OFFER LIST

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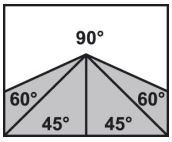
Xpert 3.0 3D



3150 x 27 x 0,9

Max. width and height of the printing plate	300 x 300 mm
Main motor	400 V, 50 Hz, 2,2 kW
Hydraulic unit motor	400 V / 50 Hz / 0,18 kW
Saw blade speed	20-130 m/min.
Operating vice height	900 mm
Oil in the hydraulic system	cca 6 l (ISO 6743/4-HM, DIN 51 524 part 2-HLP)
Machine dimensions (max.)	1900 x 980 x 1900 mm
Machine weight	513 kg

DESCRIPTION

THE BAND SAW MACHINE IS THE FASTEST, CHEAPEST AND MOST EFFECTIVE SOLUTION DESIGNED FOR THE DIVISION OF 3D PRINTED METAL PARTS FROM THE BASE PLATE.

This robust two-column band saw ensures 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 1.5 mm.

Special adjustable printing plate clamping system ensures optimal fixation. It is equipped with a tipping mechanism with stops. This allows easy and fast clamping of the printing plate in the horizontal position and simple tipping to the vertical working position. Precise clamping of the printing plate ensures cut setting with minimum allowances, which saves material when printing. The distance between the cut and the base plate can be easily manually adjusted using the control wheel.

The maximum printing plate size is 300 x 300 mm. We will adjust the spacing and thread diameter according to your requirements.

The continuously adjustable jaw of the clamping system allows the installation of a 10–60mm thick printing plate with the possibility of mechanical adjustment up to a range of 0–70 mm.

In the standard design, the clamping system jaw can hold a 250x250mm base plate.

The plate can be clamped in two ways:

1. Using screws, standard thread spacing 210 x 210 mm. In the clamping system jaw, these threads are fitted with replaceable inserts, so you can choose the thread size according to the hole diameter for the screw in the printing plate, M5, M6 and M8. The insert can also be replaced if the thread is damaged.

2. Using the quick-clamping system - very easy clamping by tightening a single screw. The quick-clamping system can be adjusted to the size of the ptinting plate according to your requirements.

The machine is seated on an innovative base, which was designed with emphasis not only on sufficient stability, but also on minimum size (the base width is only 700 mm) and easy removal of chips from the machine tray into a removable container.

Lighting of cutting are is solved by LED lamp.

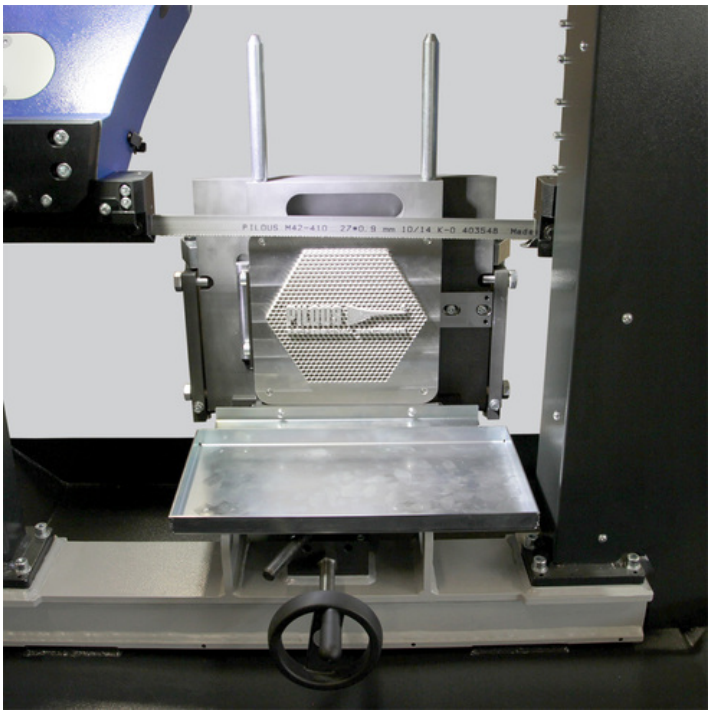
A completely new and revolutionary concept of the saw arm cast is designed in a unique way. The massive cast iron arm is entirely unrivalled in the category of dual-column band saws. It ensures, in the combination with the massive dual-column arm fit moving on linear lines excellent stiffness of the whole system and an accurate cut.

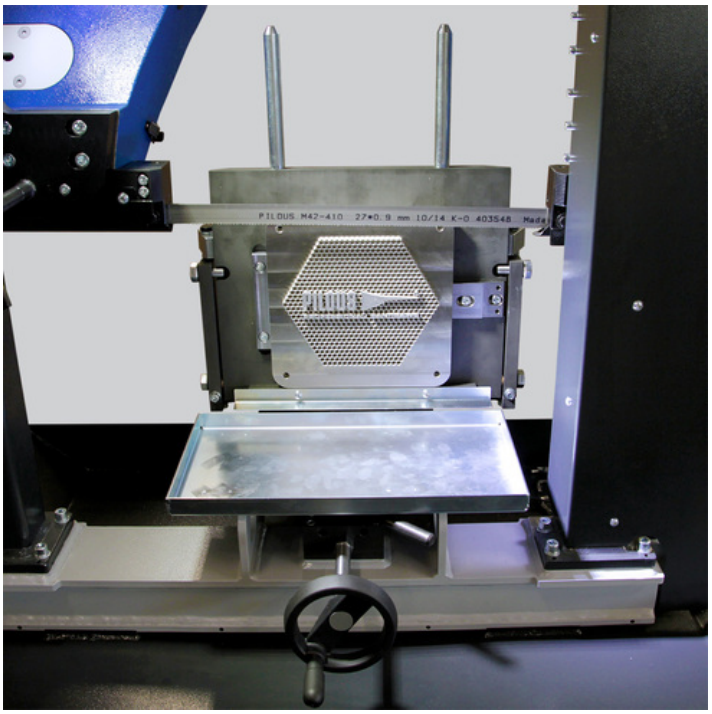
The cutting tool used is an industrial Bi-metal saw blade of the size 27 x 0.9 mm. Precision of the cut is guaranteed by a three-sided hardmetal guiding before and after the cut. Maximum cutting efficiency is maintained also thanks to the possibility of setting optimum saw band speed by a frequency converter in the range between 20-130 m/min., which significantly contributes to cutting accuracy and service life of the saw bands.

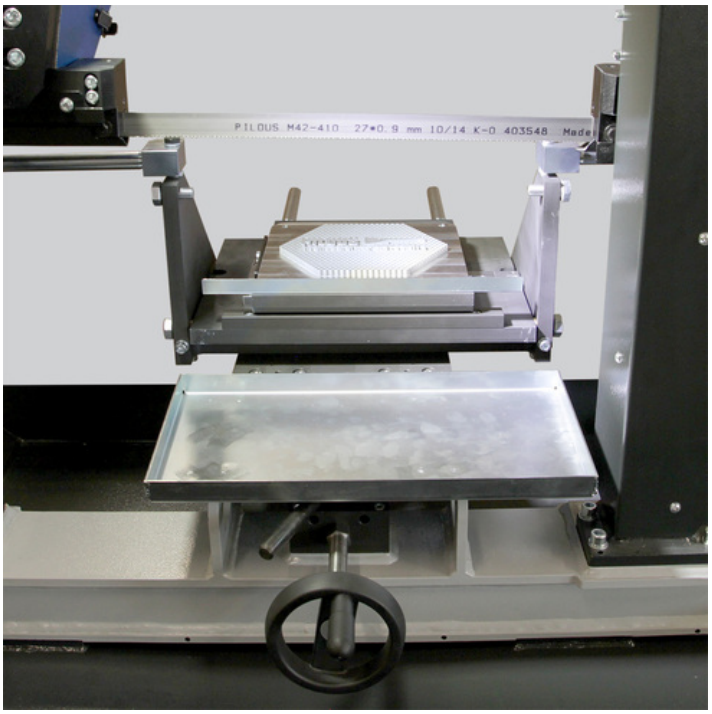
The saw blade arm moves on the linear guiding using hydraulic cylinder driven by a powerful hydraulic unit. It features simple operation on a central control panel and infinitely adjustable feed rate into the cut. After the execution of the cut, the saw blade automatically turns off and its arm moves up to the original, adjustable position.

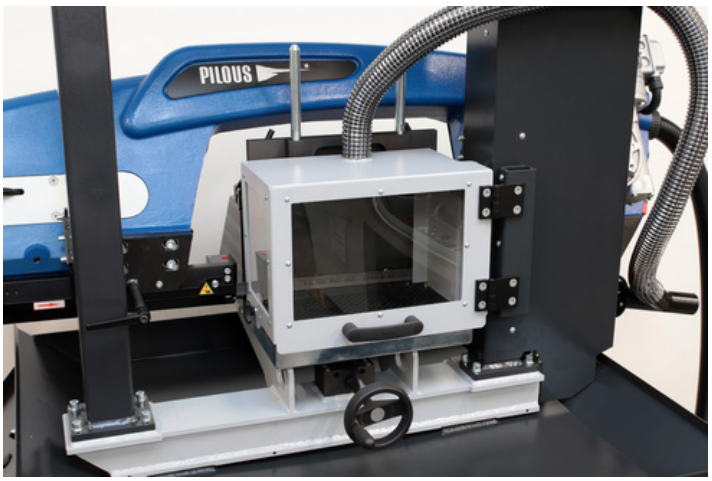
The machine is characterized by its overall robust design. Its base consists of a stable machine pedestal with the printing plate clamping system the vice and a two-column fitting system of the arm that moves on linear guiding. The unique saw blade arm is fitted with orbital cast-iron wheels with massive fit, driven by an industrial engine with a worm gear. All this guarantees long-term cutting precision and service life of the machine.

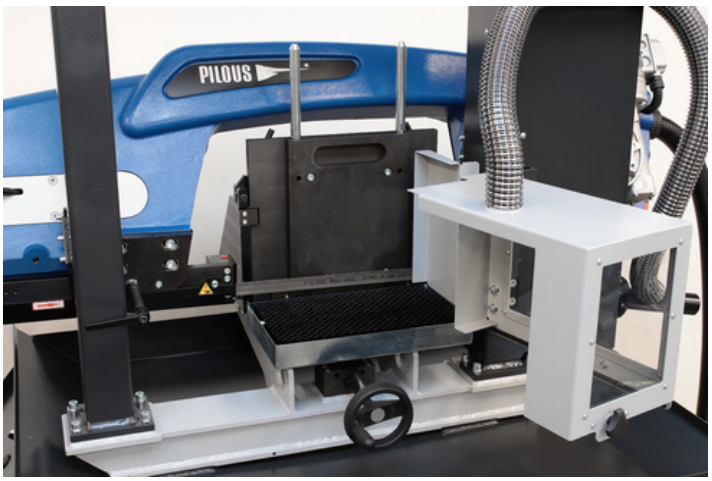
PHOTOGALLERY











ACCESSORIES

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.

KDM

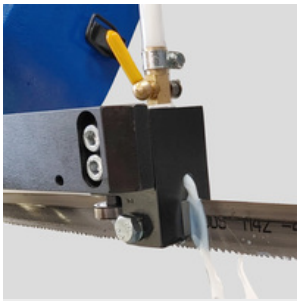
Cleaning brush
Steel cleaning brush, driven by driving wheel. Used to remove chips from the saw band behind the cut.

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.

Suction box

Suction box
The suction box helps to exclude dust and chips from the cutting area. Suctioning is divided into two branches. The connection hole for powerful suction device has a diameter of 50 mm.
With a printing plate size of 250x250x20mm, the maximum printing height is 300mm
With a printing plate size of 300x300x20mm, the maximum printing height is 250mm
This accessory cannot be combined with the following
accessories: Cooling of the saw blade and Cleaning brush



Cooling Xpert

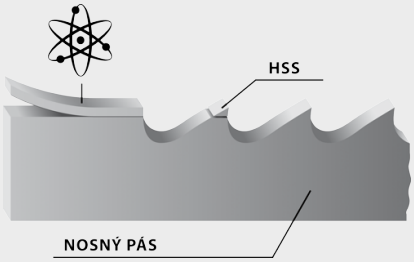
Cooling of the saw blade
Cooling of the saw blade prolongs the lifetime of the blade, removes chips, and contributes to a higher cut quality. The coolant pump starts up together with the saw blade. The amount of emulsion is dosed by a valve on the guiding heads. The emulsion is returned to the system through the waste container.
This accessory cannot be combined with the following accessories:
Suction box

3D Print Trolley

Handling table
Table enables easy manipulation with heavy print plates between 3D printer and saw. Electric drive ensures adjusting of the table height.

MAXtech

- 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.

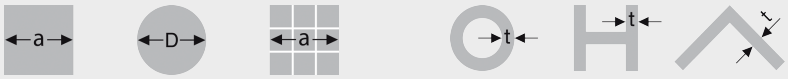
M42
Universal blade recommended for a wide palette of material, including tool steels and stainless steel up to hardness 45 HRC. Teeth are made from steel HSS-M42 containing cobalt.

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.

SOLID MATERIALS	PROFILED MATERIALS



Variable toothing		Constant toothing		Variable toothing		Constant 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.