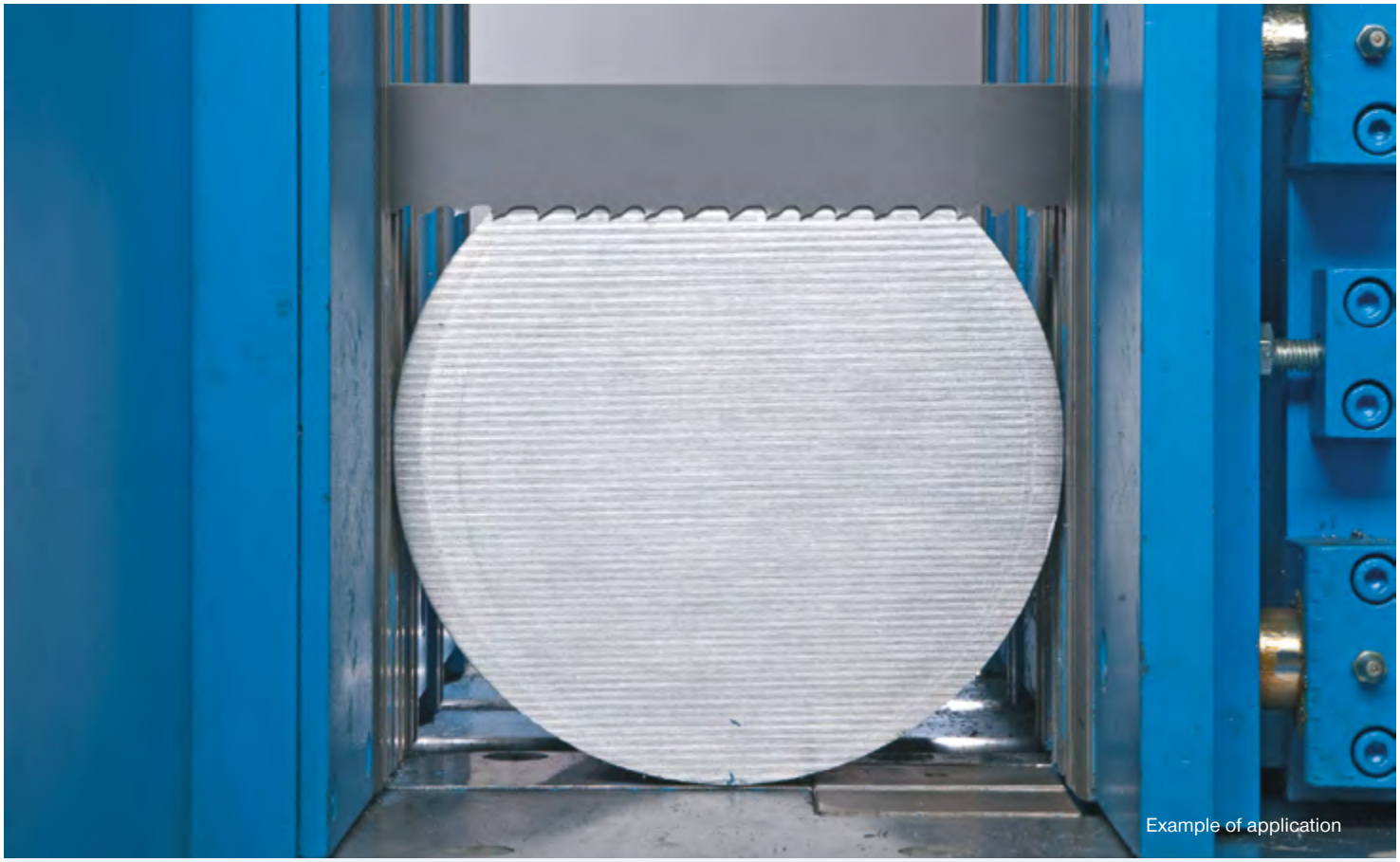
H For longer blade life, no break in time at structural steel and thin material

S High productivity and reduce cut time at solid material and large dimension >1000N/mm²

width x thickness		Teeth per inch / Combi Tooth positive					
mm	inch	4/6	3/4	2/3	1,4/2	1,1/1,4	0,75/1,25
27 x 0,90	1" x 0,035	A	A	A			
34 x 1,10	1 1/4" x 0,042	A H	A H	A H S			
41 x 1,30	1 1/2" x 0,050	C H	C H	C H S	C S		
54 x 1,30	2" x 0,050	H	C H	C H S	C S		
54 x 1,60	2" x 0,062		C H	C H S	C S	C S	C S
67 x 1,60	2 5/8" x 0,062		C	C H S	C H S	C S	C S
80 x 1,60	3 1/8" x 0,062				C		C

1 2 3 4 5 11 13 14 ~~fe~~

☐ Option on request



Bi-Metal Bandsaw Blades Standard

WESPA SUPER SCL

Product Group 453

High Performance Bi-Metal band saw blade with unique tooth geometry and positive rake angle, designed to cut hard materials and stainless steels.
Special features is the very smooth running.
Designed for machines with constant and variable feed rate.

width x thickness		Teeth per inch / Combi Tooth positive					
mm	inch	0,7/0,9	1,1/1,4	1,4/2	2/3	3/4	4/6
27 x 0,90	1" x 0,035				■	■	■
34 x 1,10	1 1/4" x 0,042			□	■	■	■
41 x 1,30	1 1/2" x 0,050			■	■	■	
54 x 1,30	2" x 0,050			□	□	□	
54 x 1,60	2" x 0,062	□	■	■	■	□	
67 x 1,60	2 5/8" x 0,062	■	■	■			
80 x 1,60	3 1/8" x 0,062	■	■				

□ on request (no stock item)

6 7 8 9 10

● ■

Example of application

Bi-Metal Bandsaw Blades | IPC

WESPA SUPER SCL IPC

Product Group 453 - IPC

C Higher cutting rate, reduce cut time, longer blade life at solid material at solid material for easy and medium machinebility to 1000 N/mm²

S High productivity and reduce cut time at solid material and large dimension >1000N/mm²

width x thickness		Teeth per inch / Combi Tooth positive				
mm	**inch**	**0,7/0,9**	**1,1/1,4**	**1,4/2**	**2/3**	**3/4**
27 x 0,90	1" x 0,035					
34 x 1,10	1 1/4" x 0,042					
41 x 1,30	1 1/2" x 0,050			C S	C S	C S
54 x 1,30	2" x 0,050			C S	C S	C S
54 x 1,60	2" x 0,062	C S	C S	C S	C S	C
67 x 1,60	2 5/8" x 0,062	C S	C S	C S		
80 x 1,60	3 1/8" x 0,062	C S	C S			

4 | 6 | 7 | 8 | 9 | 12

☐ Option on request

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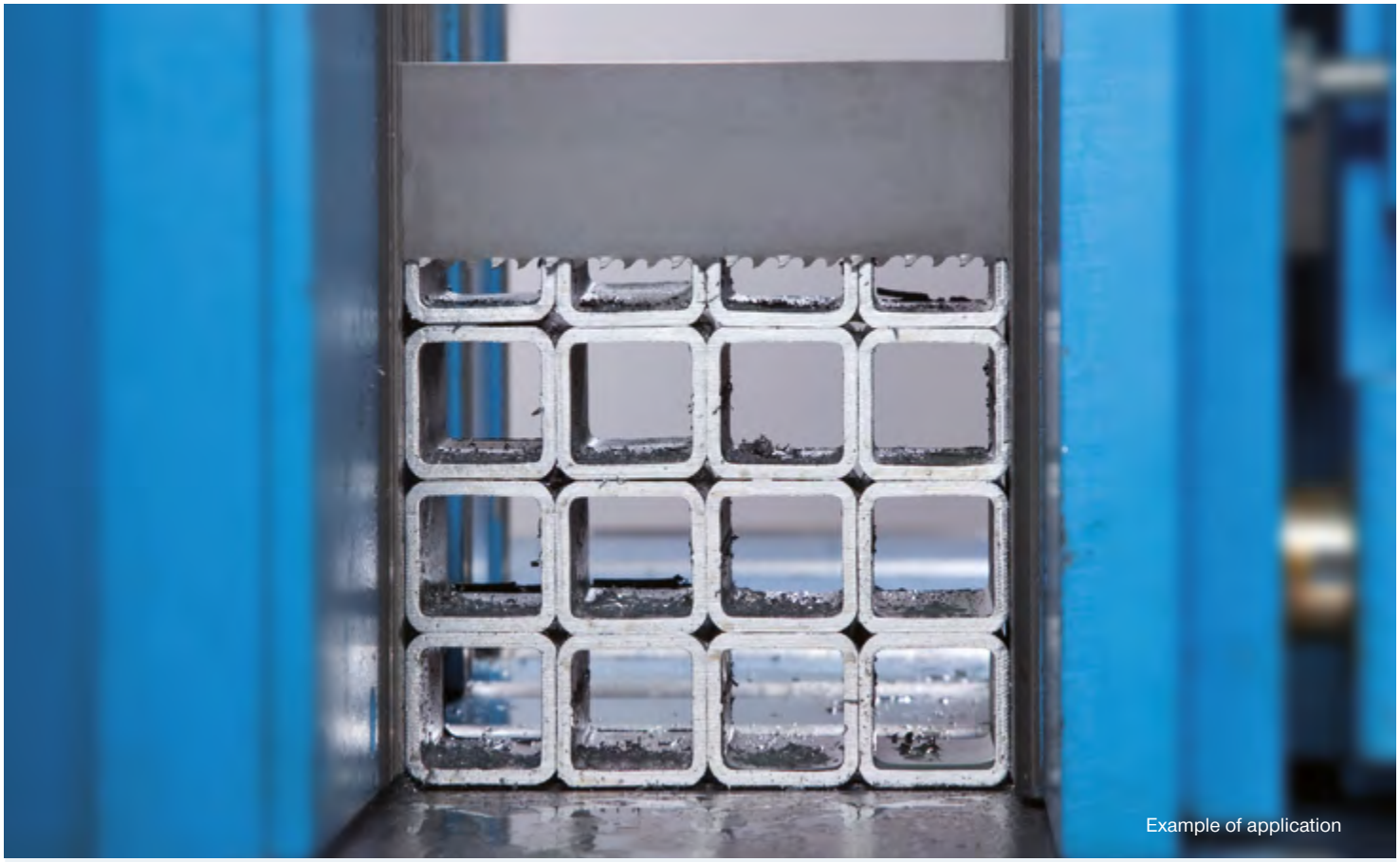

Example of application

Bi-Metal Bandsaw Blades Standard

WESPA ZENOTEC

Product Group 454

Innovative bandsaw blade with a complete new tooth design and rationalized tooth spacing. Special tooth geometry provides an optimum cutting performance across a wide array of applications and materials. A bandsaw blade developed particularly for cutting tubes and structural shapes in layers and bundles.

width x thickness		Teeth per inch			
mm	inch	2/3	3/4	4/6	5/8
19 x 0,90	3/4" x 0,035			■	■
27 x 0,90	1" x 0,035		■	■	■
34 x 1,10	1 1/4" x 0,042	■	■	■	■
41 x 1,30	1 1/2" x 0,050	■	■	■	

1 2

Example of application

Bi-Metal Bandsaw Blades | IPC

WESPA XENOTEC IPC

Product Group 454 - IPC

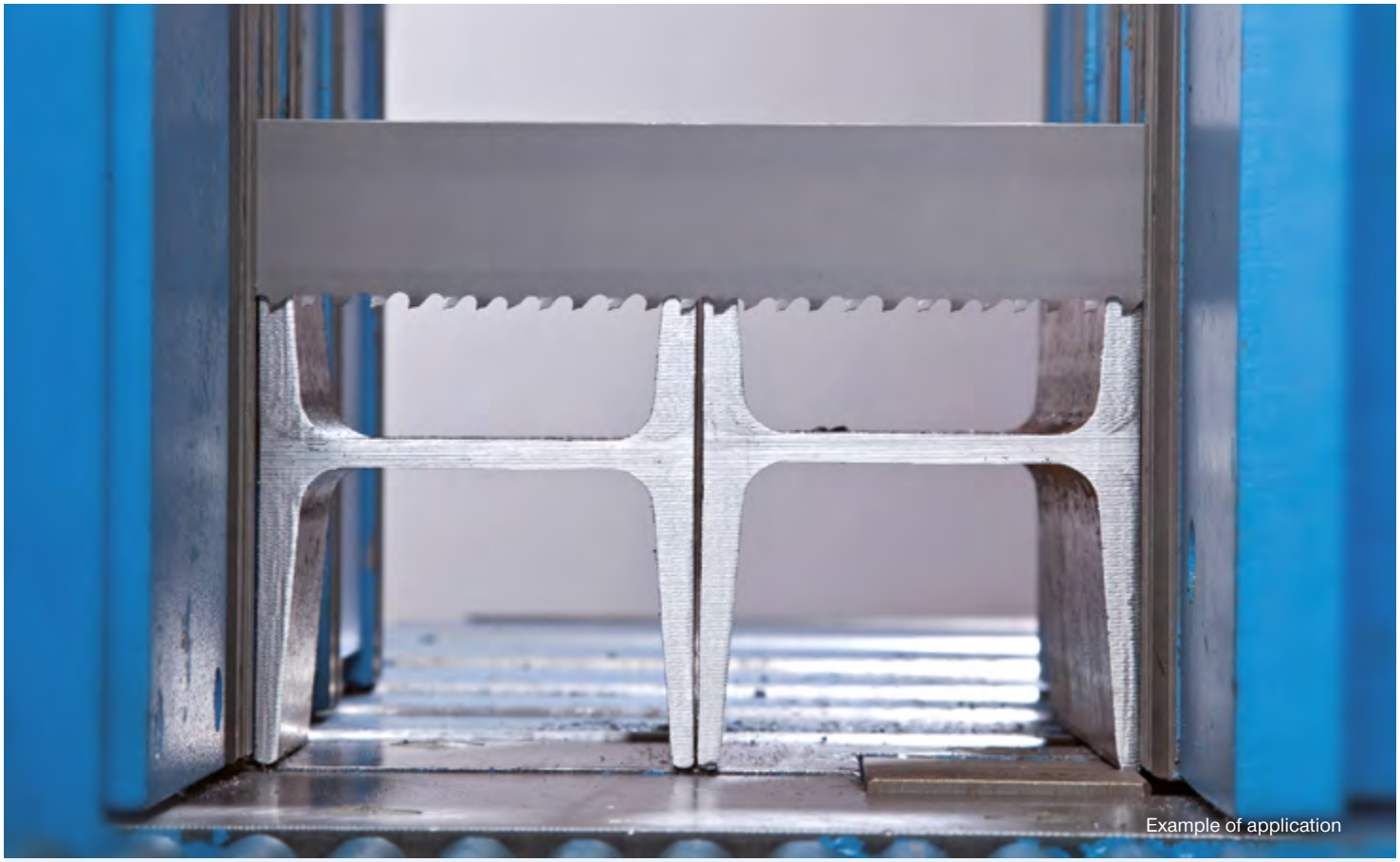
A For longer blade life, no break in time at solid material to 500 N/mm²

H For longer blade life, no break in time at structural steel and thin material

width x thickness		Teeth per inch			
mm	**inch**	**2/3**	**3/4**	**4/6**	**5/8**
19 x 0,90	3/4" x 0,035				
27 x 0,90	1" x 0,035				
34 x 1,10	1 1/4" x 0,042	A H	A H	A H	A H
41 x 1,30	1 1/2" x 0,050	A H	A H	A H	

1 2

☐ Option on request



Bi-Metal Bandsaw Blades Standard

WESPA XTREMA

Product Group 456

A bandsaw blade especially new designed for the cutting of profiles and beams.

Special settings avoid blade pinching during the cut (see IPC).

width x thickness		Teeth per inch		
mm	**inch**	**2/3**	**3/4**	**4/6**
41 x 1,30	1 1/2" x 0,050	■	■	■
54 x 1,30	2" x 0,050	□	□	
54 x 1,60	2" x 0,062	■	■	
67 x 1,60	2 5/8" x 0,062	■	■	

□ on request (no stock item)

1 2

IHL

Example of application

Bi-Metal Bandsaw Blades | IPC

WESPA XTREMA IPC

Product Group 456 - IPC

A For longer blade life, no break in time at solid material to 500 N/mm²

H For longer blade life, no break in time at structural steel and thin material

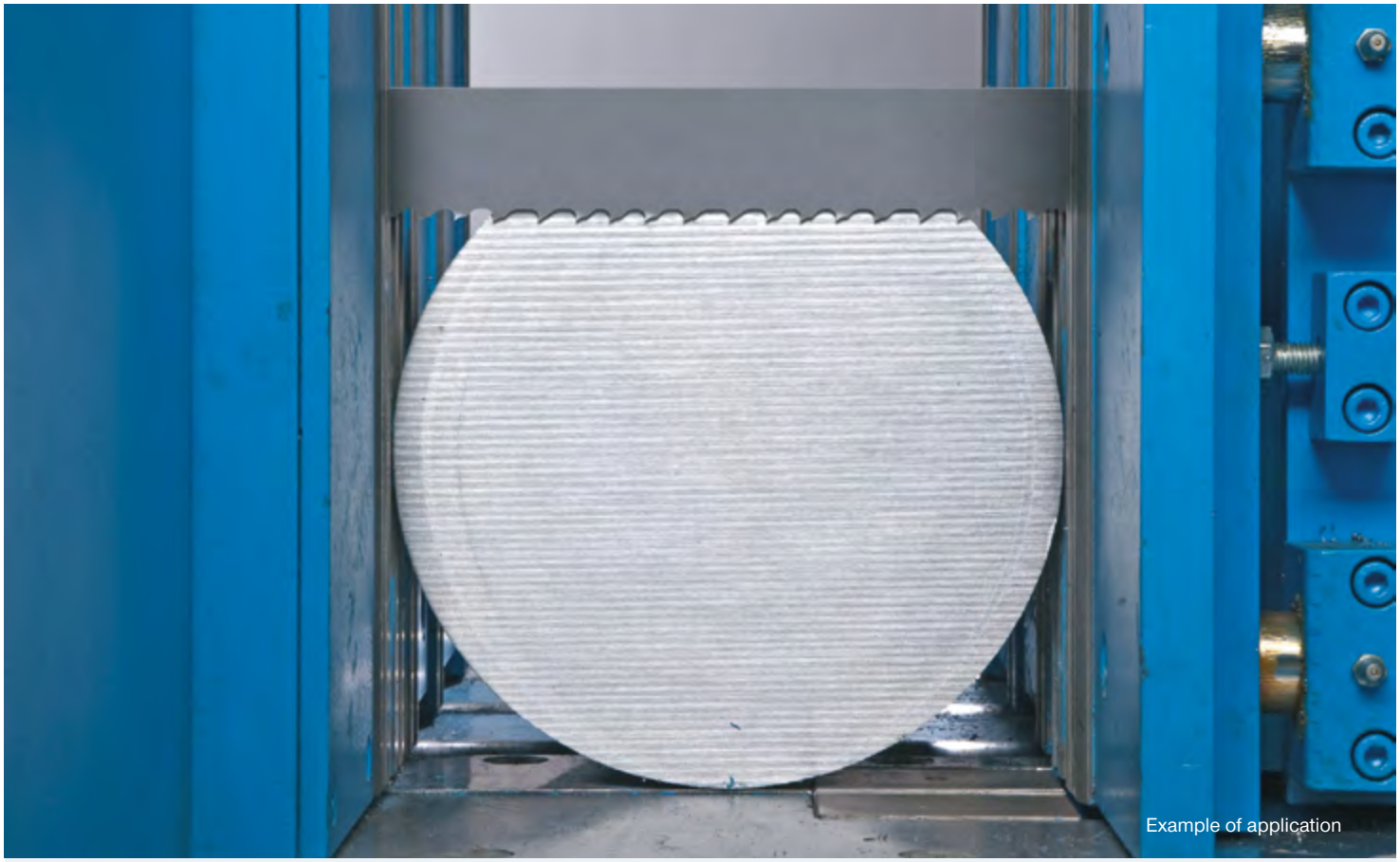
X Tooth protection and no blade pinching at structural steel cutting and solid material

width x thickness		Teeth per inch		
mm	inch	2/3	3/4	4/6
41 x 1,30	1 1/2" x 0,050	A H X	A H X	A H X
54 x 1,30	2" x 0,050	A H X	A H X	
54 x 1,60	2" x 0,062	A H X	A H X	
67 x 1,60	2 5/8" x 0,062	A H X	A H X	

1 2

☐ Option on request

IHL



Bi-Metal Bandsaw Blades Standard

WESPA DUROTEC

Product Group 460

Variable toothing for high performance, with tooth tips consisting of a highly wear-resistant HSS steel grade. Improving service lifetime in applications for medium and large cross sections as well as for cutting of hard metal materials that are difficult to handle.

width x thickness		Teeth per inch / Combi Tooth positive			Combi Tooth 0°	
mm	**inch**	**2/3**	**3/4**	**4/6**	**5/8**	**6/10**
27 x 0,90	1" x 0,035	■	■	■	■	□
34 x 1,10	1 1/4" x 0,042	■	■	■		
41 x 1,30	1 1/2" x 0,050	■	■	■		

WESPA DUROTEC SCL

New high-performance bi-metal bandsaw blade with unique toothed geometry, with positive tooth angle and high wear-resistant tooth, for heavy and very difficult machinebility.

width x thickness		Teeth per inch / Combi Tooth positive				
mm	**inch**	**0,7/0,9**	**1,1/1,4**	**1,4/2**	**2/3**	**3/4**
41 x 1,30	1 1/2" x 0,050			■	□	□
54 x 1,60	2" x 0,062	■	■	■	■	□
67 x 1,60	2 5/8" x 0,062	■	■	■	■	

4 | 6 | 7 | 8 | 9 | 10 | 12

□ on request (no stock item)

Example of application

Bi-Metal Bandsaw Blades | IPC

WESPA DUROTEC IPC

Product Group 460

S High productivity and reduce cut time at solid material and large dimension >1000N/mm²

width x thickness		Teeth per inch / Combi Tooth positive		
mm	inch	2/3	3/4	4/6
27 x 0,90	1" x 0,035			
34 x 1,10	1 1/4" x 0,042			
41 x 1,30	1 1/2" x 0,050	S	S	S

WESPA DUROTEC SCL IPC

S High productivity and reduce cut time at solid material and large dimension >1000N/mm²

width x thickness		Teeth per inch / Combi Tooth positive				
mm	inch	0,7/0,9	1,1/1,4	1,4/2	2/3	3/4
54 x 1,30	2" x 0,050	S	S	S	S	S
54 x 1,60	2" x 0,062	S	S	S	S	S
67 x 1,60	2 5/8" x 0,062	S	S	S	S	

4 6 7 8 9 10 12


Example of application

Carbide-Tipped Bandsaw Blades Standard

WESPA GALAXY HMS

Product Group 471

Carbide-tipped bandsaw blade for sawing of hard materials and metals that are hard to handle, as well as cutting of sanded castings and abrasive material.

width x thickness		teeth per inch	
mm	inch	3	4
19 x 0,90	3/4" x 0,035	■	
27 x 0,90	1" x 0,035	■	■
34 x 1,10	1 1/4" x 0,042	■	

11 13 14 S fe

Example of application

Carbide-Tipped Bandsaw Blades | IPC

WESPA GALAXY HMS - IPC

Product Group 471- IPC

X Tooth protection and no blade pinching at structural steel cutting and solid material.

width x thickness		teeth per inch
mm	inch	3
19 x 0,90	3/4" x 0,035	
27 x 0,90	1" x 0,035	X
34 x 1,10	1 1/4" x 0,042	

11 | 13 | 14 | S | ~~fe~~

Carbide-Tipped Bandsaw Blades Standard

WESPA GALAXY HMD

Product Group 473

HMD - Carbide-tipped bandsaw blade with triple chip grinded teeth. Available in variable teeth for extremely clean cut with excellent finish in hard materials and difficulty machineability. High Carbide tipped teeth increase wear resistance cutting high temperature alloys. Triple Chip geometry provides a smoother surface finish. Positive rake angle allows faster penetration for high production cutting.

width x thickness		teeth per inch (TPI)					
mm	**inch**	**0,9/1**	**1,4/1,8**	**1,9/2,1**	**2/3**	**2,5/3,5**	
19 x 0,90	3/4" x 0,035					■	
27 x 1,10	1" x 0,042					■	
34 x 1,10	1 1/4" x 0,042			■	■	■	
41 x 1,30	1 1/2" x 0,050		■	■	■	■	
54 x 1,60	2" x 0,062	■	■	■	■	■	
67 x 1,60	2 5/8" x 0,062	■	■	■		□	
80 x 1,60	3 1/8" x 0,062	■	■				

6 | 7 | 8 | 9 | 10 | 12 | 13

□ on request (no stock item)

● ■

WESPA GALAXY HMQ

Product Group 475

HMQ - Carbide-tipped bandsaw blade with multi chip grinded teeth. (Positive Rake angle 4 tooth pattern). Available in variable teeth for extremely clean cut with excellent finish in hard materials and difficulty machineability. (Alloy steels, high chrome alloys, mold steels, stainless steels, tool steels, bearing steels, titanium block, titanium plate saw, Inconel and nickel-based alloys)

width x thickness		teeth per inch (TPI)					
mm	**inch**	**0,9/1**	**1,1/1,4**	**1,4/1,8**	**1,9/2,1**	**2/3**	**2,5/3,5**
34 x 1,10	1 1/4" x 0,042						■
41 x 1,30	1 1/2" x 0,050			■	■	■	
54 x 1,60	2" x 0,062			■	■	■	
67 x 1,60	2 5/8" x 0,062		■	■			
80 x 1,60	3 1/8" x 0,062	■	■				

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 13

● ■

WESPA GALAXY HMC

Product Group 476

HMC - Carbide-tipped bandsaw blade with special grinded teeth. (Three tooth pattern with Raker) Available in variable teeth for extremely clean cut with excellent finish in hard materials. It is great for cutting high temperature alloys. Specialty blades also available for non-ferrous foundries. Positive rake angle provides aggressive tooth geometry for faster cutting and increased production.

width x thickness		teeth per inch (TPI)					
mm	**inch**	**0,9/1**	**1,4/1,8**	**1,9/2,1**	**2/3**		
34 x 1,10	1 1/4" x 0,042				■		
41 x 1,30	1 1/2" x 0,050		■	■	■		
54 x 1,60	2" x 0,062		■	■	■		
67 x 1,60	2 5/8" x 0,062	■	■	■			
80 x 1,60	3 1/8" x 0,062	■					

7 | 8 | 9 | 10 | 11

● ■

Carbide-Tipped Bandsaw Blades | IPC

C Higher cutting rate, reduce cut time, longer blade life at solid material at solid material for easy and medium machinebility to 1000 N/mm²

G Longer blade life, better surface

S High productivity and reduce cut time at solid material and large dimension >1000N/mm²

WESPA GALAXY HMD - IPC

Product Group 473 - IPC

width x thickness		Teeth per inch				
mm	inch	0,9/1	1,4/1,8	1,9/2,1	2/3	2,5/3,5
20 x 0,90	3/4" x 0,035					
27 x 1,10	1" x 0,042					G
34 x 1,10	1 1/4" x 0,042				C	C G
41 x 1,30	1 1/2" x 0,050		C S	C S	C S	C G
54 x 1,60	2" x 0,062	C S	C S	C S	C S	C G
67 x 1,60	2 5/8" x 0,062	C S	C S			
80 x 1,60	3 1/8" x 0,062	C S	C S			

6 | 7 | 8 | 9 | 10 | 12 | 13 | S

☐ Option on request

WESPA GALAXY HMQ - IPC

Product Group 475 - IPC

width x thickness		Teeth per inch				
mm	inch	0,9/1	1,1/1,4	1,4/1,8	1,9/2,1	2/3
34 x 1,10	1 1/4" x 0,042					
41 x 1,30	1 1/2" x 0,050			C S	C S	C S
54 x 1,60	2" x 0,062			C S	C S	C S
67 x 1,60	2 5/8" x 0,062		C S	C S		
80 x 1,60	3 1/8" x 0,062	C S	C S			

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 13

☐ Option on request

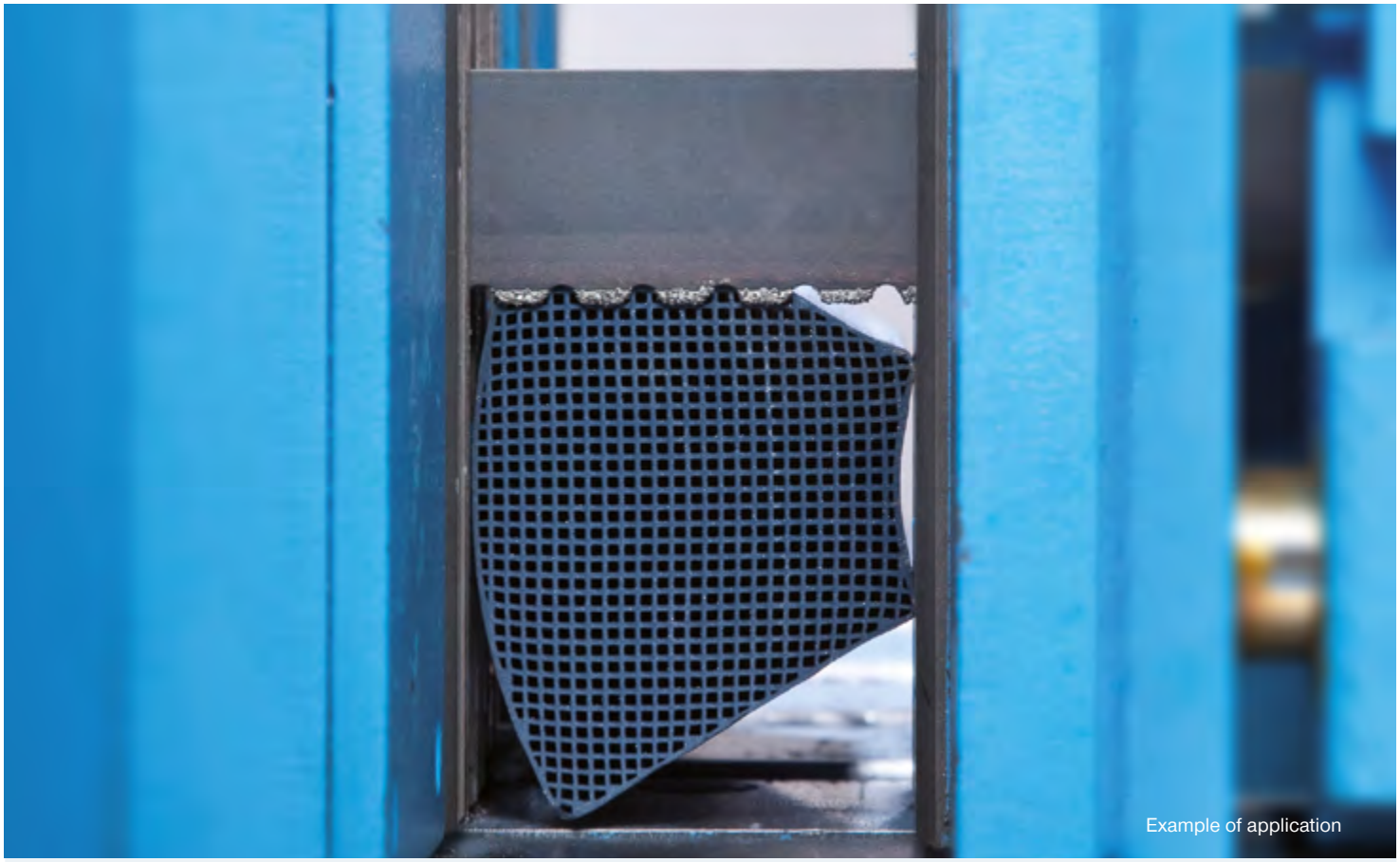
WESPA GALAXY HMC - IPC

Product Group 476 - IPC

width x thickness		Teeth per inch			
mm	inch	0,9/1	1,4/1,8	1,9/2,1	2/3
34 x 1,10	1 1/4" x 0,042				C S
41 x 1,30	1 1/2" x 0,050		C S	C S	C S
54 x 1,60	2" x 0,062		C S	C S	C S
67 x 1,60	2 5/8" x 0,062	C S	C S	C S	
80 x 1,60	3 1/8" x 0,062	C S			

7 | 8 | 9 | 10 | 11

☐ Option on request



Example of application

Carbide Grit Bandsaw Blades

WESPA SAPHIR

Product Group 480 U, 480 D

High-performance bandsaw blades for cutting of abrasive materials and bonded materials that cannot be cut easily by normal toothed bandsaw blades, for example: vehicle tires, graphite, brake linings, glass-fiber reinforced plastics, cables and ceramic tiles.
These blades consist of a cutting edge coated with carbide particles on a spring-hard end, fatigue-resistant blade body which is continuous or intermittent for chip removal.
Other versions of items available by request.

Wespa Saphir U: Carbide grit coated bandsaw blade with intermittent cutting edge (chipping space), for cutting stock of medium and large dimensions.

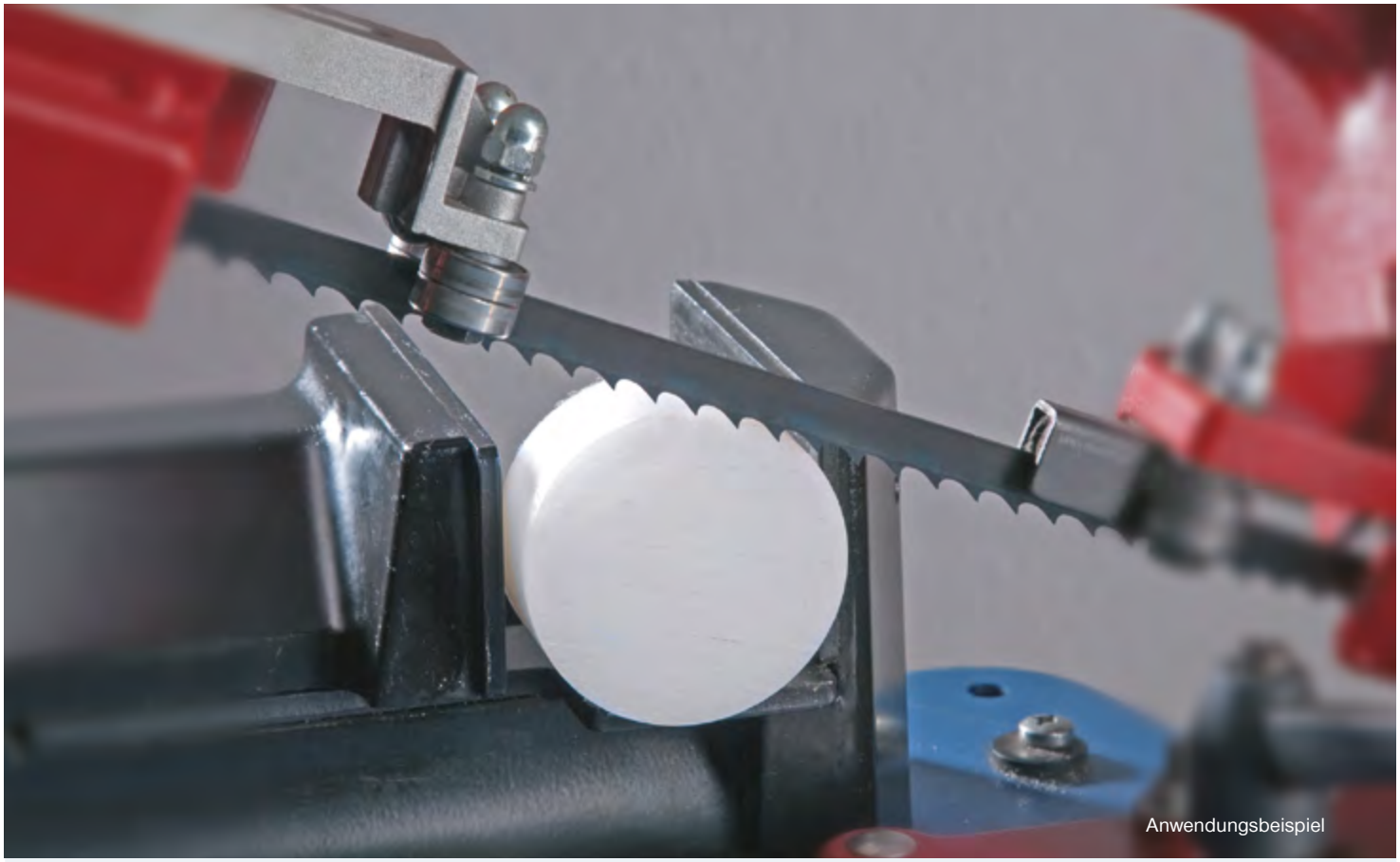
Wespa Saphir D: Carbide grit coated bandsaw blade showing a continuously coated cutting edge without chipping spaces, for cutting stock of small cross sections, thin-walled parts or fiber-reinforced materials.

width x thickness		intermittent	continuous
mm	inch	medium	medium
20 x 0,80	3/4" x 0,032	□	□
25 x 0,90	1" x 0,035	■	■
32 x 1,10	1 1/4" x 0,042	□	□
38 x 1,10	1 1/2" x 0,042	□	□

□ on request (no stock item)

S fe


With customized bandsaw blades, we reduce significant the cutting times of your cutting service center. This reduce the cutting costs and significantly improve your service lead time.“


Anwendungsbeispiel

Carbon Steel Bandsaw Blades

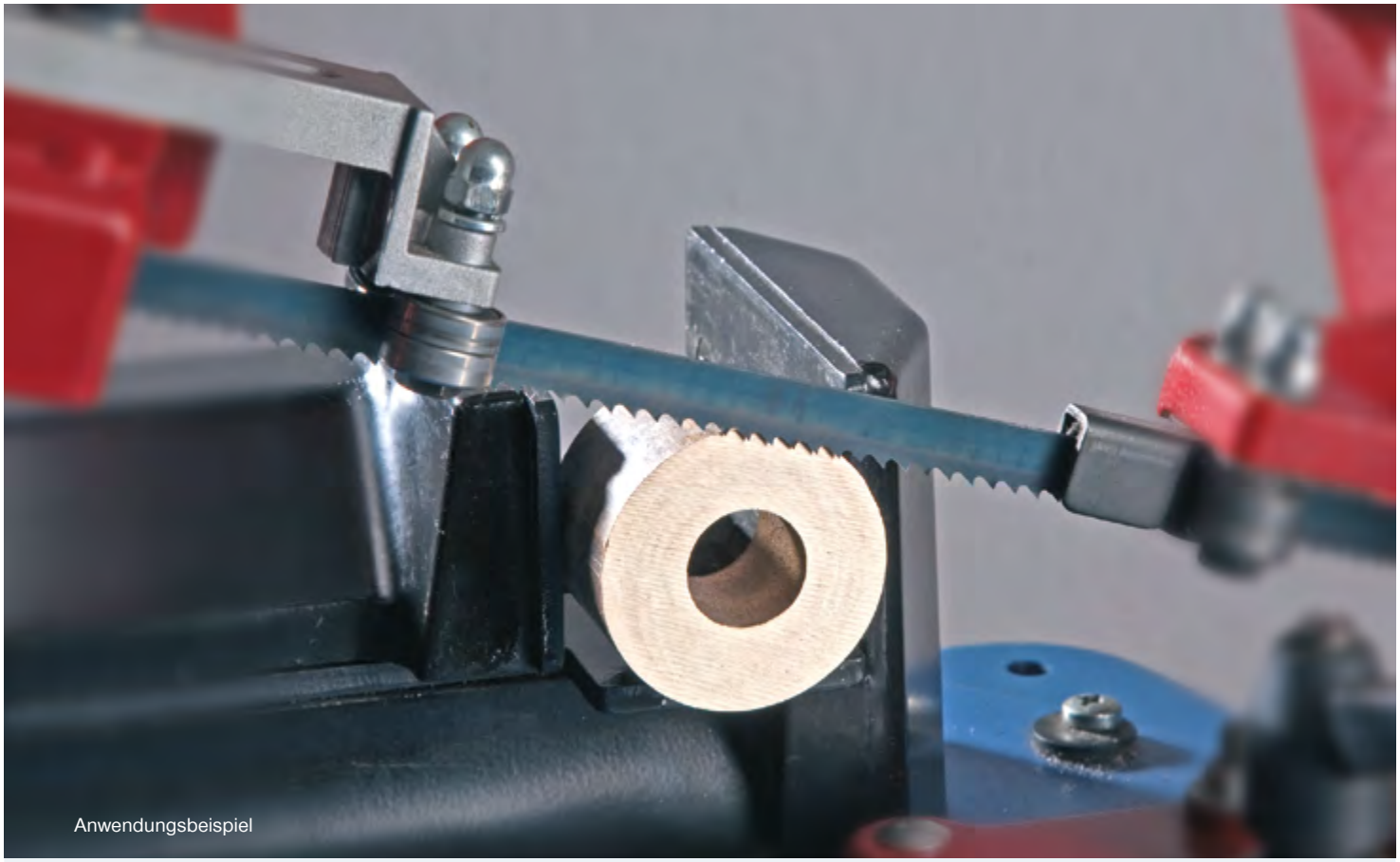
WESPA SPEZIAL

Product Group 410

Wespa Spezial (Flexback)
Standard grade carbon steel with an addition of chromium, tooth-hardened with a flexible blade body. A particular type of steel, known as “pin point”, yields hardened tooth tips with extremely high wear resistance. Easily welded!
Wespa Spezial bandsaw blades are used for materials that are easy to cut.

width x thickness		Standard Tooth (N)			teeth per inch				Hook Tooth (KL)		
mm	inch	4	6	8	10	14	18	22	3	4	6
6 x 0,65	1/4" x 0,025			■	■	■				■	■
8 x 0,65	5/16" x 0,025			■	■	■	■	■		■	■
10 x 0,65	3/8" x 0,025	■	■	■	■	■	■	■		■	■
13 x 0,65	1/2" x 0,025	■	■	■	■	■	■	■		■	■
16 x 0,65	5/8" x 0,025	■	■	■	■	■	■				■
16 x 0,80	5/8" x 0,032	■	■	■	■	■				■	
20 x 0,80	3/4" x 0,032	■	■	■	■	■			■	■	
25 x 0,90	1" x 0,035	■	■	■	■	■			■	■	

1 2 11 13 fe



Anwendungsbeispiel

Carbon Steel Bandsaw Blades

WESPA LG-SUPER

Product Group 420

Wespa LG Super (Hardback)

High-grade (carbon steel) bandsaw blades, optimized for increased cutting performance by tempering and alloying. A blade body tempered to spring hardness will ensure good cutting accuracy and increased blade life particularly in nibbling saw operations.

width x thickness		Standard Tooth (N) teeth per inch							Hook Tooth (KL)		
mm	inch	4	6	8	10	14	18	22	3	4	6
6 x 0,65	1/4" x 0,025			■	■	■	■	■		■	■
8 x 0,65	5/16" x 0,025			■	■	■	■	■		■	■
10 x 0,65	3/8" x 0,025	■	■	■	■	■	■	■		■	■
13 x 0,65	1/2" x 0,025	■	■	■	■	■	■			■	■
16 x 0,80	5/8" x 0,032	■	■	■	■	■				■	
20 x 0,80	3/4" x 0,032	■	■	■	■	■			■	■	
25 x 0,90	1" x 0,035	■	■	■	■	■			■	■	

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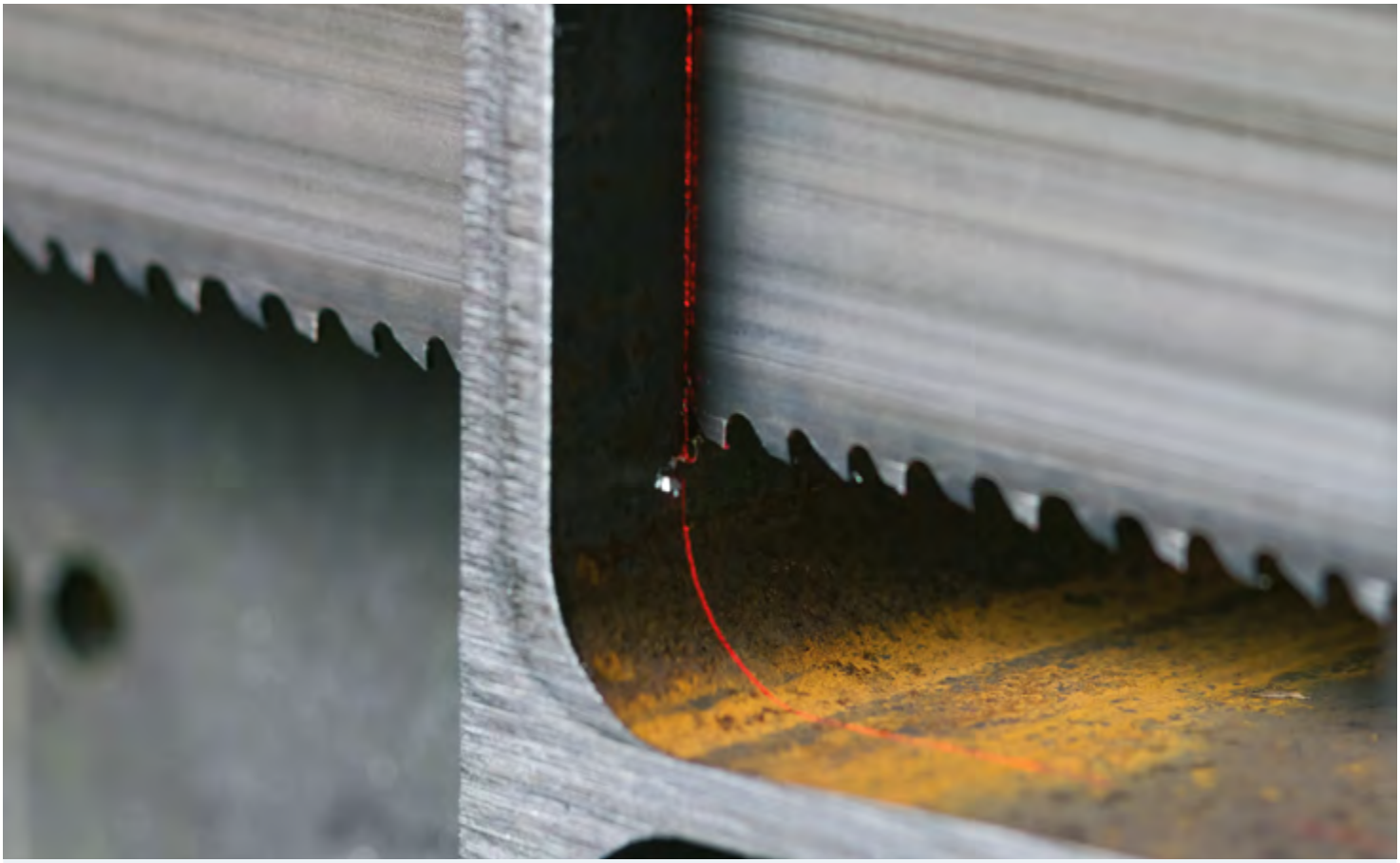


VALUE ADDED CUTTING®

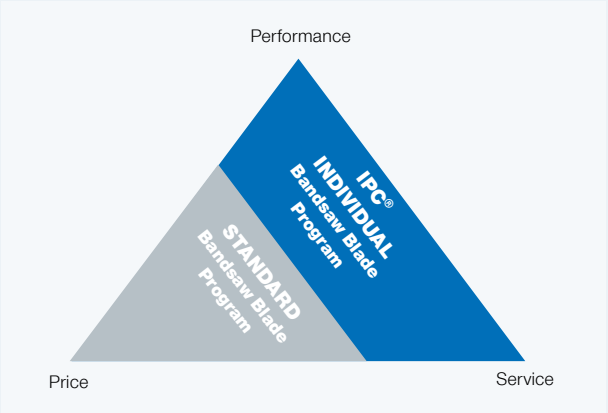
VALUE ADDED CUTTING®

WESPA supplies custom-made solutions for all conceivable saw applications which increase the efficiency of production processes.
Demanding cutting of all materials requires innovative and flexible saw designs. The high quality of your product begins with the first cut. The trust that customers place in us when deciding upon our products pays for itself within the shortest possible time.

Added value for all industries

We consider our products and services to be a part of the added value chains of our customers, making a considerable contribution to the efficiency of the entire production process, regardless of whether it concerns saw bands, improvement of saw efficiency, supply and maintenance services, long-term partnerships or training.

An integrated approach, at the center of which is the added value of a partnership with WESPA.



This is the concept we have imparted to our claim: VALUE ADDED CUTTING®.Those interested in learning more can do so at the WESPA website:

www.individual-cutting.de

Technical Information

Additionally WESPA offers as follows:

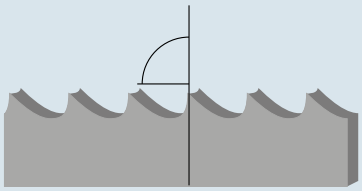
- Solution of application problems
- Wide product range
- Suitable bandsaw blades
- Optimizing of sawing processes
- Advisory service by phone or suburb
- Trial cuts / samples
- Worldwide customer advisory service

Auf den folgenden Seiten finden Sie wichtige technische Informationen und Empfehlungen.

Tooth Styles

To achieve optimum cutting performance, apart from steel grade, the number of teeth as well as the shape of the cutting edge is of great importance.
The geometry of the cutting edge and of the gullet are dependent on the material to be cut and will essentially influence the cutting behavior of a saw. As a solution to your cutting requirements, we are offering you four different tooth styles:

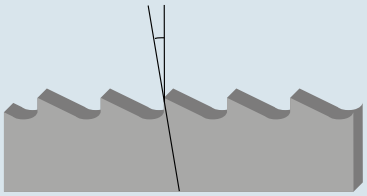
Standard Tooth N



Rake angle 0°:
completely rounded gullet.

For universal applications to cut small to medium solid cross sections, tubes, plates, contour sawing operations.

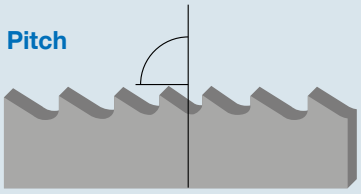
Hook Tooth (KL)



Positive rake angle:
with rounded gullet.

Advantageous for cutting materials producing long chips, such as Non Ferrous metals, steel grades of low carbon content, materials of large cross sections, metallic materials with a tendency to strain harden undernormal cutting operations.

Variable Tooth Pitch



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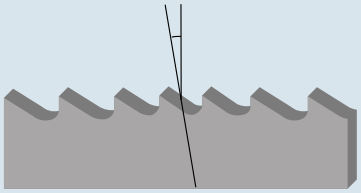

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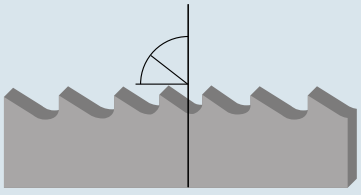


[No. 3]

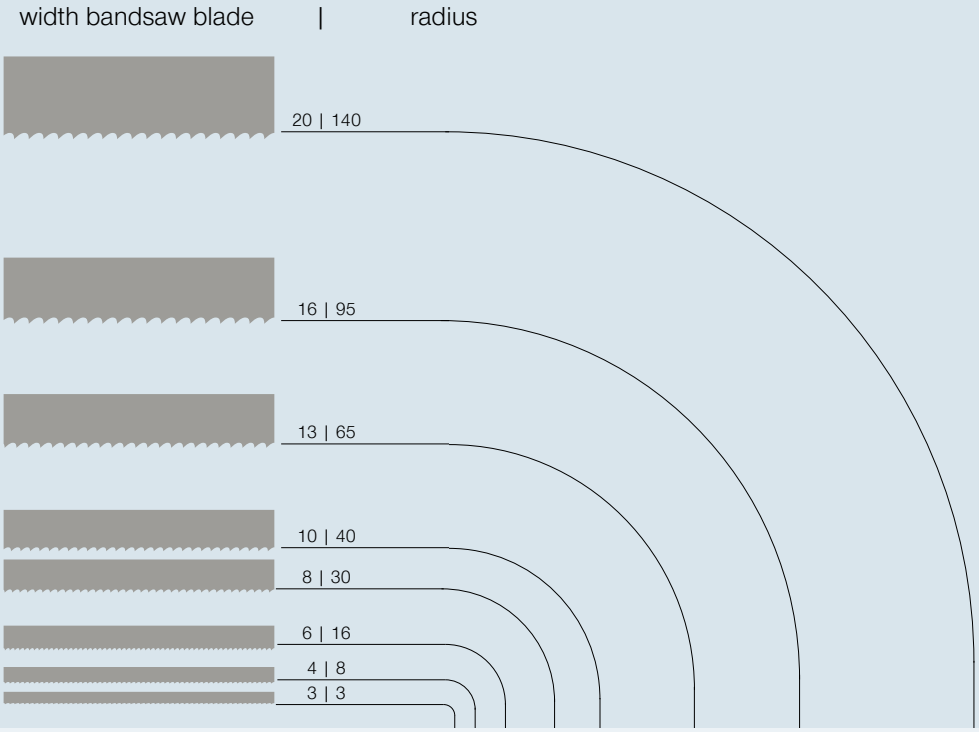
- Toothing with 0° [No.1]
- positive rake angle [No.2]
- or extreme positive rake angle [No.3]:

Regular intermittent tooth sequences where the teeth within a group show different tooth pitch, i.e. greater height. Excessive vibrations will be reduced, with a positive effect on noise level, cutting surface quality, and service life.
Applications for this toothing pattern are universal – ranging from cutting of layers and bundles up to large solid cross sections of a great variety of metallic materials.

Bandsaw Blade Tension

Proper blade tension is required to obtain long life and accurate cutting.
By using the WESPA blade tension gauge you can measure the blade tension applied by your band saw machine and adjust it to the proper level.
For WESPA - band saw blades we recommend a blade tension of 250-300 N/mm².
Blade brakeage due to excessive blade tension or cut deviation due to insufficient blade tension can be avoided by using the correct blade tension.

Table of Radiuses



For contour sawing, the smallest radius to be sawed depends on the width of the bandsaw blade. The blade width is to be measured from the tooth tips to the back edge.

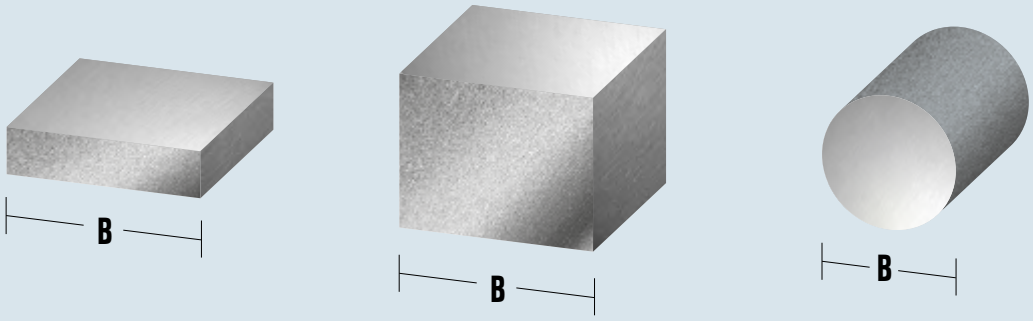
The graph indicates which maximum bandsaw blade width is to be selected for the smallest radius to be cut.

Recommendation for tooth pitch

Recommendation for tooth pitch Carbide Bandsaw Blades | Solid Material

Toothing

Ø / mm	2,5/3,5	2/3	1,4/2	1,1/1,4	0,9/1,1
50	■				
100	■	■			
150	■	■			
200	■	■	■		
250		■	■		
350			■	■	
400			■	■	
500				■	■
600				■	■
>700					■



Correct tooth pitch

- Selecting the correct tooth pitch is important for optimized cutting results.
- The tooth pitch results from the engaged length of bandsaw blade in the material.
- If the tooth pitch is too small, (irregular) cutting may result. Chips may clog the cutting length, forcing the bandsaw blade from its cutting line.
- If the tooth pitch is too large, teeth may break out because the cutting pressure acting upon individual teeth becomes too high.
- At least 3 teeth are recommended to be engaged to achieve an optimum result.

Recommendation for tooth pitch **Bi-Metal Bandsaw Blades** | Solid Material

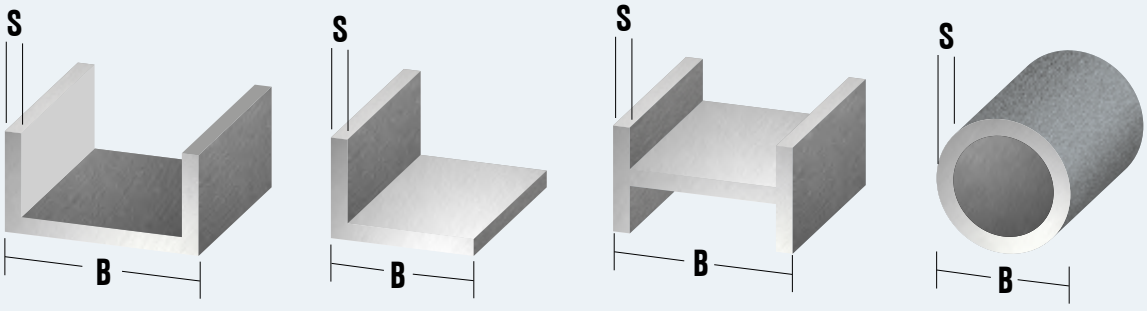
	Variable Teeth												Constant Teeth
Ø / mm	14/18	10/14	8/12	6/10	5/8	4/6	3/4	2/3	1,4/2	1,1/1,4	0,75/1,25	0,7/0,9	ZPZ
20	■	■	■										14
30		■	■	■									10
40			■	■	■								8
50			■	■	■	■							6
60				■	■	■							6
70				■	■	■	■						6
80					■	■	■						4
90						■	■						4
100						■	■	■					4
150							■	■					3
200								■	■				2
250								■	■				2
300								■	■				2
350									■				2
400									■				1,25
450									■	■			1,25
500									■	■			1,25
510									■	■			1,25
520									■	■	■		1,25
530										■	■		1,25
540										■	■		1,25
550										■	■	■	1,25
600										■	■	■	1,25
700										■	■	■	1,25
1000											■	■	1,25

Sawing of tubes and structural shapes

Recommendation for tooth pitch **BI-Metal Bandsaw Blades** | tubes and structural shapes

B Teeth per inch | Wall thickness (S) Variable Teeth

Ø / mm	2	4	6	8	10	15	25	35	50	65	75	100	130	150	200
20	22	10/14	10/14												
40	22	10/14	8/12	6/10	5/8										
60	18	10/14	8/12	6/10	5/8	5/8	4/6 pos								
80	18	10/14	8/12	6/10	5/8	4/6 pos	4/6 pos	3/4 pos							
90	14	8/12	6/10	5/8	4/6 pos	4/6 pos	4/6 pos	3/4 pos							
100	14	8/12	6/10	5/8	4/6 pos	4/6 pos	4/6 pos	3/4 pos							
110	14	8/12	6/10	5/8	4/6 pos	4/6 pos	4/6 pos	3/4 pos							
120	14	8/12	6/10	5/8	4/6 pos	4/6 pos	3/4 pos	3/4 pos	3/4 pos						
130	10/14	6/10	5/8	5/8	4/6 pos	4/6 pos	3/4 pos	3/4 pos	2/3 pos						
140	10/14	6/10	5/8	5/8	4/6 pos	4/6 pos	3/4 pos	3/4 pos	2/3 pos	2/3 pos					
150	10/14	6/10	5/8	5/8	4/6 pos	4/6 pos	3/4 pos	3/4 pos	2/3 pos	2/3 pos					
160	10/14	6/10	5/8	4/6	4/6 pos	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	2/3 pos				
170	10/14	6/10	5/8	4/6	4/6 pos	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	2/3 pos				
180	10/14	6/10	5/8	4/6	4/6 pos	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	2/3 pos				
190	10/14	6/10	5/8	4/6	4/6 pos	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	2/3 pos				
200	10/14	6/10	5/8	4/6	4/6 pos	3/4 pos	3/4 pos	2/3 pos	2/3 pos	1,4/2 pos	2/3 pos				
220	10/14	6/10	5/8	4/6	4/6 pos	3/4 pos	3/4 pos	2/3 pos	2/3 pos	1,4/2 pos	2/3 pos				
250	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos			
300	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos		
350	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos	
400	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos	1,4/2 pos	
500	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	0,75/1,25	0,75/1,25	0,75/1,25	0,75/1,25
600	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	0,75/1,25	0,75/1,25	0,75/1,25	0,75/1,25
700	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	0,75/1,25	0,75/1,25	0,75/1,25	0,75/1,25
800	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	0,75/1,25	0,75/1,25	0,75/1,25	0,75/1,25
1000	8/12	5/8	4/6	4/6	3/4 pos	3/4 pos	2/3 pos	2/3 pos	2/3 pos	1,4/2 pos	1,4/2 pos	0,75/1,25	0,75/1,25	0,75/1,25	0,75/1,25



If you have two or more tubes side by side lying to be separated, then you consult the table under consideration of the doublewall thickness.

Factors for the right choice of the tooth pitch

- Saws of tubes and profiles in bundles _____
- Saws of tu bes and profiles in the single cut _____

General advice for band saws

Band saw maschines

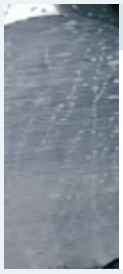
Check regularly:

- function of the chip brush
- function + concentration of the coolant
- wear + paralleliam of band saw guide
- blade tension
- blade speed

Coolant/ cutting fluid

The coolant lubricates, cools and transports the chips out of the cut.
What is important:

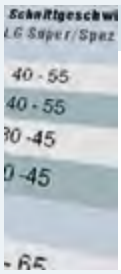
- use a cutting fluid that is recommended for the intended operation
- use the recommended concentration of cutting fluid
- check that the coolant is applied at the correct pressure



Work piece

What is important:

- make sure the work piece is clamped securely and can not vibrate or rotate
- do not use work pieces that are damaged, twisted or severely deformed
- the closer the guide of the band saw is to the work piece,
  the more precise the cut will be



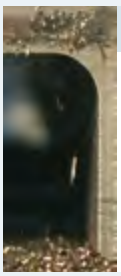
Observe start up programme

What is important:

- follow our stat-up advice
- use the recommended cutting parameters to obtain the best service life

Optimal chip formation

- very fine and powdery chips indicate insufficient cutting precssure
- thick, highly compressed and blue tarnisch chips indicate overtaxing
  of the saw band
- loosely rolled chips are a sign of good cutting conditions



Optimal chip formation with customized bandsaw blades IPC Option C

- Optimum cutting performance with colored (gold to blue) chips
- Fine chips indicate insufficient cutting pressure.
  It comes to early worn out of the teeth and high noises.
  Increase cutting pressure and feed rates.

Break in time of bandsaw blades

WESPA Standard bandsaw blades:
Break-In-Process increases the service life of conventional bandsaw blades.

- Sharp cutting edges with extremely small edge radii are required for high performance blades.
- To get the best blade life we recommend that the blade be „broken in".
- Determine the proper cutting speed (m/min) and feed (mm/min) based on the material and dimension of the work piece to be cut.
- It is important to only operate the new saw blade at about 50% of the determined feed during the break-in cuts. This is done to avoid damaging the extremely sharp blade teeth by micro-chipping due to excessive chip thickness.
- Sometimess new saw blades are prone to vibrations or oscillating noises. If this happens you may reduce the cutting speed.
- With small work piece dimensions, 300-500 cm^2 of the work piece cutting material should be cut during break in. When large work piece dimensions are being cut we recommend a break in period of 15 min. After the start-up slowly increase the feed to the previously determined value.

WESPA INDIVIDUAL BANDSAW BLADES (IPC): A C H
DON'T NEED THE BREAK-IN-PROCESS!

- No break-in-process necessary, immediately full cutting performance.

  We recommended with new bandsaw blade and minimum lubrication 5 laps before you start the regular cutting process.

TABLE OF CUTTING RESULT

Fax +49 (0) 5661 . 92 63 500 | Phone +49 (0) 5661 . 92 63 0

Company Name | Customers Number (if available)

Contact Person | P.O Box

Street | City/Town

Country | Phone/Fax

Surface of the Material

Machine Name | Type (horizontal/vertical) Machine Code

Sawing Fluid

Product Name | Size ZpZ / Tooth Pitch | Product Code

Material Group	Materials	Type of Material	Size mm	Blade Speed m/min	Cutting Rate mm/min	Cutting Result cm²/min	m² per Blade	Remarks

Date | Department | Signature

REQUEST FAX +49 (0) 5661 - 92 63-500

Company Name, Address

IPC Individual® Performance Cutting.

Piece	Band Saw Dimension	TPI	IPC	Notes:

Type of Materials:
Shape of Material:

Materialmix: ☐
Oberflächengüte:

■ ● ▬ HLO

Dimension:	Dimension:	Dimension:
Diameter:	Wall Thickness:	Wall Thickness:
Machine Type:	Machine Manufacturer:	Quantity of bundle:
Abteilung:	Ansprechpartner:	Quantity of pieces:

What is your company or department important when you introduce the new bandsaw blade innovation?

mark what you expected

- ☐ more blade life
- ☐ better surface finish
- ☐ better delivery service
- ☐ better surface finish
- ☐ better cost performance
- ☐ lower noise
- ☐ shorter cuttime
- ☐ reduce tool costs
- ☐ miscellaneous.....

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VALUE ADDED CUTTING

WESPA Metallsägenfabrik
Simonds Industries GmbH
Spangenberger Straße 61
D – 34212 Melsungen
phone: +(49) 5661 – 92 63 0
fax: +(49) 5661 – 92 63 166
www.wespa-simonds.de
info@wespa-simonds.de

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