



**Pilana**

METAL

**Bi-Metal  
Band Saw Blades**

Made in Czech Republic  
since 1934

# ABOUT US



**Over 85 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.

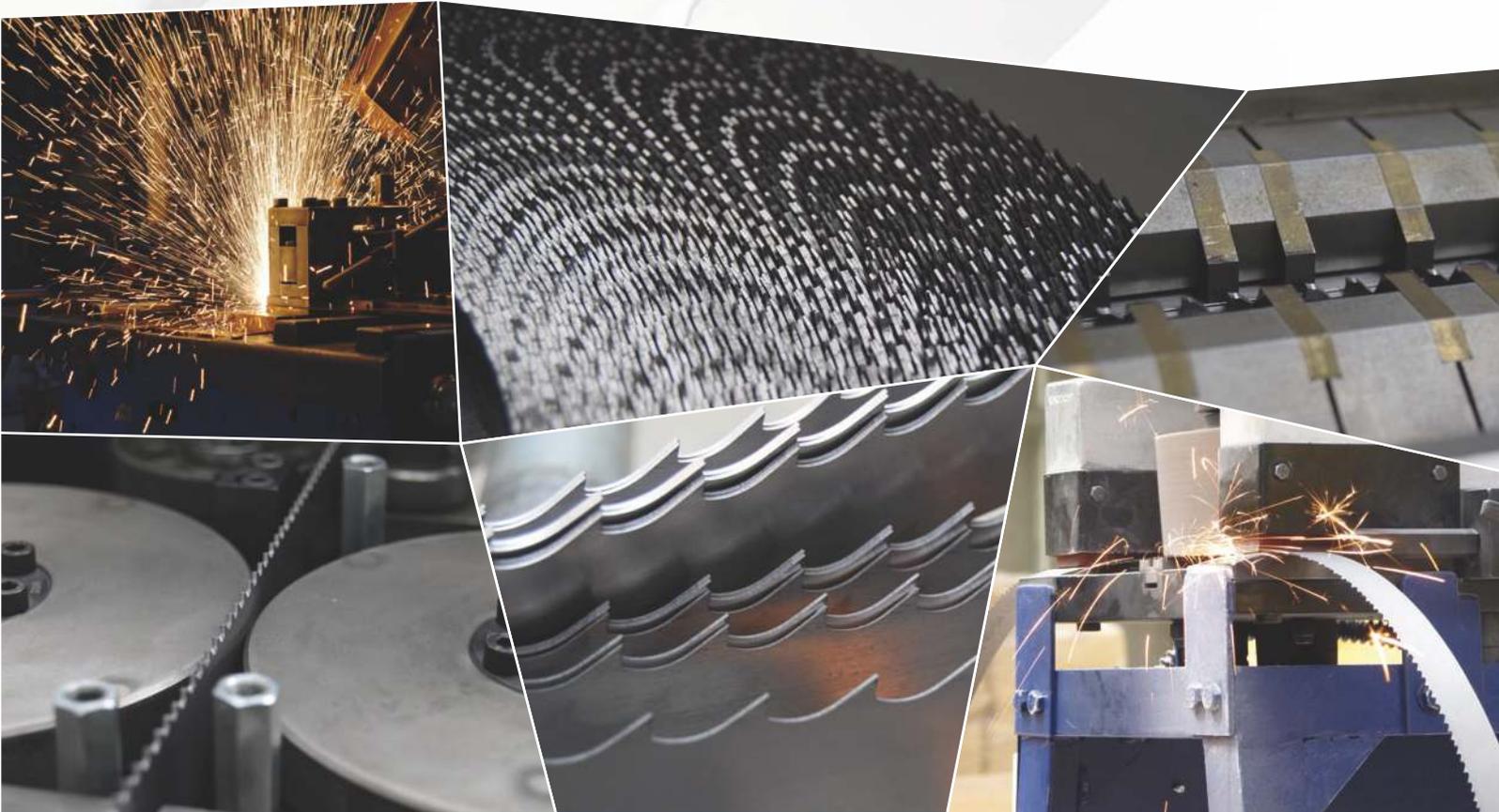
**We export to the whole world.** 90% of the tools is exported. Our bimetal band saw blades supplied in coils and welded blades are delivered to more than 60 countries worldwide.

**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.



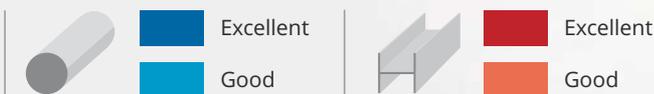
# EXPORT REGIONS WORLDWIDE

■ Export regions



# BAND CHOICE CHART

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



## 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

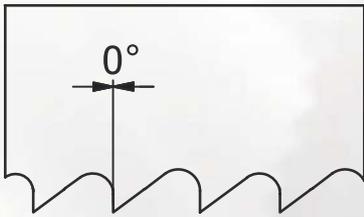
## Cutting recommendation for steel tubes and profiles



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

# BI-METAL BAND SAW BLADES

## 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:

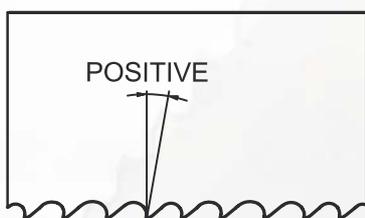
- 0° rake angle
- Variable TPI
- M42 HSS teeth tips
- Hardness up to 68 HRC
- Excellent life time expectancy

Dimensions	TPI - teeth per inch			
	5/8	6/10	8/12	10/14
mm				
13 x 0,65	V-O*	V-O	V-O	V-O
13 x 0,90	V-O*	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° 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				
	0,75/1,25	1,4/2	2/3	3/4	4/6
mm					
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	

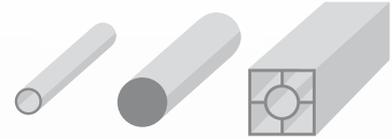
V-POS = variable teeth with positive rake angle

\* 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.

# BI-METAL BAND SAW BLADES

## 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					
	2	3	4	6	2/3	3/4
mm						
13 x 0,65			POS	POS		
13 x 0,90		POS	POS			
20 x 0,90		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*

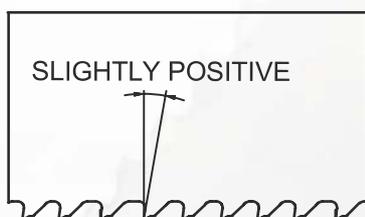
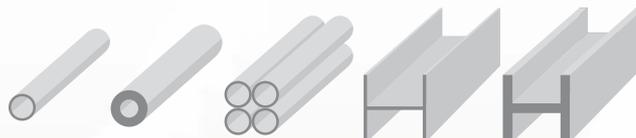
POS = regular teeth with positive rake angle

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

Dimensions	TPI - teeth per inch				
	2/3	3/4	4/6	5/7	8/11
mm					
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			
67 x 1,60	V-POS*	V-POS*			

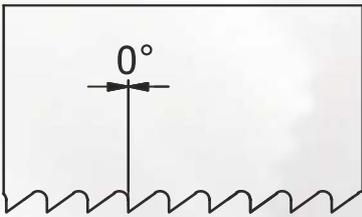
V-POS = variable teeth with positive rake angle

\* 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.

# BI-METAL BAND SAW BLADES

## 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-ferrous 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

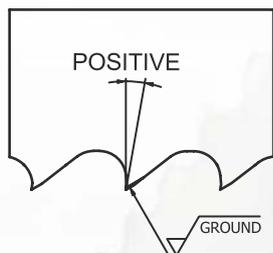
Dimensions	TPI - teeth per inch	
	14	18
mm		
13 x 0,65	N	N
13 x 0,90	N*	N*
20 x 0,90	N	N
27 x 0,90	N	N

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 ground 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	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

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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.

# BI-METAL BAND SAW BLADES

## 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		
	1,4/2	2/3	3/4
mm			
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			
	1,4/2	2/3	3/4	4/6
mm				
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	
67 x 1,60	V-POS*	V-POS*		

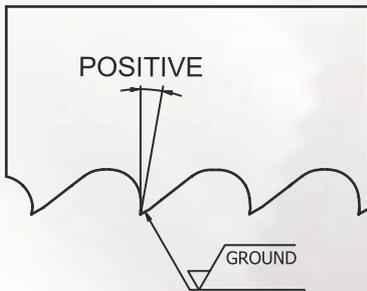
V-POS = variable teeth with positive rake angle

\* 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.

# BI-METAL BAND SAW BLADES

## 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		
	1,4/2	2/3	3/4
mm			
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 PROFIL



## HIGH PERFORMANCE BANDSAW BLADE

### Application:

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

### Characteristics:

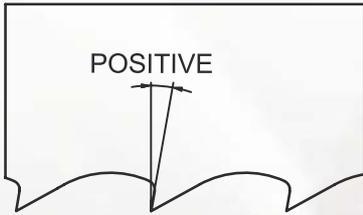
- Very positive rake angle
- Variable TPI
- M51 HSS teeth tips
- Hardness up to 69 HRC
- Excellent life time expectancy

Dimensions	TPI - teeth per inch		
	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.

# WOODCUT



## BIMETAL BAND SAW BLADE FOR WOOD CUTTING

### Application:

- Cutting of hard, exotic or frozen wood

Dimensions	TPI - teeth per inch	
	1,14	2
mm		
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	
54 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](http://www.pilanametal.com)

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