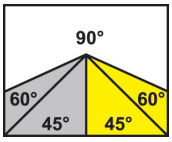
OFFER LIST

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

ARG 330 H.F.





3870 x 34 x 1,1

	90°	+45°	+60°
●	330	250	165
■	320	230	150
▬	400 x 200	250 x 170	150 x 150

Main motor	400 V, 50 Hz, 3 kW
Pump motor	400 V, 50 Hz, 0,12 kW
Hydraulic motor unit	400 V, 50 Hz, 0,18 kW
Saw blade speed	15-90 m/min.
Working height of vice	945 mm
Hydraulic system oil	cca 6 l (ISO 6743/4-HM, DIN 51 524 part 2-HLP)
Coolant tank	cca 35 l
Machine dimensions (min.)	1350 x 2200 x 1750 mm
Machine dimensions (max.)	2050 x 2600 x 2150 mm
Machine weight	735 kg

DESCRIPTION

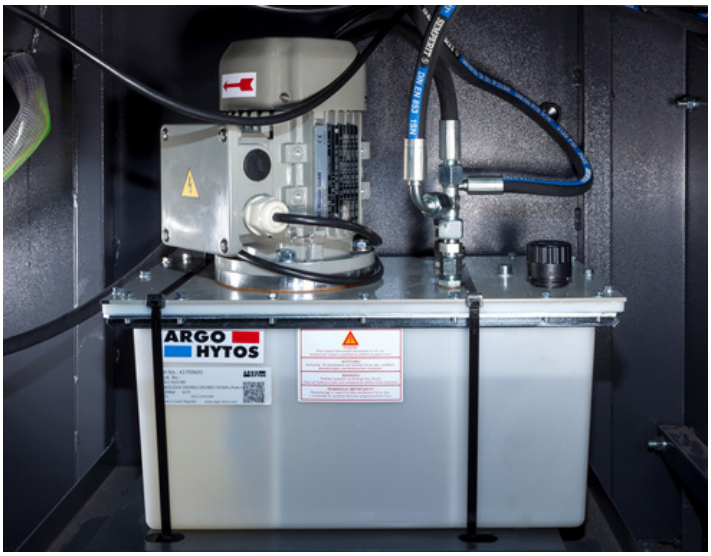
A completely new, revolutionary concept of the band saw arm casting and a new, unique design. The band saw arm casting is hollow in its full length and it forms a closed section. This ensures optimum stiffness of the whole system and maximum accuracy cutting. The robust band saw is generally suitable for all demanding 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. The machine is equipped with a simple hydraulic unit which facilitates the automatic uplift of the saw band arm after the cut is finished. In contrast to manual uplift this system makes the operation of the machine much easier, especially when cutting larger series. Uplift height can be adjusted according to the size of the material to be cut. The feed into cut is carried out by the weight of the arm, with the possibility of continuous regulation by the oil damper butterfly valve. When the cutting is finished the band drive automatically switches off and the arm goes up to the set position. 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. Ergonomic base allows you to install the machine even in confined spaces.

• 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.
• In order to achieve maximum stiffness of the whole system and cutting accuracy, the band saw arm is attached to a sturdy turntable on both sides in massive “houses” fitted with pre-stressing tapered roller bearings.
• Modern concept of the band saw arm allows for large cutting ranges in both upright and angular cutting.
• Massive arm turning system with large loading surfaces ensures exceptional stability of the machine even when cutting heavy workpieces.
• Simple locking and adjusting of the desired cutting angle on the angle scale.
• Massive quick-clamping vice ensures easy and reliable material clamping.
• Large diameter running wheels and precise three-side hardmetal guiding ensure long service life of the band and cutting accuracy. 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 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.
• All of electrical wiring and coolant distribution are concealed in hollow parts of the arm which means they are protected from damage.
• The new concept of the arm also brings a great simplification when changing the saw band or when cleaning the inside of the arm. You just need to open the hinged back cover of the arm and it will stay locked in the upper position.
• 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 the workpiece from jamming during cutting.

PHOTOGALLERY





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.



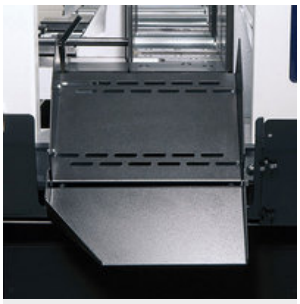
FR*

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.



VP

Pressure device
Used to clamp the bundles of material to be cut. Ensures simple and reliable material clamping using a vertical contact pressure.



KL

Material chute
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.



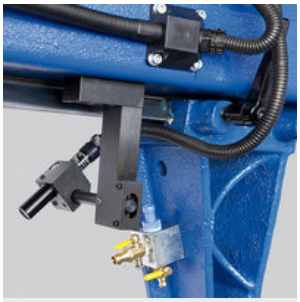
LA 50

Halogen lamp
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.



KDM

Cleaning brush
Steel cleaning brush, driven by driving wheel. Used to remove chips from the saw band behind the cut.



KDE

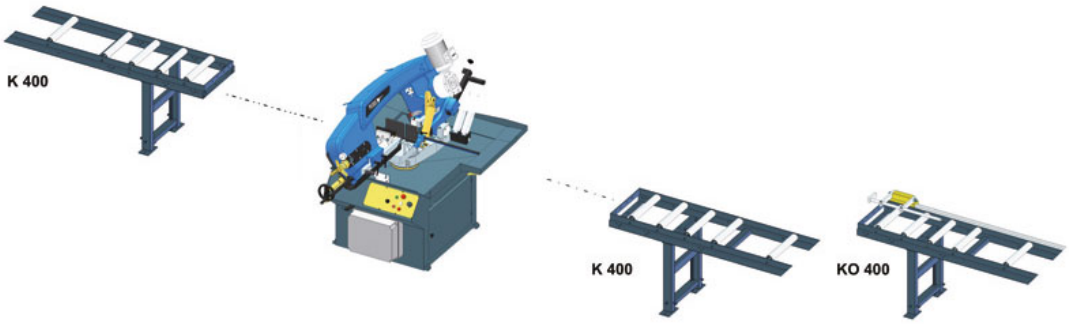
Electrical cleaning brush
Steel circular brush powered by and industrial motor with worm gearbox. Used to remove chips from the saw band behind the cut.



CD

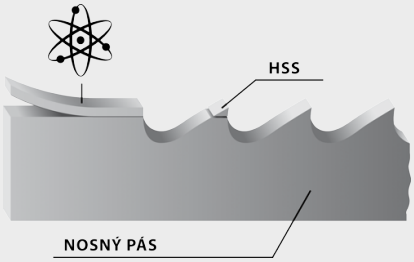
Saw band tension indicator
Ensures accurate tensioning of the saw band to a required value according to the pressure gauge and its control during the use of the machine. Optimum tensioning of the saw band is essential for its service life and cutting accuracy.

CONVEYORS



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.

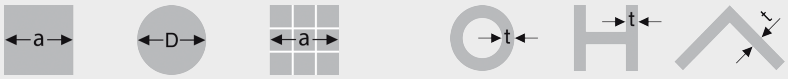
M42
Universal blade recommended for a wide palette of material, including tool steels and stainless steel up to hardness 45 HRC. Teeth are made from steel HSS-M42 containing cobalt.

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