

Change:

From 1.5.2017

- Location of the control panel on a flexible console
- Distance between the vice and the floor: 800 mm
- New mechanism of tensioning the blade. More robust, unificated :130mm
- New upgraded blade guides without any clearance of blade and hard metal plates. Tension by plate springs

460x600 SHI-LR (II.GENERATION – version 3)

Semiautomatic machine with hydraulic manipulation.

The machine is designed for cutting of material in vertical and angle cuts, angle cuts are possible to set fluently rom 45° left to 60° right.

It is suitable for serial production and thanks to its robust construction enables to cut wide range of materials including stainless steels and tool steels both profiles and full materials.

Control system:

- The Controller with PLC MITSUBISHI and features an automatic feed control BRP.
- Control panel MITSUBISHI as standard equipment. It uses touch display and PLC, which enable semi-automatic cutting (basic setting included) as well as communication with operator.
- "Controller show lot of information about cutting proces on the display:
 - Cutting cycle indication,
 - indication BRP,
 - indication – blade tightening,
 - time of the cut,
 - loading of blade in amperes,
 - speed of the blade,
 - cutting times measuring,
 - list of error messages.
- User's setting:
 - autostop of hydraulic unit
 - mode of arm moving after end of the cut
 - mode fast moving of the arm
 - mode time lag of shift speed
 - mode blade moving
 - mode jaw moving after cutting cycle finish
 - diagnostic of inputs and outputs"
- STOP function – cutting : it enables to stop cutting by pressing STOP button at any time. The Frame goes up with the running blade without opening the vice.
- Regulation of shaft speed (moving to cut) is manual and uses throttle valve placed beside control panel. Automatic (safety) regulation of shift speed PEGAS BRP. Principle: Machine will stop after exceeding set loading (defined in amperes).
- The ergonomical control panel is mounted on the movable console. The control panel is equipped with mechanical buttons and digital display of the machine control system. Mechanical buttons controls basic saw movements (arm, vice) and cutting cycle start. The safety button is present on the panel aswell. All buttons are highly resistant in anti-vandal version.

Construction:

- The machine is constructionally designed in that way, so that it corresponds to extreme exertions in productive conditions.
- The arm of the machine is robust, heavy weldment and it is designed so that a toughness and a precision of cut was ensured.
- The arm is situated in pretightened slide bushes with a teflon friction surface.
- Drive pulley and tighten pulley are both metal castings.
- The upper arm position is handling by the button on control panel. Digital display of upper position in %.
- The down working position of the arm controlled by the microswitch. In the end position microswitch is on, arm goes to selected upper position.
- The vice is welded. The jaw is made from cast iron. Jaw ensures the safe clamping of the material.
- Jaws of the main vice move in steel leading.
- Moving jaw of the vice is handled by long stroke hydraulic cylinder.
- Basic part of the vice moves according to the direction of the angle cut setting, fixation is made by the handle.
- Turn table is cast iron. Turn table situated on cone roller bearings.
- Manuall turning of the table for angle cuts, the position of the turntable is fixed by the lever with the excenter. The position of the turntable for vertical cutting is arested automatically by the spring mechanism.
- The angles indicated on the digital display on the control panel MITSUBISHI. Reading of angle by incremental sensor and magnetic tape.

Basic equipment of machine:

- The blade leading in guides with hardmetal plates and leading bearings and along cast iron pulleys.
- There is a guide situated on the firm beam on the drive side. On the tightening side there is the guide situated on the

moving beam.

- The guide beams of moving band guide is adjustable in whole working range. Manual adjustment and fixing of the guide beams.
- Guide holder moves in adjustabled dovetail groof.
- The saw-band is equipped with a guard, which protects the operator from millings and cutting emulsion.
- Mechanic tightening of the blade.
- Automatic indication of blade tension.
- A cleaning brush for perfect cleaning and function of blade, passive driven by pulley.
- Drive of machine is solved by worm gear box with maintenanceless oil filling. Three-phases electromotor with double winding, with a frequency converter for a fluent regulation of the blade speed from 20 to 100 m/min. Sturdy flange with shaft. Termoprotection of engine.
- The cooling system for emulsion, leaded to the guides of the blade and by LocLine system directly to the cut groove.
- Massive base with a tank for chips. Base is designed for manipulation manipulation with machine by pallet truck and also by any hight lift truck.
- Indication of blade tightening and opening of the cover.
- Controlling 24 V.
- Maschine is equipped with hydraulic system which controles all functions of that maschine. It pushes the arm to cut, pulls up the arm and opens and closes vices.











Basic accessories of machine:

- Band saw blade.
- Set of spanners for common service.
- Manual instructions in eletronic form (CD).

Operating cycle:

After manual adjustment of the jaws the operator starts the cycle with a switch on the control panel. The hydraulic cylinder of the vice grips the material and the saw starts working. The cutting speed of the arm is controlled by a throttle valve. Arm and vice movements after cut finish following set user parameter. The vice opens and the operator can handle the material.

Cutting parameters

		 0°	 45°	 60°	 45°	 60°	 ^b _a
	D [mm]	460	460	320	460	320	X
	D [mm]	400*	280*	200*	280*	190*	X
	axb [mm]	600x460	470x240	330x180	470x250	320x240	600x250

* Recommended values. Recommendations of band blade producers are to be followed when choosing to cut full material, their dimensions are limited by available size of the teeth for the specific type of the band.

° Cutting of the bundle without upper vice HP. HP = accesory for additional prie. The cutting parameters are limited when using.

performance parameters

drive of the blade	kW	4,0
drive of the hydraulic agregate	kW	0,75
pump of the cooling emulsion	kW	0,05
total input	kW	10,7
cutting speed – fluently set	m/min	20-100
diameter of the blade	mm	5380x41x1,3
electric connection		3x400V, 50 Hz, TN-S

control

feed of the Frame to the cut	hydraulically
feed of the material	manually
clamping of material	hydraulically
bend tension	manually
cleaning of the blade	cleaning brush driven by a pulley

Parameters

lenght	width	Height		height of the table	weight
		[Hmax]	[Hmin]		
[Lmax]	[B]	[Hmax]	[Hmin]	[V]	(kg)
3200	1140	2660	1630	800	1200

