



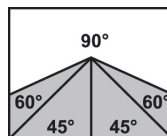
## Pilous

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### ARG 520 DC CF-NC Automat



5770 x 41 x 1,3

	90°
●	520
■	500
■	700 x 480

Main motor	400 V, 50 Hz, 4 kW
Servo motor of the feed	400 V, 50 Hz, 4,5 kW
Pump motor	400 V, 50 Hz, 0,12 kW
Hydraulic motor unit	400 V, 50 Hz, 1 kW
Feed rate of material	1,6 / 2,5 / 3 m/min.
Saw blade speed	15-90 m/min.
Working height of vice	920 mm
Hydraulic system oil	cca 26 l (ISO 6743/4-HM, DIN 51 524 part 2-HLP)
Coolant tank	cca 35 l
Machine dimensions	<a href="#">Dimension drawing</a>
Machine weight	3100 kg

## DESCRIPCIÓN DEL PRODUCTO

**Massive double-column semi-automatic machine designed for versatile use in the industrial cutting of materials even in the most challenging and non-stop applications 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 during industrial cutting of full materials. Industrial band 41 x 1.3 mm 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 workpiece feed by industrial servomotor (servomotor with planetary gear) 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 600 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.

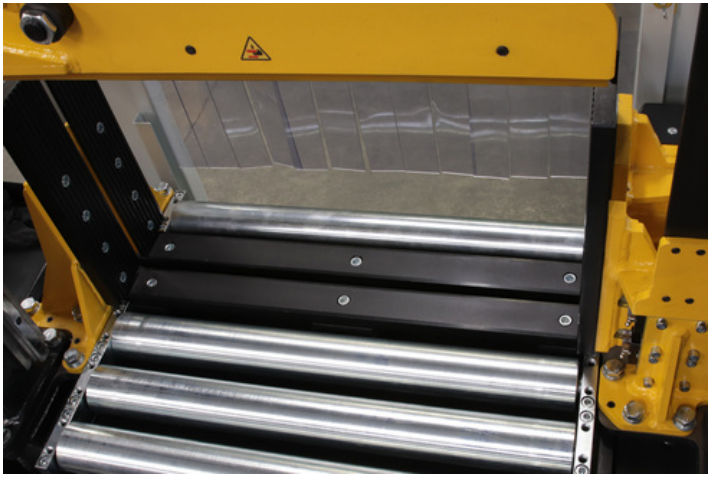
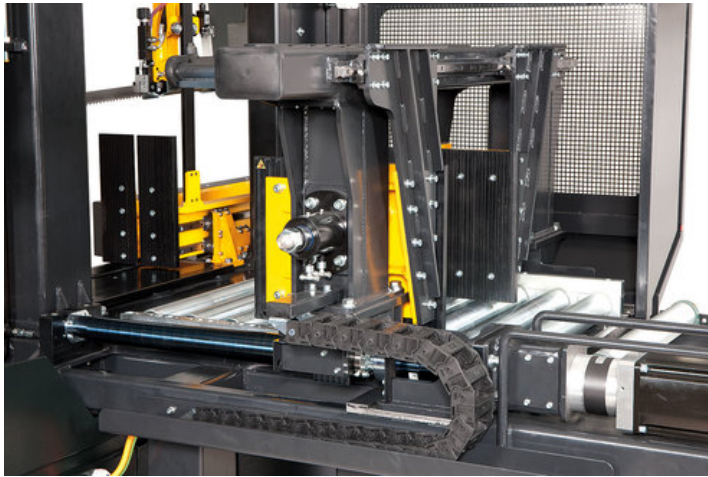
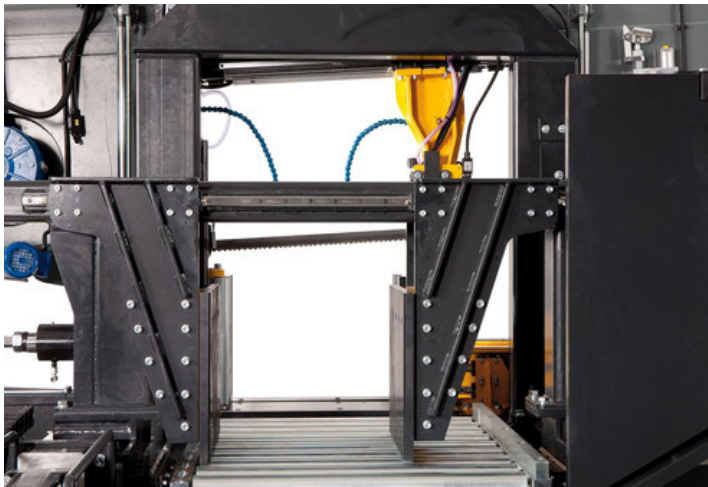
Due to very cutting of very heavy workpieces the loading floor is equipped with a robust rollers along its entire length, allowing easy motion of the material. Optimum clamping of the workpiece when cutting is facilitated by a full-stroke double-jaw vice which clamps the material both before and behind the cut. The vice moves along linear guides. The moving guide block is adjusted together with the vice jaw. That means that it is always automatically closest to the cut, which contributes to cutting accuracy and speed. Saw band guide block holder also moves along the linear guides. Extremely robust feeding full-lifting vice moves again along the linear guides. For maximum performance the servomotor with ball screw is additionally equipped with cutting-edge planetary gear, which guarantees easy motion of even the heaviest materials. For the expected cutting of very heavy and often uneven materials, e.g. forgings, the vice is equipped with a system gaping simultaneously both jaws. The fixed jaw pushes aside by 15 mm from the material, the movable jaw with full-lifting hydraulic cylinder pushes during the automatic operation also by 15 mm. Therefore there is not any conflict between the feed vice and material, and also the accuracy of the feed is ensured. The machine is equipped with a high-performance industrial hydraulic unit. Horizontal clamping of the material and motion of the sawblade arm to the cut and back into the required position according to the diameter of the material are also hydraulically operated. Hydraulic unit allows you to set the required pressure of the vice.

Both saw band guiding heads are fitted with automatic regulation of feed into cut, which significantly increases the rate and accuracy of cutting and service life of the saw band. Maximum cutting efficiency is maintained also thanks to the possibility of setting optimum saw band speed 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. Large base and overall massive framework guarantee exceptional stability of the machine even when cutting heavy workpieces. By default the machine is equipped with a screw conveyor. Its location right below the cut ensures optimum removal of chips. Chips can be driven into a metal container with a removable drip tray (accessories). High-quality lighting of the work area by a line of powerful LEDs with a cover. Behind the cut the vice can be fitted with a supporting roller for cutting long pieces or a slide of material for short pieces (accessories).

- In order to achieve maximum accuracy and productivity the machine is designed only for perpendicular cutting.
- Very robust machine construction composed of massive weldments ensures vibration absorption.
- Large diameter running wheels and precise three-side hardmetal guiding ensure long service life of the band and cutting accuracy.
- Easy intuitive controls by ergonomically placed controls on the control panel.
- 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 two additional adjustable outlets. 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.

All pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

GALERÍA DE IMÁGENES







FR\*

**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.



KDE\*

**Cepillo de limpieza eléctrico - equipamiento estandar**

Cepillo circular de acero accionado por un motor industrial con engranaje helicoidal. Se utiliza para eliminar virutas de la cinta de sierra detrás del corte.



AG\*

**Regulación de presión - Equipamiento estándar**

Regulación automática de presión bidireccional controlada hidráulicamente de la cinta de sierra en el corte, dependiendo de la resistencia del material cortado. Reduce significativamente el tiempo de corte y prolonga la vida útil de la cinta de sierra.



SD 520\*

**Transportador de virutas SD - Equipamiento estándar**

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.



OPL\*

**Pistola de enjuague OPL - Equipamiento estándar**

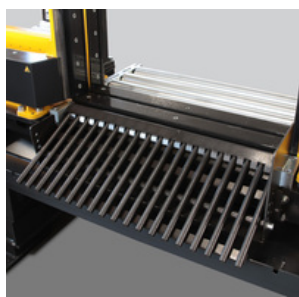
Sirve para limpiar el área de trabajo de la máquina.



LED\*

**Lámpara LED - Equipamiento estándar**

La tira LED con cubierta asegura una iluminación de calidad del área de trabajo. Un ayudante invaluable, especialmente en condiciones de iluminación insuficiente en el lugar de trabajo.



KL 720

**Vertedero de material KL 640**

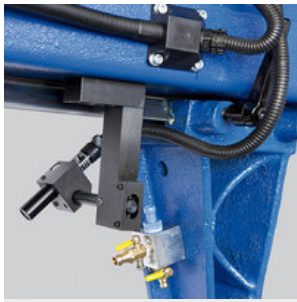
Une continuamente el tornillo de banco detrás del corte y permite deslizar fácilmente las piezas cortadas en un contenedor cuando se cortan series más grandes.



MM

**Lubricación por neblina de aceite MM**

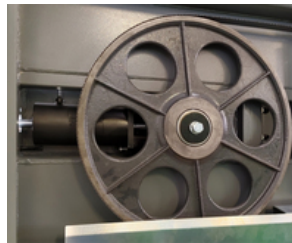
Crea una niebla de aceite que se pulveriza sobre el filo de corte. Sustituye al uso de un refrigerante clásico, especialmente al cortar secciones durante las cuales pueden producirse fugas. Posibilidad de utilizar aceites ecológicos.



LS

### 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.



HD 520

### Tensión hidráulica

Permite una tensión conveniente de la banda de sierra desde el panel de control central. La tensión óptima de la banda de sierra es esencial para la vida útil de la banda de sierra y la calidad del corte.



CD

### 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.



M2

### Baliza de señalización M2

Sirve para el control visual remoto del estado de funcionamiento de la máquina. La baliza de dos colores está equipada con luces LED de alta luminosidad y visibilidad desde todas las direcciones gracias a la forma única de las lentes.

Luz verde: señala el modo de trabajo de la máquina, la cinta de sierra está en corte. Al finalizar el corte y detener la cinta de sierra, la luz se apaga y le indica que puede iniciar el siguiente corte.

Luz roja: señala una avería, por ejemplo, una cinta de sierra rota, sobrecarga del motor principal, cubierta de seguridad abierta y otros fallos que llevan a la parada de la máquina.



M3

### Baliza de señalización M3

Sirve para el control visual remoto del estado de funcionamiento de la máquina. La baliza de tres colores está equipada con luces LED de alta luminosidad y visibilidad desde todas las direcciones gracias a la forma única de las lentes.

Luz verde: señala el modo de trabajo de la máquina, la cinta de sierra está en corte. Al finalizar el corte y detener la cinta de sierra, la luz se apaga y le indica que puede iniciar el siguiente corte.

Luz roja: señala una avería, por ejemplo, una cinta de sierra rota, sobrecarga del motor principal, cubierta de seguridad abierta y otros fallos que llevan a la parada de la máquina.

Luz azul: señala la falta de material u otra advertencia.



BG

### Caja de engranajes cónicos con motor de 5,5 kW

La caja de engranajes cónicos con un motor más potente de 5,5 kW aumenta el rendimiento de corte de la máquina. Adecuado para el corte altamente productivo de materiales sólidos y tenaces, como aceros inoxidables.



**SDB 520**

**Contenedor de virutas SDB 520**

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

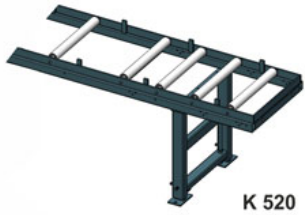


**STM magnetic separator**

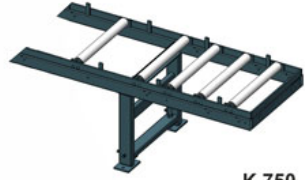
**Separador magnético de virutas STM**

Para virutas especialmente finas que pasan por los tamices en la sierra, se utiliza un separador magnético altamente eficiente. Ahorra tiempo de limpieza y desmontaje del sistema de refrigeración y prolonga la vida útil del refrigerante. Este dispositivo es fácilmente extraíble y se puede limpiar fuera de la máquina simplemente retirando las barras magnéticas de la carcasa.

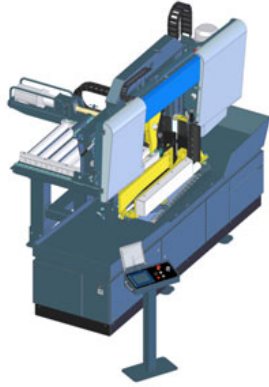
# TRANSPORTADORES



K 520



K 750



K 520



K 750



- 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**

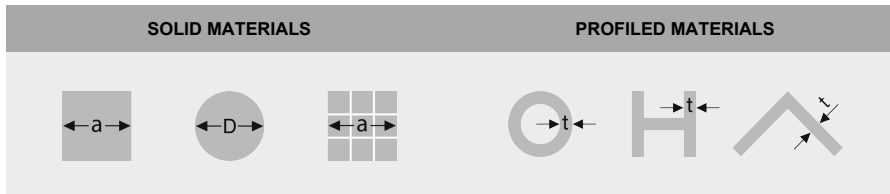
Blade for tool and stainless steel with hardness up to 50 HRC. Tooth tips are made from steel HSS-M42 containing cobalt and wolfram

**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

## 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



OHE 90

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