Pilana
METAL

Bi-Metal Band Saw Blades

Made in Czech Republic
since 1934

ABOUT US

Pilana METAL SINCE 1934

Over 90 years of experience in cutting tools production. The manufacturing of cutting tools began in Hulin in the year of 1934. Its founder, Josef Studenik, named his company „The First Moravian Factory For Saws and Tools". Since then, our company is participating in the development of the cutting tools for worldwide applications.

The most up-to date production of bimetal bandsaw blades. PILANA METAL built a completely new plant producing bi-metal band saw blades for metal cutting in the year of 2012. The production line is equipped with the best European technologies. For the manufacturing of our tools we only use bimetal strip produced in Western Europe.

High and stable quality with quick delivery. Our technology allows us to guarantee both high quality tools and very short delivery times to our customers as well. Our welding center, as a part of the production plant, produces more than 500 welded band saw blades every day.

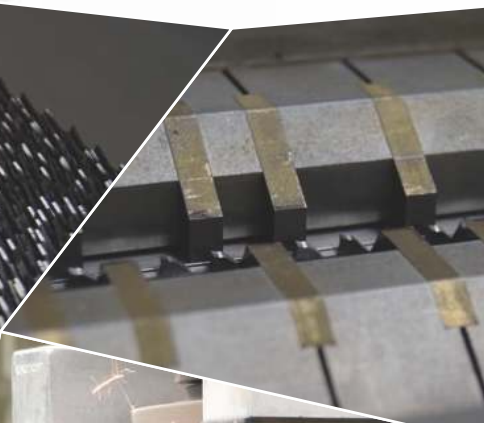
We export to the whole world. 90% of the tools is exported. Our bimetal band saw blades supplied in coils and welded blades are delivered to more than 60 countries worldwide.

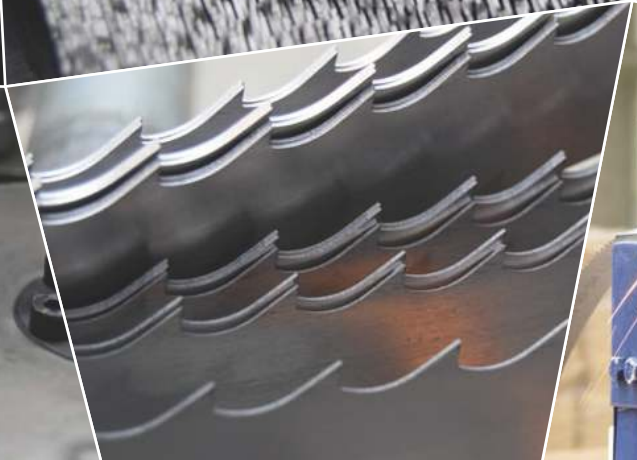
Technical advice! Try our tools. Our team is ready to provide all our customers and dealers with full technical support and service. We firmly believe you will be fully satisfied.

EXPORT REGIONS WORLDWIDE

Pitana METAL

Export regions





BAND CHOICE CHART

Material type	Dimension	UNIVERSAL	MASSIVE	ALUCUT	PROFILE	REGULAR	GRDINDCUT	PLUSCUT	MASSIVE PROFI	GRINDCUT PROFI	PLUSCUT PROFI
STRUCTURAL STEELS CASE HARDENING STEELS FREE MACHINING STEELS	< 70										
	80 - 350										
	> 350										
UNALLOYED TOOL STEELS SPRING STEELS BALL BEARING STEELS	< 70										
	80 - 350										
	> 350										
HIGH SPEED STEELS COLD-WORK STEELS	< 70										
	80 - 350										
	> 350										
NITRIDING STEEL HEAT TREATABLE STEELS HOT-WORK STEELS	< 70										
	80 - 350										
	> 350										
STAINLESS STEELS	< 70										
	80 - 350										
	> 350										
HEAT RESISTANT STEELS HIGH TEMPERATURE STEELS	< 70										
	80 - 350										
	> 350										
HIGH-STRENGTH STEEL TITANIUM AND TI ALLOYS NICKEL ALLOYS	< 70										
	80 - 350										
	> 350										
CAST STEEL CAST IRON	< 70										
	80 - 350										
	> 350										
ALUMINIUM COPPER	< 70										
	80 - 350										
	> 350										
BRASS BRONZE RED BRASS	< 70										
	80 - 350										
	> 350										
ALUMINIUM BRONZES ALUMINIUM ALLOYS HIGH SILICON CONTENT	< 70										
	80 - 350										
	> 350										

Excellent

Good

Excellent

Good

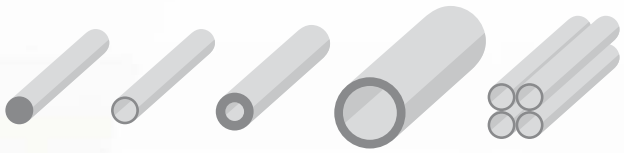
Solid material

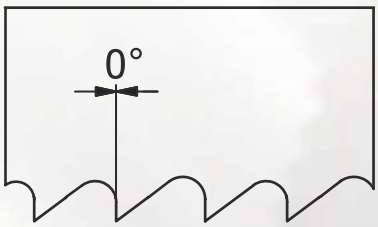
Constant tooth pitch		Variable tooth Pitch	
Material cross section [mm]	TPI	Material cross section [mm]	TPI
380 - 700	1,25	> 550	0,75/1,25
200 - 400	2	300 - 600	1,4/2
120 - 200	3	120 - 350	2/3
80 - 120	4	80 - 160	3/4
50 - 80	6	60 - 110	4/6
30 - 50	8	40 - 70	5/8
20 - 30	10	30 - 60	6/10
10 - 20	14	20 - 40	8/12
< 10	18	< 20	10/14

Cutting recommendation for steel tubes and profiles

Wall thickness [mm]	Outer diameter [mm]									
	20	40	60	80	100	120	150	200	300	500
2	14	14	10/14	10/14	10/14	8/12	8/12	8/12	6/10	6/10
3	14	10/14	10/14	10/14	8/12	8/12	8/12	6/10	6/10	5/8
4	10/14	10/14	10/14	8/12	8/12	8/12	6/10	6/10	5/8	5/8
5	10/14	10/14	8/12	8/12	8/12	6/10	6/10	5/8	5/8	4/6
6	10/14	8/12	8/12	8/12	6/10	6/10	5/8	5/8	4/6	4/6
8	10/14	8/12	6/10	6/10	5/8	5/8	5/8	4/6	4/6	4/6
10		6/10	6/10	5/8	5/8	5/8	4/6	4/6	4/6	4/6
15		6/10	5/8	5/8	5/8	4/6	4/6	4/6	4/6	4/6
20			4/6	4/6	4/6	4/6	4/6	4/6	4/6	4/6
30				4/6	4/6	4/6	4/6	3/4	3/4	3/4
50						3/4	3/4	3/4	2/3	2/3
80							3/4	2/3	2/3	2/3
100								2/3	2/3	1,4/2

M42
UNIVERSAL





IDEAL BAND SAW BLADE FOR SMALL SOLID MATERIAL AND MEDIUM WALL-THICKNESS TUBES

Application:

- Profiles with thin or medium wall thickness
- Short-chipping material
- Single as well as bundle cutting
- Carbon and alloyed steels
- Non-ferrous metals

Characteristics:

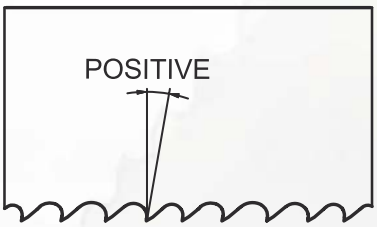
- 0° rake angle
- Variable TPI
- M42 HSS teeth tips
- Hardness up to 68 HRC
- Excellent life time expectancy

Dimensions	TPI - teeth per inch			
mm	5/8	6/10	8/12	10/14
13 x 0,65		V-O	V-O	V-O
13 x 0,90		V-O	V-O	V-O
20 x 0,90	V-O	V-O	V-O	V-O
27 x 0,90	V-O	V-O	V-O	V-O
34 x 1,10	V-O	V-O	V-O	
41 x 1,30	V-O			

V-O = variable teeth with 0^0 rake angle

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M42 MASSIVE



SPECIALLY DESIGNED FOR MEDIUM AND LARGE CROSS-SECTION CUTTING OF SOLID MATERIAL

Application:

- Excellent for solid rods and blocks cutting
- Single as well as bundle cutting
- Carbon steels
- Alloyed steels
- Non-ferrous metals

Characteristics:

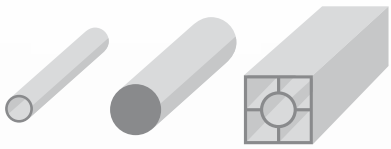
- Positive rake angle
- Variable TPI
- M42 HSS teeth tips
- Hardness up to 68 HRC
- Excellent life time expectancy

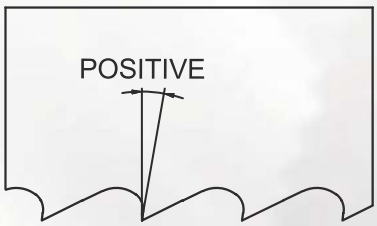
Dimensions	TPI - teeth per inch				
mm	0,75/1,25	1,4/2	2/3	3/4	4/6
20 x 0,90					V-POS
27 x 0,90			V-POS	V-POS	V-POS
34 x 1,10			V-POS	V-POS	V-POS
41 x 1,30		V-POS	V-POS	V-POS	V-POS
54 x 1,60	V-POS*	V-POS*	V-POS*	V-POS	V-POS
67 x 1,60	V-POS*	V-POS*	V-POS*	V-POS*	

V-POS = variable teeth with positive rake angle
* On request

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M42
ALUCUT





SPECIALLY DESIGNED FOR EASY ALUMINIUM CUTTING

Application:

- Aluminium and aluminium alloys
- Non-ferrous metals
- Solid material and profiles
- Material with residual stress and tendency to jamming

Characteristics:

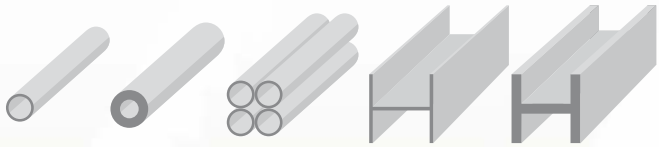
- Positive rake angle
- Variable/constant TPI
- M42 HSS teeth tips
- Hardness up to 68 HRC
- Prevents jamming

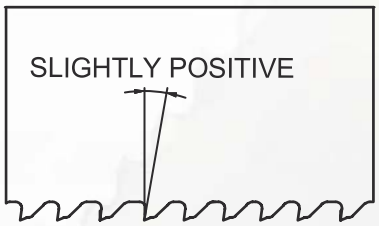
Dimensions	TPI - teeth per inch					
mm	2	3	4	6	2/3	3/4
13 x 0,65			POS	POS		
13 x 0,90		POS				
20 x 0,90		POS	POS*	POS		
27 x 0,90	POS	POS	POS		V-POS*	V-POS*
34 x 1,10	POS*				V-POS*	V-POS*
41 x 1,30					V-POS*	V-POS*

POS = regular teeth with positive rake angle
V-POS = variable teeth with positive rake angle
* On request

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M42 PROFILE





BAND SAW BLADE FOR SMOOTH TUBES CUTTING

Application:

- Tubes, beams, profiles
- Single as well as bundle cutting
- Carbon steels
- Alloyed steels

Characteristics:

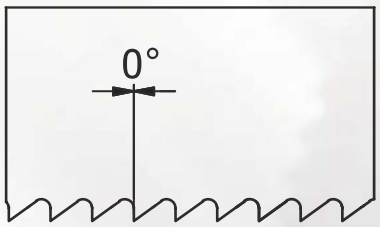
- Slightly positive rake angle
- Variable TPI
- M42 HSS teeth tips
- Hardness up to 68 HRC
- Excellent life time expectancy

Rozměry	TPI - počet zubů na palec				
mm	2/3	3/4	4/6	5/7	8/11
20 x 0,90					V-POS*
27 x 0,90		V-POS*	V-POS	V-POS	V-POS
34 x 1,10		V-POS	V-POS	V-POS	V-POS*
41 x 1,30	V-POS*	V-POS	V-POS		
54 x 1,60	V-POS*	V-POS	V-POS*		
67 x 1,60	V-POS*	V-POS*			

V-POS = variable teeth with positive rake angle
* On request

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M42
REGULAR



BAND SAW BLADE FOR SMALL CROSS-SECTION SOLIDS AND TUBES

Application:

- Tubes, beams and profiles
- Single and bundle cutting
- Structural steels, unalloyed steels, carbon steels
- Non-ferous metals, HSS steels, spring steels

Characteristics:

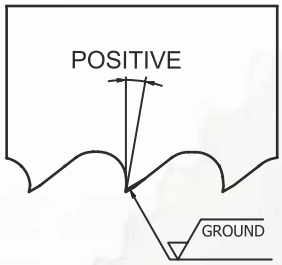
- M42 HSS tooth tips
- 0° rake angle
- Regular teeth with constant TPI
- Hardness up to 68 HRC
- Suitable for manual feed

Dimensions	TPI - teeth per inch	
mm	14	18
13 x 0,65	N	N
13 x 0,90	N*	N*
20 x 0,90	N*	N
27 x 0,90	N*	N

N = regular teeth with 0° rake angle
* On request

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M42
GRINDCUT



HIGH PERFORMANCE BANDSAW BLADE

Application:

- Stainless steels
- Non-ferrous metals
- Thick walled structurals

Characteristics:

- Positive rake angle
- Variable TPI
- M42 HSS groudn teeth tips
- Hardness up to 68 HRC
- Excellent life time expectancy

Dimensions	TPI - teeth per inch			
mm	0,75/1,25	1,4/2	2/3	3/4
27 x 0,90			V-POS	V-POS
34 x 1,10			V-POS	V-POS
41 x 1,30		V-POS	V-POS	V-POS
54 x 1,60	V-POS*	V-POS*	V-POS*	V-POS
67 x 1,60	V-POS*	V-POS*	V-POS*	V-POS*

V-POS = variable teeth with positive rake angle

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M42
PLUSCUT

BAND SAW BLADE WITH EXTRA POSITIVE RAKE ANGLE

Application:

- Large cross-sections solids
- Long-chipping materials
- Stainless and acid resistant steels
- Titanium alloys
- Special bronzes
- Nickel base alloys

Characteristics:

- Extra positive rake angle
- Variable TPI
- M42 HSS teeth tips
- Hardness up to 68 HRC

Dimensions	TPI - teeth per inch		
mm	1,4/2	2/3	3/4
27 x 0,90		V-POS+*	V-POS+
34 x 1,10		V-POS+	V-POS+
41 x 1,30	V-POS+	V-POS+	V-POS+*
54 x 1,60	V-POS+*	V-POS+*	V-POS+*

V-POS+ = variable teeth with a strongly positive rake angle

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M51
MASSIVE PROFI

SPECIALLY DESIGNED FOR CUTTING SOLID MATERIALS OF LARGE CROSS-SECTIONS

Application:

- Excellent for solid rods cutting
- Single as well as bundle cutting
- Stainless steels
- Highly Alloyed steels
- Titanium and nickel-based alloys

Characteristics:

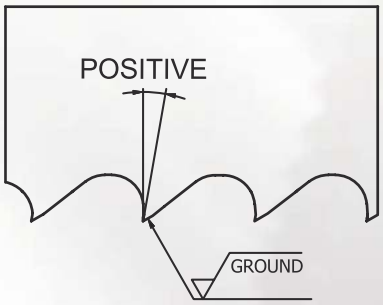
- Positive rake angle
- Variable TPI
- M51 HSS teeth tips
- Hardness up to 69 HRC
- Extra-long lifetime expectancy

Dimensions	TPI - teeth per inch			
mm	1,4/2	2/3	3/4	4/6
27 x 0,90		V-POS	V-POS	V-POS
34 x 1,10		V-POS	V-POS	V-POS
41 x 1,30	V-POS*	V-POS	V-POS	V-POS
54 x 1,60	V-POS*	V-POS*	V-POS	V-POS*
67 x 1,60	V-POS*	V-POS*		

V-POS = variable teeth with positive rake angle
* On request

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M51
GRINDCUT PROFI



GROUND-TEETH PROFILE FOR THE BEST CUTTING RESULTS

Application:

- Excellent for solid rods cutting
- Single as well as bundle cutting
- Stainless steels
- Highly Alloyed steels
- Titanium and nickel-based alloys

Characteristics:

- Positive rake angle
- Variable TPI
- M51 HSS teeth tips
- Hardness up to 69 HRC
- Extra-long lifetime expectancy
- Ground teeth

Dimensions	TPI - teeth per inch		
mm	1,4/2	2/3	3/4
27 x 0,90		V-POS	V-POS
34 x 1,10		V-POS	V-POS
41 x 1,30	V-POS*	V-POS	V-POS
54 x 1,60	V-POS*	V-POS*	V-POS
67 x 1,60	V-POS*	V-POS*	

V-POS = variable tooth pitch with positive rake angle
* On request

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

M51
PLUSCUT PROFI

HIGH PERFORMANCE BANDSAW BLADE

Application:

- Excellent for solid rods cutting
- Long chipping materials
- Highly alloyed steels

Characteristics:

- Very positive rake angle
- Variable TPI
- M51 HSS teeth tips
- Hardness up to 69 HRC
- Excellent life time expectancy

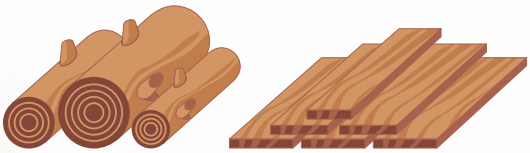
Dimensions	TPI - teeth per inch		
mm	1,4/2	2/3	3/4
27 x 0,90		V-POS+*	V-POS+*
34 x 1,10		V-POS+*	V-POS+*
41 x 1,30	V-POS+*	V-POS+*	V-POS+*
54 x 1,60	V-POS+*	V-POS+*	V-POS+*

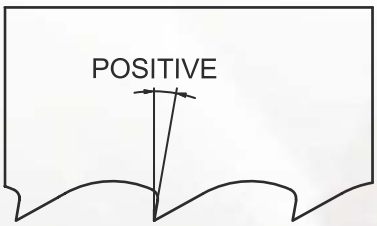
V-POS+ = variable teeth with very positive rake angle

The lifetime expectancy of band saw blade can be significantly increased by controlled break-in/running-in procedure. Please set the cutting speed to 80% and feed to 50% for first 20 minutes.

Pilana METAL

WOODCUT





BIMETAL BAND SAW BLADE FOR WOOD CUTTING

Application:

- Cutting of hard, exotic or frozen wood

Dimensions	TPI - teeth per inch	
mm	1,14	2
34 x 0,90	W	W
34 x 1,10	W	
38 x 1,10	W	
41 x 1,10	W	
50 x 1,10	W	

Characteristics:

- Tooth tips made from High Speed Steel (HSS)
- Band body is made from flexible steel
- Unique cutting performance and long life time expectancy

W = 10° rake angle, 30° clearance angle

www.pilanametal.com

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Co-funded by
the European Union