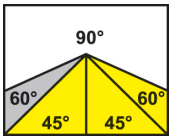
OFFER LIST

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

ARG 400 plus S.A.F.





4300 x 34 x 1,1

	90°	-45°	+45°	+60°
●	400	290	300	200
■	400	250	300	200
▬	460 x 300	300 x 170	300 x 200	200 x 200

Main motor	400 V, 50 Hz, 3 kW
Pump motor	400 V, 50 Hz, 0,12 kW
Hydraulic motor unit	400 V, 50 Hz, 0,55 kW
Saw blade speed	15-90 m/min.
Working height of vice	795 mm
Hydraulic system oil	cca 26 l (ISO 6743/4-HM, DIN 51 524 část 2-HLP)
Coolant tank	cca 35 l
Machine dimensions (min.)	1410 x 2370 x 1580 mm
Machine dimensions (max.)	2000 x 2600 x 2150 mm
Machine weight	1225 kg

DESCRIPTION

Exceptionally robust construction of the whole machine. Band saw arm made of grey cast iron in this size of band saws is completely exceptional. It ensures high cutting accuracy and long service life of the machine. Complete massive construction of the machine is designed primarily for industrial cutting of full materials even in the most difficult conditions. Thanks to the range of cutting angles of 60° to the right and 45° to the left the band saw is suitable for universal use in all production plants. The saw band sized 34 x 1.1 mm ensures accurate cutting of large cross-sections. The band is manufactured in many versions and allows for cutting of wide range of materials, including stainless steel or tool steel.

Easy intuitive controls through a touchscreen on a central control panel. The display also shows required lifting height of the saw band arm depending on the cross section of the material to be cut. Moreover it allows you to monitor the number of cut workpieces in the current settings and machine diagnostics (PLC inputs and outputs, history of errors). During cutting the display shows saw band speed, main engine load and any potential error messages. The display also shows cutting angle settings. Special accessories.

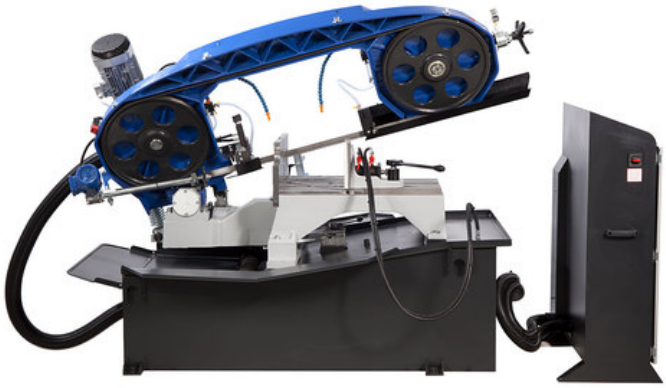
When you switch to the manual mode you can control all functions separately. The machine is equipped with a high-performance industrial hydraulic unit which allows setting of the contact pressure of the vice. All of this in connection with hydraulics-controlled saw band feed into cut significantly increases cutting efficiency, especially in larger series and cutting of full and high-quality materials. 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. 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.

• In order to achieve maximum stiffness of the whole system and cutting accuracy, the band saw arm is attached to a sturdy grey cast iron turntable on both sides in massive “houses” fitted with pre-stressing tapered roller bearings.
• Massive machine base and exceptionally robust grey cast iron vice with a large material loading surface. The base of the machine is by default equipped with a removable chips container or with an additional chips conveyor.
• The system is mounted on tapered roller bearings in order to facilitate the easiest possible rotation of the arm during angular cutting.
• Simple locking and adjusting of a required cutting angle on the angle scale or, as additional accessories, digital monitoring on a touch screen.
• 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 machine.
• Noiseless and maintenance-free band drive is provided by an in-dustrial 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 and on an additional adjustable outlet. 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.

PHOTOGALLERY



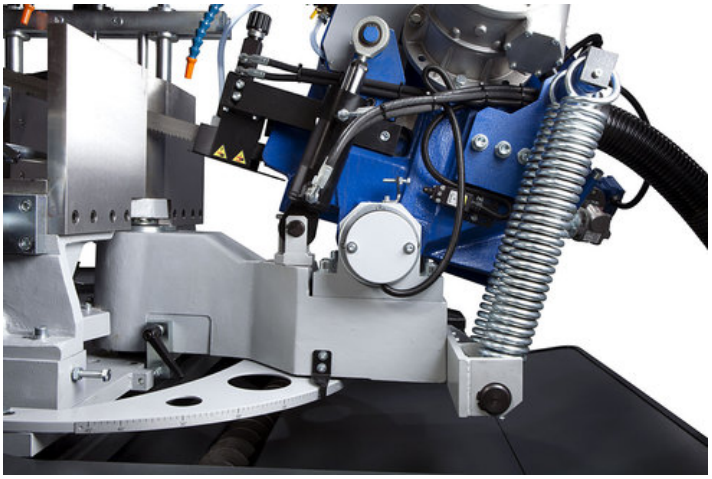


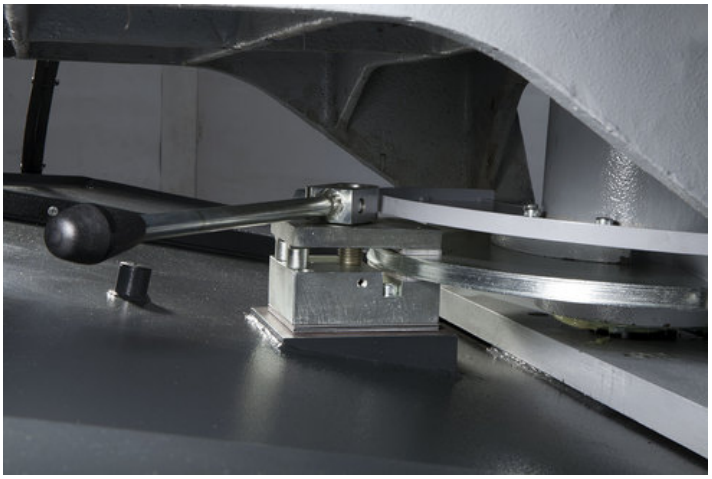


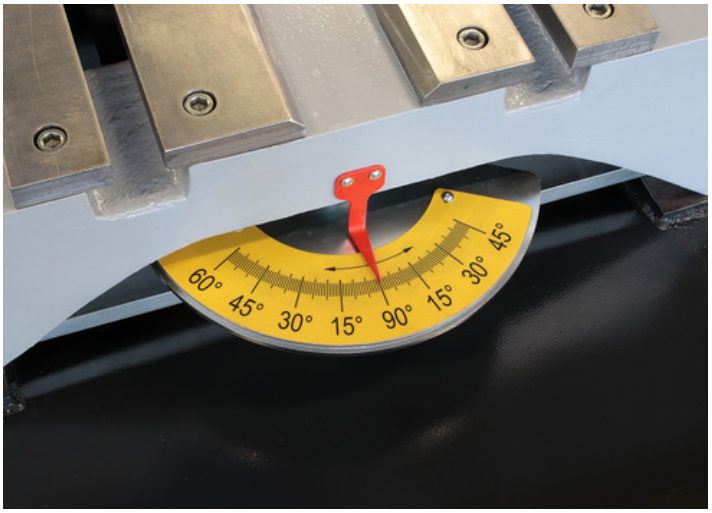











60°
45°
30°
15°
90°
15°
30°
45°

ACCESSORIES



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.



HVP400PLUS

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



LA400plus

Halogen lamp
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
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.



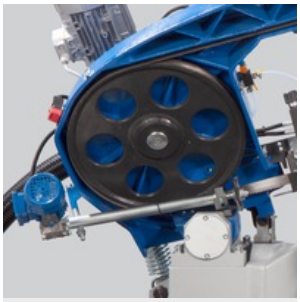
LS

Laser alignment
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.



DR 380/400/500

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



KDE 400

Electrical cleaning brush
Steel circular brush powered by and industrial motor with worm gearbox. Used to remove chips from the saw band behind the cut.



LG 380/400/500

Display of angles
Digital scanning of set cutting angle ensures fast and accurate setting of the required angle. The value is displayed with an accuracy of 0.1 degrees on a central touchscreen. We recommend this equipment especially for a frequent angular cutting.



AG 330/380/400

Pressure regulation
Hydraulically controlled one-sided automatic regulation of saw band feed into cut according to the resistance of the material to be cut. Significantly reduces the cutting time and service life of the saw band.



SD

Screw chips conveyor
Ensures smooth removal of chips from the machine. Reduces the time needed for the cleaning of the machine especially when cutting series of full materials producing large amount of chips.



CD

Saw band tension indicator
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
For cleaning working space of the machine.



SDB

Chip container
For easy handling is chip container equiped with wheels and swivel chip bin.



SP separator+

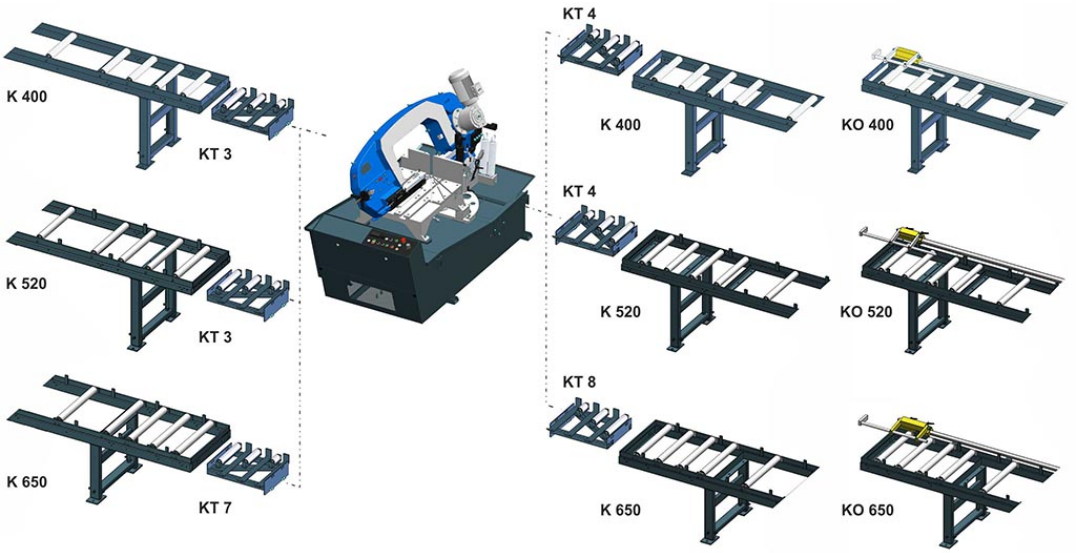
Stainless steel container and chip separator
The robust stainless steel container is an optional accessory enabling the machine to be complemented with a chip separator. The chip separator is a galvanized, finely perforated container for efficient collection of sawdust that has passed through a sieve in the base. This container is easily removable when filled and is easy to clean outside the machine.



SPM magnetic separator+

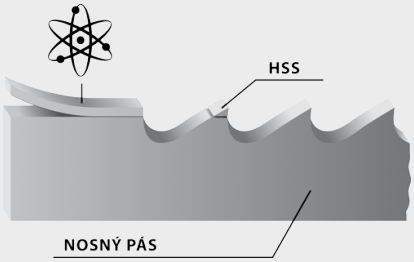
Stainless steel container and magnetic chip separator
The robust stainless steel container is an extra accessory enabling the machine to be complemented with a magnetic chip separator. For particularly fine chips that have passed through the sieves in the saw, a highly efficient magnetic separator is used. It saves time for cleaning and disassembling the cooling path and extends the service life of the cooling emulsion. This device is easily removable and easy to clean outside the machine by simply pulling the magnetic bars out of the housing.

CONVEYORS


K 400
KT 3
K 520
KT 3
K 650
KT 7
KT 4
K 400
KO 400
KT 4
K 520
KO 520
KT 8
K 650
KO 650

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.

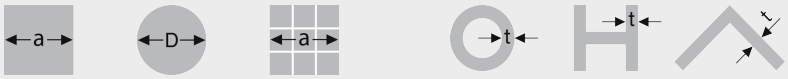
M42
Universal blade recommended for a wide palette of material, including tool steels and stainless steel up to hardness 45 HRC. Teeth are made from steel HSS-M42 containing cobalt.

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

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