



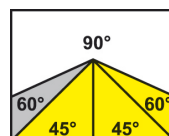
## Pilous

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## ARG 300 plus E.H.



3150 x 27 x 0,9

	90°	-45°	+45°	+60°
●	300	220	240	155
■	290	190	190	150
■	360 x 190	240 x 100	240 x 160	150 x 150

Main motor	400 V, 50 Hz, 1,2/1,55 kW
Pump motor	400 V, 50 Hz, 0,05 kW
Hydraulic motor unit	400 V, 50 Hz, 0,18 kW
Saw blade speed	40/80 m/min.
Working height of vice	910 mm
Coolant tank	cca 15 l
Machine dimensions (min.)	1840 x 890 x 1520 mm
Machine dimensions (max.)	2210 x 1720 x 2150 mm
Machine weight	478 kg

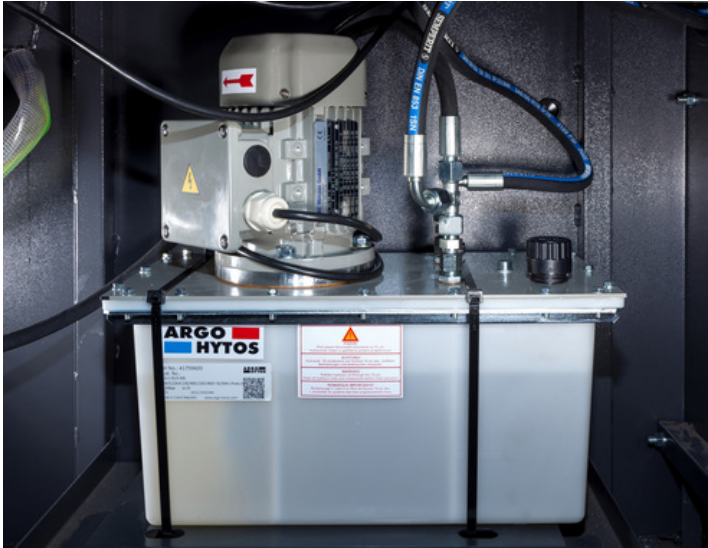
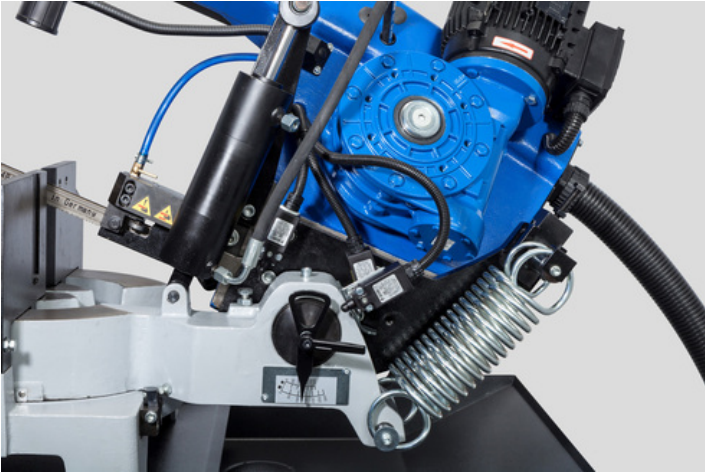
## DESCRIPTION

The universal band saw is expected to find application in many areas from facilities with non-stop operation to metalworking and maintenance workshops. It is equipped with an industrial saw band 27 x 0.9 mm, manufactured in many versions, which allows for cutting of a 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. 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. The vice system also makes the machine highly versatile, enabling continuous adjustment of the cutting angle on both sides within the range of 60° to the right and 45° to the left. The turntable rotates with the saw belt. This prevents the saw blade from cutting into the loading surface of the vice.

The most advanced concept of the arm casting creates a closed section that is hollow along its full length at all load-carrying points. This guarantees outstanding stiffness of the entire system, maximum accuracy during cutting and a long service life of the saw blades. All electrical wiring and the coolant delivery system 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. Apart from the new saw arm design, there are many technological adjustments and innovations that improve user comfort as well as the quality and durability of the machine. As an accessory, it is possible to use the cleaning brush of the saw band that is synchronously driven by the driving wheel.

- Robust machine framework composed of castings from grey cast iron guarantees excellent 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 45°, 60° and 90°.
- Massive quick-clamping vice ensures easy and reliable workpiece clamping.
- Large-diameter running wheels and precise three-side hardened steel blade guides ensure long service life of the band and cutting accuracy.
- Overdesign of the running wheel bearings, the tensioning wheel system and all the rotary parts helps extend the service life of the machine in long run.
- Noiseless and maintenance-free drive of the saw band is provided by an industrial electric motor with worm gearbox.
- Three-phase, two-speed motor (400 V) allows you to choose the band speed of 40 and 80 m/min. Version ARG 300 PLUS E.H.F. is equipped with frequency converter, which enables continuous blade speed regulation between 15 - 90 m/min (2,2 kW motor).
- The machine is connected to a complete cooling system with a high-performance pump, with the ability of regulating the flow on both guiding heads independently. Coolant tank with a pump is placed in the base of the machine.
- Easy control by ergonomically placed controls (electrical and hydraulics) located on the base of the machine.
- The machine is equipped with an adjustable workpiece limit stop with 250 mm scale.

PHOTOGALLERY





DR105/130/200/235\*

**Workpiece stop - Standard equipment**

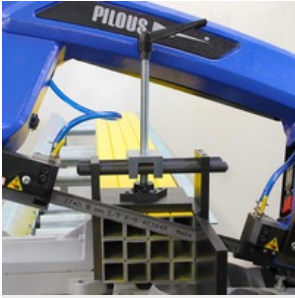
Simple stop for setting the required length of the material to be cut.



FR

**Frequency converter**

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.



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.



DR235

**Workpiece stop 500 mm**

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



KDM

**Cleaning brush**

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

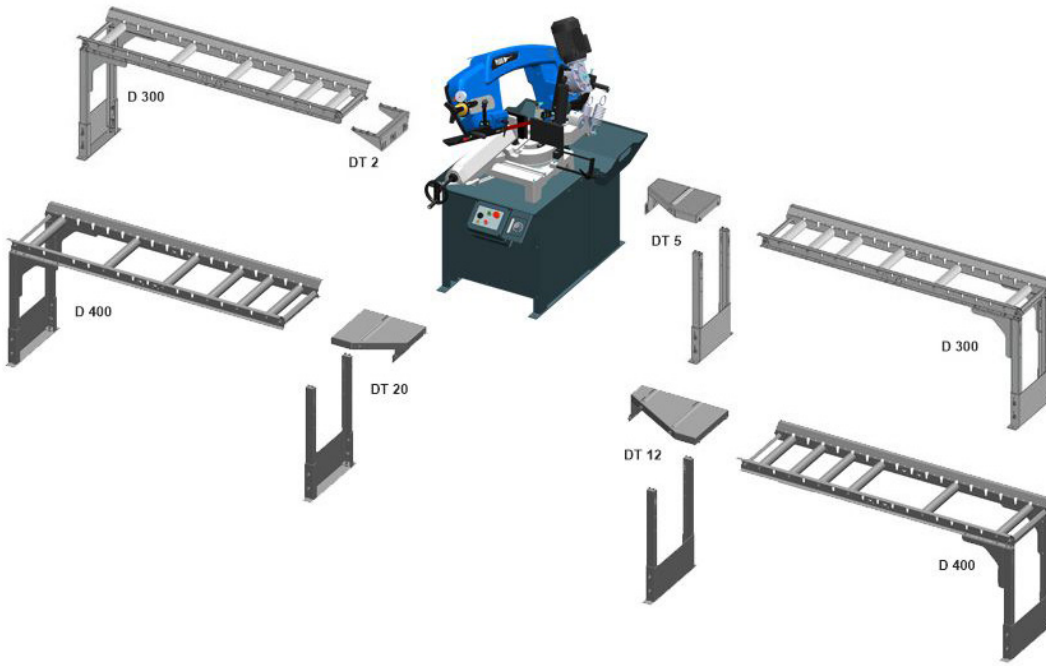


CD

**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





- 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 tooling 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 toothting**  
The distance of the teeth are always the same.

**Variable toothting**  
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**

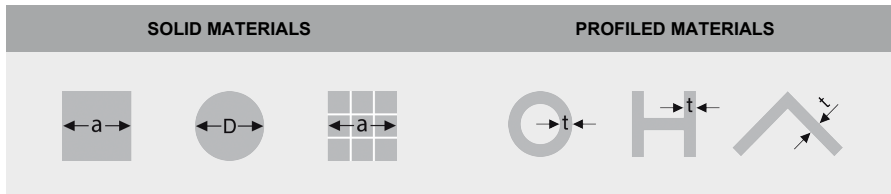
Blade for tool and stainless steel with hardness up to 50 HRC. Tooth tips are made from steel HSS-M42 containing cobalt and wolfram

**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.



Variable toothting		Constant toothting		Variable toothting		Constant toothting	
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.



**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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