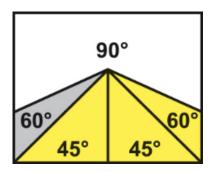


### ARG 450 DC PLUS CF-NC AUT.





Robust, two-column automatic CNC machine with a double-sided automatic arm positioning in the range from 45° to the left and 60° to the right.



**Category:** <u>Double colonnes CNC auto</u>

#### PRODUCT DESCRIPTION

It is used mainly in industrial operations and by double-sided cutting under angles. Automatic feed of the material with a length of 1400 mm and automatic angle adjustment guarantee high productivity and precision of the machine even when feeding long lengths, i.e., mainly when cutting sections. On request, the length of individual feeds can be extended up to 6 metres. Smooth motion of the robust feeding vice on linear lines. The design of the vice feeding system guarantees minimum residual material length, even when cutting under angles. The so-called "floating" design of the feed vice ensures accurate feeding of uneven and crude workpieces. To the optimum clamping of the material during feeding adds also the fully liftable vertical contact pressure as a part of the standard version of the machine. Exceptionally solid construction of the saw blade arm and the massive dual-column arm support moving on linear lines ensure excellent stiffness of the whole system and an accurate cut. In its category, the machine is distinguished by a very robust system of two-sided double-column positioning of the arm support together with automatic hydraulic locking and a large loading area. Optimal clamping during cutting ensures a fully liftable vice in combination with a fully liftable vertical clamping in the standard version of the machine. For optimal cutting of sections, the saw blade is tilted to the loading area under the angle of 3°. This guarantees optimum engagement of the teeth, better cutting performance, higher quality of the cut and smooth input and output of the saw blade by different cross-sections of the cut material. Nevertheless, the machine deals reliably also with industrial cutting of solid materials.

The vice jaw together with the movable guide head of the saw blade are automatically adjusted on the linear guiding, even when cutting under angles. Thus, it is located as close to the cut as possible, which contributes to the accuracy and speed of the cut. 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 material. This significantly speeds up and gives precision to the cut and increases the service life of the saw blade. Maximum cutting efficiency is maintained also thanks to the possibility of setting optimum saw blade speed by a frequency converter in the range from 10 to 115 m/min, which significantly contributes to cutting accuracy and service life of the saw blades. The machine is fitted with a highly productive industrial saw blade 41 x 1,3 mm that is manufactured in

many versions and allows for cutting of wide range of materials, including stainless steel or tool steel.

# Easy intuitive controls through a large colour 10, 4" touchscreen on an ergonomic rotary central control panel.

After setting on the touchscreen a quick automatic arm positioning, the desired angle gets set with an accuracy of  $\pm$  0.2°. The speed of arm positioning to 45° is about 10 seconds. Arm positioning to 60° is 15 seconds. 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 - arm positioning to the desired angle, workpiece clamping, saw blade and cooling system start, cutting, saw blade and cooling stop, arm uplift right above the material, vice unclamping, material feed to the preset length, material clamping, arm positioning to the desired angle, 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 material is indicated by an optical sensor. Large base and overall massive framework guarantee exceptional stability of the machine even when cutting heavy workpieces. In the base of the machine, there is a removable chip container, or, it is possible to equip the machine 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.

- 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 worm gearbox.
- A circular steel brush powered by an industrial motor with a bevel-spur 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. 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.



	90°	-45°	+45°	+60°
•	450	450	450	320
	450	450	450	320
	620 x 450	450 x 410	450 x 450	320 x 450

Main motor	4 kW	
Pump motor	0,09 W	
Hydraulic motor unit	1,1 kW	
Material feed length (multiple)	1400 mm	
Max. cutting in bundle	300 x 450 mm	
Residual piece in NC operation	300 mm	
Saw blade speed	10-115 m/min.	
Saws blade tilt	3	
Working height of vice	700 mm	
Hydraulic system oil	Paramol HM 32	
Coolant tank	100	
Machine dimensions (max.)	3200 x 3050 x 2330 mm	
Machine weight	4500 kg	



# 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.



## Halogen lamp

Provides good lighting of the workplace of the machine. An invaluable tool especially when the lighting at the workplace is insufficient.



#### 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.



## 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.



# Chip rake conveyor

Ensures smooth removal of chips from the machine. Reduces the time needed for the cleaning of the machine especially when cutting series of full materials producing large amount of chips.