# CATÁLOGO



# **Pilous**

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# ARG 250 CF-NC automat





2710 x 27 x 0,9

	90°	+45°
•	250	180
	245	170
	245 x 250	180 x 120

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, 0,37 kW
Servo motor of the feed	400 V, 50 Hz, 1,3/2 kW
Feed rate of material	1,6 / 2,5 / 3 m/min.
Saw blade speed	15-90 m/min.
Working height of vice	790 mm
Hydraulic system oil	cca 25 I (ISO 6743/4-HM, DIN 51 524 part 2-HLP
Coolant tank	cca 40 I
Machine dimensions (min.)	1500 x 2150 x 1350 mm
Machine dimensons (max.)	1800 x 2150 x 1650 mm
Machine weight	937 kg

# DESCRIPCIÓN DEL PRODUCTO

Fully automated CNC band saw is generally suitable for cutting big series in the heaviest and non-stop operating plants. The machine is equipped with a workpiece feed by industrial servomotor with a new control system. The servomotor and ball screw ensure high speed and maximum accuracy of workpiece feed, even in multiple feed when cutting long pieces. Options of setting three feed rates – 27, 42 or 50 mm/s according to weight and length of the workpiece to be cut. Maximum length of a single feed is 500 mm.

Central control panel with a big colour touch screen (7.5") ensures simple intuitive control of all features of the machine. The control unit allows for programming of up to 60 programmes for quick setting of the feed length in repetitive production. Each programme can be annotated, e.g. by the drawing number. Possibility of programming and cutting of different number of pieces of different sizes without the need for further operation of the machine. The machine can be controlled in fully automatic, semi-automatic or manual mode. In manual mode all functions of the machine are controlled separately. Workpiece clamping and arm feed into and out of the cut in the desired position according to section of the workpiece are controlled by hydraulics. Regulation of pressure of the feeding and fixed vice is included in the standard equipment.

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. Maximum accuracy of workpiece feeding is based on a very robust construction of the machine with all the main parts made of grey cast iron and massive framework of the feeding system. Large base and overall massive framework guarantee exceptional stability of the machine even when cutting heavy workpieces. The base is equipped with a large removable chips container and allows for installation of an optional worm chips container. 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.

- Continuous manual setting of the cutting angle within 90°-45°. The material can be cut by angular cutting or in automatic mode as well.
- 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.
- · 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 and on an additional adjustable outlet. Coolant tank with a high-performance 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 intuitive controls by ergonomically places controls on the rotary central control panel.

### **ACCESORIOS**



### Convertidor de frecuencia equipamiento estandar

Permite regular continuamente la velocidad de la cuchilla entre 15-90 m/min. y establecer así las condiciones de corte óptimas para el material de que se trate.



# Pistola de enjuague OPL -Equipamiento estándar

Sirve para limpiar el área de trabajo de la máquina.



# HVP NC 250/300/330

# Dispositivo de presión hidráulica **HVP**

Sirve para sujetar el material durante el corte en paquete. Asegura una sujeción fiable mediante presiones verticales controladas hidráulicamente, que funcionan en ciclo con toda la máquina. Está instalado en el tornillo fijo y de alimentación.



KL

### Vertedero de material KL

Une continuamente el tornillo de banco detrás del corte y permite deslizar fácilmente las piezas cortadas en un contenedor cuando se cortan series más grandes. La construcción de la conducto, que consta de 2 partes, evita las fugas del refrigerante.



### Lámpara halógena LA

Proporciona una buena iluminación del lugar de trabajo de la máquina. Una herramienta invaluable, especialmente cuando la iluminación del lugar de trabajo es insuficiente.



# Lubricación por neblina de aceite

Crea una niebla de aceite que se pulveriza sobre el filo de corte. Sustituye al uso de un refrigerante clásico, especialmente al cortar secciones durante las cuales pueden producirse fugas. Posibilidad de utilizar aceites ecológicos.



### Alineación láser LS

El láser industrial de alta calidad proyecta la línea de corte sobre el material a cortar. Hace que el ajuste de la longitud de material requerida sea más sencillo, rápido y preciso.



SD

## Transportador de virutas SD

Asegura la eliminación continua de virutas fuera de la máquina. Reduce el tiempo necesario para limpiar la máquina, especialmente durante el corte en serie de materiales sólidos, donde se genera una gran cantidad de virutas.



# Indicador de tensión de la cinta de sierra CD

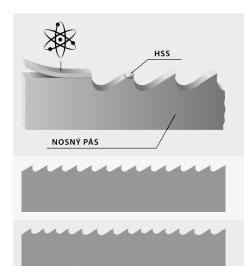
Garantiza un tensado preciso de la cinta de sierra al valor requerido según el manómetro y su control durante el uso de la máquina. La tensión óptima de la cinta de sierra es esencial para su vida útil y su precisión de corte.



Contenedor de virutas SDB Para una fácil manipulación, el contenedor está equipado con ruedas y un depósito basculante para virutas.



- 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

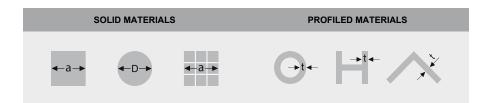
Blade for tool and stainless steel with hardness up to 50 HRC. Tooth tips are made from steel HSS-M42 containing cobalt and wolfram

# 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.



Variable	toothing	Constant toothing		Variable toothing		Consta	ant 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.

# **EMULSIONES**



**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

### **RECOMENDADOS**



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



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