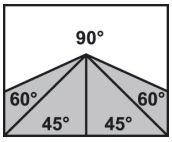
PILOUS

PALSON

SRL "Global Palson Group"
str. M. Sadoveanu, 11/1-98
mun. Chisinau MD-2044
R. Moldova
tel: 060-171-730; 060-171-753
e-mail: sales@palsonglobal.com
www.palson-cnc.md

ARG 520 DC S.A.F.



5770 x 41 x 1,3

	90°
●	520
■	500
▬	700 x 480

Main motor	400 V, 50 Hz, 4 kW
Pump motor	400 V, 50 Hz, 0,12 kW
Hydraulic motor unit	400 V, 50 Hz, 0,55 kW
Saw blade speed	15-90 m/min.
Working height of vice	920 mm
Hydraulic system oil	cca 25 l (ISO 6743/4-HM, DIN 51 524 part 2-HLP)
Coolant tank	cca 30 l
Machine dimensions (min.)	1020 x 2980 x 2330 mm
Machine dimensions (max.)	1350 x 3610 x 2600 mm
Machine weight	1720 kg

DESCRIPTION

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. A completely new revolutionary concept of the band saw arm casting and a unique design. The massive grey cast iron arm is entirely unique in the category of dual-column band saws. This, and the massive dual-column arm support moving on linear guides ensure excellent stiffness of the whole system and accurate cut during industrial cutting of full materials. Industrial band 34 x 1.1 mm is manufactured in many versions and allows for cutting of wide range of materials, including stainless steel or tool steel.

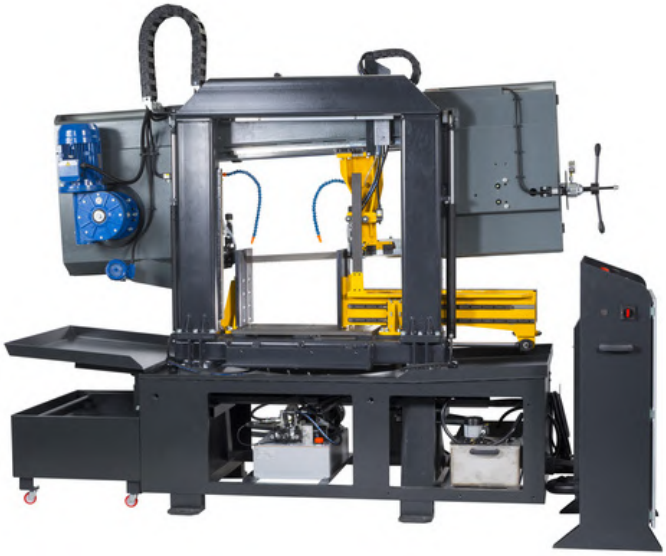
Optimum clamping of the workpiece when cutting is facilitated by full-stroke double-jaw vice which clamps the material both before and behind the cut. Pressing a single switch will execute complete cutting cycle - material clamping, band and cooling system start, cutting, band and cooling stop, arm uplift to the original adjustable position and vice unclamping. When you switch to the manual mode you can control all functions separately.

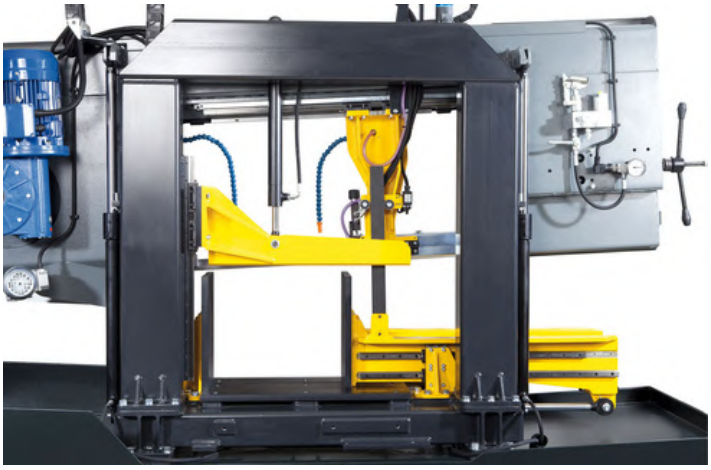
Easy intuitive controls through a touchscreen on an ergonomic central control panel. The display also shows required lifting height of the saw band arm depending on the cross section of the material to be cut. Moreover it allows you to monitor the number of cut workpieces in the current settings and machine diagnostics (PLC inputs and outputs, history of errors). During cutting the display shows saw band speed, speed of the arm feeding, main engine load and any potential error messages.

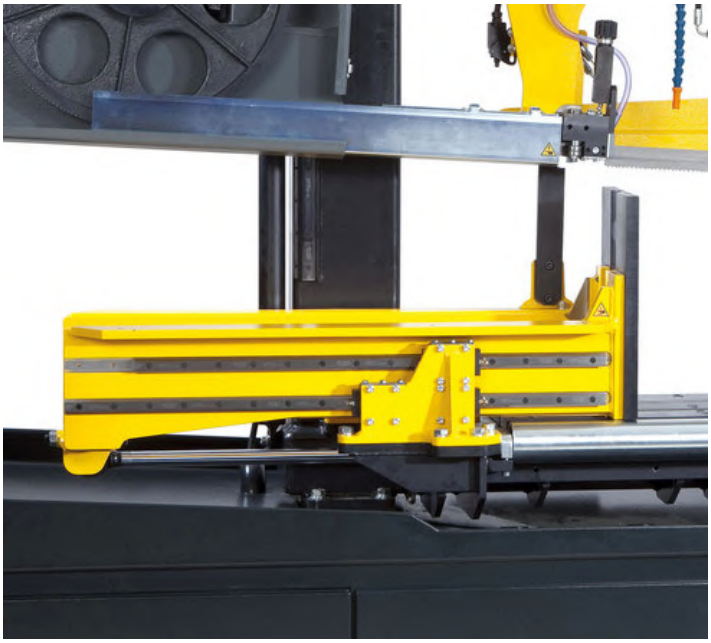
The machine is equipped with a high-performance industrial hydraulic unit which allows setting of the contact pressure of the vice. Maximum cutting efficiency is maintained also thanks to the possibility of setting optimum saw band speed by a frequency converter in the range between 15 and 90 m/min., 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 solid screw chip conveyor. Its location right below the cut ensures optimum removal of chips. The basic version of the vice assembly is also equipped with an eccentrically placed roller which allows easy manual lift of the material onto the loading area of the vice and therefore its smooth movement. The assembly is equipped with a material slide behind the cut. High-quality lighting of the work area by a line of powerful LEDs with a cover.

• In order to achieve maximum accuracy and productivity the machine is designed only for upright cutting.
• Very robust machine construction composes of massive castings from grey cast iron and ensures vibration absorption.
• 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 the possibility of regulating the flow on both guiding heads independently and ontwo additional adjustable outlets. The coolant tank with a high-performance pump are 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.

PHOTOGALLERY







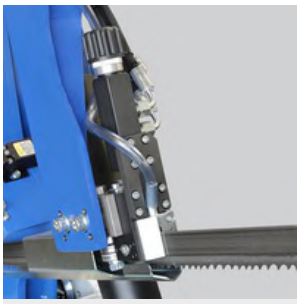
ACCESSORIES

FR*

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.

KDE*

Electrical cleaning brush - Standard equipment
Steel circular brush powered by and industrial motor with worm gearbox. Used to remove chips from the saw band behind the cut.



AG*

Pressure regulation - Standard equipment
Hydraulically controlled double-side automatic regulation of saw band feed into cut according to the resistance of the material to be cut. Significantly reduces the cutting time and service life of the saw band.

SD 520*

Screw chips conveyor - Standard equipment
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.

OPL*

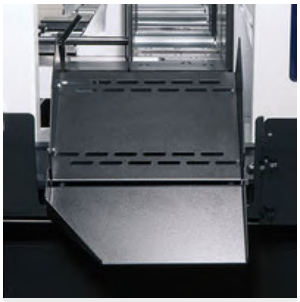
Rinse spray gun - Standard equipment
For cleaning working space of the machine.

LED*

LED Light - Standard equipment
High-quality lighting of the work area by a line of powerful LESs with a cover. An invaluable tool especially when the lighting at the workplace is insufficient.

HVP 520

Hydraulic pressure device
The massive full-stroke pressure device ensures optimum vertical clamping when cutting workpieces in bundles. Hydraulics-controlled pressure plate with adjustable lifting height is guided through linear guidance and it clamps the workpiece along the full length of the vice. The lifting height according to the size of the workpiece is simply adjustable through a touchscreen and the clamping is synchronized with vertical vice.



KL

Material chute
Continuously joins the vice behind the cut and allows for easy slide of cut pieces into a container when cutting larger series. The chute construction consisting of 2 parts prevents leakage of the coolant.

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.

HD

Hydraulic tensioning
Ensures convenient tensioning of the saw band by a manual hydraulic pump 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.

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.

M2

Signalling beacon M2
Signalling beacon is designed for a remote check of the working status of the machine. Dichromatic beacon is fitted with LED lights of a high luminosity and visibility from all directions, thanks to a unique shape of lenses.
Green light – indication of a working mode of the machine, sawblade is in the cut. After cutting operation and sawblade stopping the light switches off signalling that a next cut can be started.
Red light – indication of malfunction, e.g. broken sawblade, main motor overload, opened safety cover and other failures leading to the stop of the machine.

PV

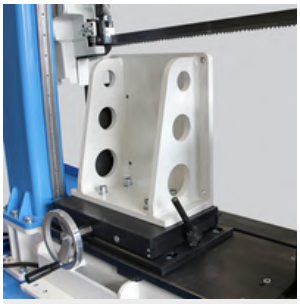
Additional roller
To be installed instead of the slide behind the cut. Facilitates the feed of the material when cutting long workpieces.

BG

Bevel gearbox with 5,5 kW motor
Bevel gearbox with stronger motor 5,5 kW increases cutting power. Efficient for highly productive cutting of tough metal, e.g. stainless steel.

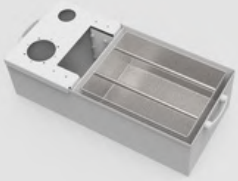
SDB 520

Chip container
For easy handling is chip container equiped with wheels and swivel chip bin.



SV 520

Special support with fixing plate
Special support with fixing plate for material clamping. Is used particularly for fast and precise division of the 3D-printer-product from the printing plate. The cutting accuracy is 0.1 mm in all directions, the cutting width 2 mm. **VIDEO**



SP separator

Chip separator
The chip separator is a galvanized, finely perforated container for efficient collection of sawdust that has passed through a sieve in the base. This container is easily removable when filled and is easy to clean outside the machine.

SPM magnetic separator

Magnetic chip separator
For particularly fine chips that have passed through the sieves in the saw, a highly efficient magnetic separator is used. It saves time for cleaning and disassembling the cooling path and extends the service life of the cooling emulsion. This device is easily removable and easy to clean outside the machine by simply pulling the magnetic bars out of the housing.

CONVEYORS