



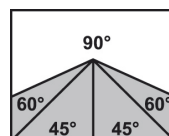
## Pilous

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### ARG 700 DC CF-NC Automat



8200 x 54 x 1,6

	90°
●	700
■	700
■	700 x 750

Main motor	7,5 kW
Pump motor	0,09 W
Hydraulic motor unit	3 kW
Material feed length (multiple)	500 mm
Max. cutting in bundle	370 x 700 mm
Residual piece in NC operation	360 mm
Saw blade speed	15-110 m/min.
Saws blade tilt	3
Working height of vice	700 mm
Hydraulic system oil	Paramol HM 32
Coolant tank	160 l
Machine dimensions (max.)	3840 x 2790 x 2760 mm
Machine weight	6500 kg

## DESCRIPTION

**Robust, fully automated CNC band saw is generally suitable for cutting big series in the heaviest and non-stop operating plants, and also for cutting heavy workpieces of larger cross-sections. Exceptionally solid construction of the saw band arm and the massive dual-column arm support moving on linear lines ensure excellent stiffness of the whole system and accurate cut. A robust feed system of the vice on linear lines guarantees precise material feed.**

Industrial saw blade 54 x 1.6 mm is manufactured in many versions and allows for cutting of wide range of materials, including stainless steel or tool steel. For easier feed of heavy materials, the loading area is equipped with a pass-through roller track with a load-carrying capacity of 8 t/m. Full uplift vice ensures a quick and reliable workpiece clamping during cutting. The vice jaw together with the movable guide head of the saw blade are automatically adjusted on the linear guiding. Thus, it is located as close to the cut as possible, which contributes to the accuracy and speed of the cut and to the service life of the saw blade. Both guide heads of the saw blade are equipped with automatic control of the feed to the cut. The system monitors the current load on the saw blade and provides automatic coordination of an ideal cutting pressure and feed, considering the current profile of the cut material. This significantly speeds up and gives precision to the cut and increases the service life of the saw band.

Maximum cutting efficiency is maintained also thanks to the possibility of setting optimum saw blade speed by a frequency converter in the range from 15 to 110 m/min., which significantly contributes to cutting accuracy and service life of the saw blades. Ergonomic central control panel ensures easy and intuitive control of the machine. Simple creation of up to 99 programs with different lengths and number of pieces. After material clamping and pressing of a single switch, the machine will execute the complete cutting cycle – workpiece clamping, saw blade and cooling system start, cutting, saw blade and cooling stop, arm uplift to the original adjustable position above the material, vice unclamping, material feed to the preset length, material clamping and cutting.

The display allows you to track the number of cut pieces, the speed of the saw blade, and any error messages. When you switch to the manual mode, you can control all functions separately. The end of the cut material is indicated by an optical sensor. Large base and overall massive framework guarantee exceptional stability of the machine even when cutting heavy workpieces. For a comfortable chip removal, the machine can be equipped with a rake chip conveyor. The machine is equipped with a high-performance industrial hydraulic unit. Hydraulic unit allows you to set the required pressure of the vice. Hydraulic blade tensioning guarantees perfect tensioning of the saw blade.

- In order to achieve maximum accuracy and productivity, the machine is designed only for upright cutting.
- Very robust machine construction composes of massive castings and ensures safe vibration absorption.
- Large diameter blade wheels and precise three-side solid carbide blade guides ensure long service life of the blade and cutting accuracy.
- Overdesign of blade wheel bearings, tensioning wheel system and all rotary parts ensure long service life of the machine.
- Noiseless and maintenance-free band drive is provided by an industrial electric motor with bevel-spur gearbox.
- A circular steel brush powered by an industrial motor with a worm gearbox ensures removal of chips from the saw blade behind the cut.
- 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 two additional adjustable outlets. Rinsing pistol is used for easy cleaning of the machine. Coolant tank of approx. 100 l with a high-performance pump are placed in the base of the machine.
- High-quality lighting of the work area by a line of powerful LEDs with a cover.
- The machine checks correct tension or breakage of the saw blade. If the saw blade breaks, the machine automatically switches off.



- 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 tooth spacing**  
The distance of the teeth are always the same.

**Variable tooth spacing**  
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 tooth spacing		Constant tooth spacing		Variable tooth spacing		Constant tooth spacing	
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.**

- 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. Recommended concentration 5–10 %. 5 litres pack. Dilution 1:20.



**COOLcut Opti**

**COOLcut Opti – universal coolant and lubricant. Such machining fluid allows achievement of unique lubricating and cooling properties during the machining process.**

- 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. Recommended concentration 4–7 %. 1 and 5 litres pack. Dilution 1:20.



**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.**

- 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. Recommended concentration 4–7 %. 5 litres pack. Dilution 1:20.



**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.**

- 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. Recommended concentration 4–7 %. 5 litres pack. Dilution 1:20.



**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.**

- 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. Recommended concentration 4–7 %. 5 litres pack. Dilution 1:20.



**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.**

- 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.

5 litres pack. Dilution 1:20.

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