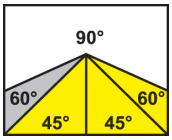
OFFER LIST

Pilous
Železná 9, 619 00 Brno, Czech Republic
Tel.: +420 543 25 20 10
*e-mail: **metal@pilous.cz**, **www.pilous.cz***

ARG 250 plus S.A.F.



2710 x 27 x 0,9

	90°	-45°	+45°	+60°
●	250	180	200	125
■	240	160	190	120
▬	300 x 200	190 x 100	190 x 190	120 x 130

Main motor	400 V, 50 Hz, 2,2 kW
Pump motor	400 V, 50 Hz, 0,05 kW
Hydraulic motor unit	400 V, 50 Hz, 0,55 kW
Saw blade speed	15-90 m/min.
Working height of vice	910 mm
Hydraulic system oil	cca 25 l (ISO 6743/4-HM, DIN 51 524 part 2-HLP)
Coolant tank	cca 15 l
Machine dimensions (min.)	1470 x 951 x 1455 mm
Machine dimensions (max.)	1940 x 1451 x 1780 mm
Machine weight	550 kg

DESCRIPTION

Universal robust band saw is appraised for general use in continuous uninterrupted production plants and in work-shops (work on locks, maintenance) as well. Industrial band 27 x 0.9 mm is manufactured in many versions and allows for cutting of wide range of materials, including stainless steel or tool steel.

The machine is equipped with high-performance industrial hydraulic unit. Pressing a single switch will execute complete cutting cycle – material clamping, band and cooling system start, cutting, band and cooling stop, arm uplift to the original adjustable position and vice unclamping. All of this in connection with hydraulics-controlled saw band feed into cut significantly increases cutting efficiency, especially in larger series and cutting of full and high-quality materials. When you switch to the manual mode you can control all fun-ctions separately. Hydraulic unit allows you to set the required pressure of the vice. Maximum cutting efficiency is maintained also thanks to the possibility of setting optimum saw band rate by a frequency converter in the range between 15 and 90 m/min., which significantly contributes to cutting accuracy and service life of saw bands. Large base and massive arm turning system with large loading surfaces ensure exceptional stability of the machine even when cutting heavy workpieces.

• Continuous adjustment of the cutting angle within the range 90°–60° when the workpiece is clamped tight.
• Very robust machine framework composes of castings from grey cast iron and ensures vibration absorption.
• Modern concept of the band saw arm allows for large cutting ranges in upright and angular cuts.
• Simple locking and adjusting of the desired cutting angle on the angle scale with stops fixed at 60° to the right and 45° to the left.
• The turntable rotates along with the saw band. Thanks to that the saw band does not cut into the loading surface of the vice.
• The massive vice ensures easy and reliable material locking.
• Large diameter running wheels and precise three-side hardmetal guiding ensure long service life of the band and cutting accuracy.
• Overdesign of running wheel bearings, tensioning wheel system and all rotary parts ensures long service life of the ma-chine.
• Noiseless and maintenance-free band drive is provided by an industrial electric motor with worm gearbox.
• The machine is connected to a complete cooling system with a high-performance pump and possibility of regulating the
• flow on both guiding heads independently. Coolant tank with a pump is placed in the base of the machine.
• The machine checks correct tension or break of the saw band. If the saw band breaks the machine automatically switches off.
• Easy control by ergonomically placed controls (electrical and hydraulics) on the base of the machine.
• The machine is equipped with a hinged stop with a 500mm scale. Hinged system prevents jamming of the material during cutting – it prevents saw band from damage.

ACCESSORIES

DR250/300/330*

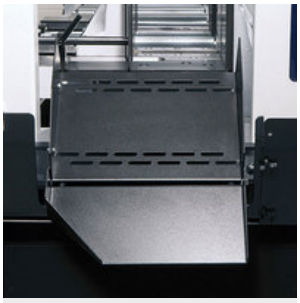
Workpiece stop - Standard equipment
Robust stop with a 500mm scale for setting the required length of the material to be cut.

FR*

Frequency converter - Standard equipment
Enables continuous blade speed regulation between 15–90 m/min. and thus setting the optimum cutting conditions for the given material.

HVP

Hydraulic pressure device HVP
Used to clamp bundles of material to be cut. Ensures reliable clamping by hydraulically controlled vertical contact pressure working within the machine's cycle.



KL

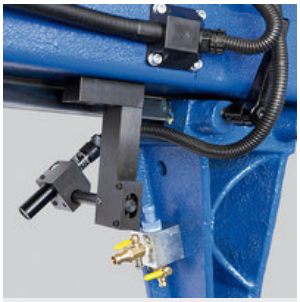
Material chute KL
Continuously joins the vice behind the cut and allows for easy slide of cut pieces into a container when cutting larger series. The chute construction consisting of 2 parts prevents leakage of the coolant.

LA 50

Halogen lamp LA 50
Provides good lighting of the workplace of the machine. An invaluable tool especially when the lighting at the workplace is insufficient.

MM

Oil mist lubrication MM
Creates an oil mist that is sprayed onto the cutting edge. It replaces the use of a classic coolant, especially when cutting sections during which leakages may occur. Possibility of using organic oils.



LS

Laser alignment LS
High-quality industrial laser projects the cutting line on the material to be cut. Makes the setting of the required material length simpler, faster and more accurate.

CD

Saw band tension indicator CD
Ensures accurate tensioning of the saw band to a required value according to the pressure gauge and its control during the use of the machine. Optimum tensioning of the saw band is essential for its service life and cutting accuracy.

OPL

Rinse spray gun OPL
For cleaning working space of the machine.

ANZ

Electronic arm uplift height setting ANZ
On a standard machine, the arm uplift height is adjusted manually on a scale located on the machine's joint. This version is fitted with a sensor on the machine's joint. If you set the desired arm uplift height before serial cutting in manual mode, the set arm uplift height is stored in the machine memory after switching the machine to semi-automatic mode. After the workpiece is cut, the arm is automatically raised to the set arm uplift height.

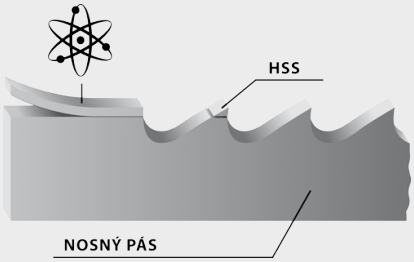
CONVEYORS

*) Is always a part of the conveyor.

Note: You can connect M280 behind the cut as a conveyor only if angular cutting isn‘t required.

MAXtech

- Original bandsaw blades produced using the latest technology with top-quality German materials, while strictly complying with all stated production and control procedures.
- High productivity and precision of cut with the maximum service life of the blade is ensured.
- Wide range of produced types of sawblades and toothing enables the professional cutting of almost all available materials.



Bi-metal blade

Consists of bearing band from special steel on which a layer of HSS material is welded into where the teeth are milled.

Constant toothing

The distance of the teeth are always the same.

Variable toothing

The distance of teeth vary and is periodically repeated. This results in a greater cutting range, ability to further eliminate vibrations caused by the impact of the tooth blade on material, longer service life of the blade.

M42

Universal blade recommended for a wide palette of material, including tool steels and stainless steel up to hardness 45 HRC. Teeth are made from steel HSS-M42 containing cobalt.

M51

Blade for tool and stainless steel with hardness up to 50 HRC. Tooth tips are made from steel HSS-M42 containing cobalt and wolfram

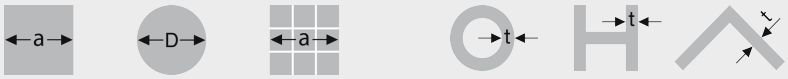
Carbide

Consists of bearing band from special steel into which the teeth are milled on which especially grinded carbide plates are welded. The carbide mounted blade is recommended for cutting surface hardened materials, chrome parts, forged pieces and materials with external tenacity and hardness up to 62 HRC.

Cutting range

For optimal output of the blade, the correct selection of the size of the blade tooth is important depending on the size of the divided material.

SOLID MATERIALS	PROFILED MATERIALS



Variable toothing		Constant toothing		Variable toothing		Constant toothing	
a(D) [mm]		a(D) [mm]		t [mm]		t [mm]	
0–25	10/14	0-10	18	0-4	10/14	0-1	18
20-40	8/12 (8/11)	5-20	14	3-6	8/12 (8/11)	0-3	14
30-60	6/10	20-40	10	6-9	6/10	4-7	10
40-70	5/8 (5/7)	40-80	6	9-13	5/8 (5/7)	8-11	6
60-110	4/6	80-120	4	12-16	4/6	12-15	4
80-140	3/4	120-200	3	16-22	3/4	16-20	3
120-350	2/3	200-400	2	20-35	2/3	21-30	2
250-550	1,4-2	300-800	1,25	30-85	1,4-2	31-90	1,25
380-750	1/1,5			40-85	1/1,5		
550-3000	0,75/1,25			80-200	0,75-1,25		

When selecting the number of teeth for the blade, the general principle applies of a minimum of 4 teeth, but no more than 30 teeth are in contact with the work piece.

Be careful when unpacking welded saw blades. They are in a shipping container in tensioned condition. Remove the saw blade cover only after fitting it onto the machine.

EMULSION

COOLcut Standard

COOLcut Standard – universal coolant and lubricant.
Recommended concentration 5–10 %. 5 litres pack. Dilution 1:20.
• fluid allows achievement of optimal lubricating and cooling properties during the machining process
• low aromatic, highly refined paraffinic oil
• effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
• bio stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
• minimum tendency to foaming ensures effective lubrication
• high efficiency and profitability of use
Except use on log band saws the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres.

COOLcut Opti

COOLcut Opti – universal coolant and lubricant. Such machining fluid allows achievement of unique lubricating and cooling properties during the machining process.
Recommended concentration 4–7 %. 1 and 5 litres pack. Dilution 1:20.
• low aromatic, highly refined mineral oil
• effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
• above average stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
• minimum tendency to foaming ensures effective lubrication
• high efficiency and profitability of use
• long-term biostability
In addition to use in saw bands the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres.

COOLcut Eco 65

COOLcut Eco 65 – universal cooling and lubricating emulsifying oil, well biodegradable according to OECD 301-D test. Biodegradability of 65 % in 21 days.
Recommended concentration 4–7 %. 5 litres pack. Dilution 1:20.
• Such machining fluid allows achievement of unique lubricating and cooling properties during the machining
• process
• highly refined synthetic ester oil
• effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
• above average stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
• minimum tendency to foaming ensures effective lubrication
• high efficiency and profitability of use
• long-term biostability
In addition to use in saw bands the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres.

COOLcut Bio 90

COOLcut Bio 90 – universal cooling and lubricating emulsifying oil, well biodegradable according to OECD 301-D test. Biodegradability of 90 % in 21 days. Due to its biodegradability it can be used in any outdoor environment without environmental damage.
Recommended concentration 4–7 %. 5 litres pack. Dilution 1:20.
• Such machining fluid allows achievement of unique lubricating and cooling properties during the machining
• process
• highly refined synthetic ester oil
• effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
• above average stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
• minimum tendency to foaming ensures effective lubrication
• high efficiency and profitability of use
• long-term biostability
In addition to use in saw bands the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres.

COOLcut Micro

COOLcut Micro – an easily biodegradable semi-synthetic cooling and lubricating micro-emulsion. Due to its biodegradability it can be used in any outdoor environment without environmental damage. Such machining fluid allows achievement of unique lubricating and cooling properties during the machining process.
Pack of 5 litres. Use undiluted.
• highly refined synthetic ester oil
• effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
• above average stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
• minimum tendency to foaming ensures effective lubrication
• high efficiency and profitability of use
• long-term biostability
In addition to use in saw bands the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres. 5 litres pack.

COOLcut Antifreeze

COOLcut Antifreeze – low-freezing ingredient for water miscible coolants used in winter in outdoors environment, up to minus 20 °C, depending on the dosage.
5 litres pack. Dilution 1:20.
• effectively lowers the freezing point of the fluid
• very good resistance to oxidation guarantees long service life
• does not act aggressively on the sealing elements (elastomers), to which it comes into contact.

Optima Antifreeze	(%)	10	20	30	40	50
Flowability temperature	(°C)	-5	-10	-17	-26	-40

RECOMMEND

OH 90

Simple and very fast deburring of all kinds of sections (including the internal edges) or full material by a rotary steel brush. High quality construction of the machine along with a three-phase motor make use of the machine possible in specialized workshops as well as in production plants. Compared to manual deburring it reduces the required time and hence reduces your costs. While maintaining incomparably higher and balanced quality of deburring.
We recommend using stainless steel brush for stainless steel products.
Example of the difference between manual deburring (including internal edges) and OH 90

Hollow section 60 x 60 x 2 mm:	manual deburring - 32 s	machine OH 90 - 8 s
Tube diameter 50 x 2 mm:	manual deburring - 21 s	machine OH 90 - 4 s

OHE 90

Simple and very fast deburring of all kinds of sections (including the internal edges) or full material by a rotary steel brush. High quality construction of the machine along with a three-phase motor make use of the machine possible in specialized workshops as well as in production plants. Compared to manual deburring it reduces the required time and hence reduces your costs. While maintaining incomparably higher and balanced quality of deburring.
We recommend using stainless steel brush for stainless steel products.
Example of the difference between manual deburring (including internal edges) and OH 90

Hollow section 60 x 60 x 2 mm:	manual deburring - 32 s	machine OH 90 - 8 s
Tube diameter 50 x 2 mm:	manual deburring - 21 s	machine OH 90 - 4 s