

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 from 0 to 60 grades to the right and from 0 to 60 grades to the left. Change of angle using quick clamping handle.

It is suitable for piece production and small series production. Thanks to its rugged construction it enables cutting of wide range of profiles and full materials.

NOVELTY: control system designed with focus to easy handling.

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.

New functions:

- autostop of hydraulic unit
- cutting times measuring
- list of error messages
- supporting message for machine start without necessity to learn the manual
- mode of arm moving after end of the cut

automatic diagnostic of inputs and outputs

Construction:

- The Controller with **PLC MITSUBISHI**. Controller show lot of information about cutting process on the display. Time of the cut, amperes, speed of the blade ....
- Saw is equipped with electrical regulation of down shift - BRP.
- The machine is constructionally designed in that way, so that it corresponds to extreme exertions in productive conditions.
- The Frame provides the necessary performance and accuracy of cutting.
- The Frame is situated in pretightened slide bushes with a teflon friction surface.
- The drive and tensioning pulleys are cast pieces.
- The down working position of the Frame controlled by the microswitch. The upper working position of the Frame is controlled by induction sensor. In the end position microswitch is on, Frame goes to selected up position.
- The vice is made of cast iron and the jaws allow a safe grip. The hydraulically controlled vice with short travel is situated in an adjustable dovetail groove. The adjustment is manual with a wheel and trapeze thread. Basic part of the vice moves according to the direction of the angle cut setting, fixation is made by the handle.
- The turntable is a robust weldment situated on tapered roller bearings. The position of the turntable is fixed by the handle with the excenter. The position of the turntable for vertical cutting is arrested automatically by the spring mechanism. General angles are adjusted by the nonius.
- Leading of blade in hard-metal plates.
- The sawing machine is equipped with an electromechanical device, which monitors the band tension and a limit switch, which secures the machine against slack band.
- The saw-band is equipped by a guard, which protects the operator from millings and cutting emulsion.
- Mechanic tightening of the blade.
- The cleaning brush for perfect cleaning and function of blade.
- 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 distributes cutting emulsion to the band guides.
- Robust base with a tank for chips.
- Indication of blade tightening and opening of the cover
- Controlling 24 V
- The control panel is equipped with a safety button, which stops the saw. There is also a feed regulator and buttons, which control the various available movements.
- Maschine is equipped by hydraulic system that manipulates all functions of that machine. It presses the Frame to cut, pulls up the Frame and opens and closes vices.

**Basic equipment of machine:**



- blade
- set of tools
- manual instructions



**Operating cycle:**

After manual adjustment of the the Frame's operational positions the operator close the vice and starts the cycle with a switch on the control panel and the saw starts working. The cutting speed of the Frame is controlled by a throttle valve. After finishing the cutting, the Frame reaches its top operational position and the band drive stops. The operator open the vice and then can handle the material. The control system monitors correct tension of the band, correct position of the band guard and, through a ampere-meter the load on the band drive during operation (i.e. assists setting up the Frame's cutting speed).

**Cutting parameters**

		0°	45°	60°	45°	60°	<sup>b</sup> / <sub>a</sub>	<sup>b</sup> / <sub>a</sub> +HP max	<sup>b</sup> / <sub>a</sub> +HP min
	D [mm]	360	350	270	360	310	x	x	x

	D [mm]	250*	180*	130*	180*	130*	x	x	x
<b>360x500 SHI-LR</b>									

	axb [mm]	500x360	400x180	270x320	400x190	310x170	500x220	410x160	145x50
	axb [mm]	500x360	350x360	240x360	330x360	200x360	500x220	270x160	145x50

\* recommended values,

+ HP = The cutting diameter is limited by the hydraulic upper vice