Highly productive semi-automatic, hydraulically manipulated two column band saw machine.
The machine has massive design, it is robust and has new conception of friendly control system. It has blade sloped 7 degrees, which enables higher productivity during cutting of profiles and full materials and ensures longer lifetime of blades. These parameters together with powerfull drive and blade 34 mm heigh enable high productivity of machine.
The machine is designed for vertical cuts.
Thanks to its robust construction enables to cut wide range of materials including stainless steels and tool steels.

Control system:

- The Controler 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 encluded) as well as communication with operator.
- Controler 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 fadt 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 ampers).
- Controlling panel is equipped with a safety button, which stops the saw. There is also a feed regulator and buttons which controls the various available movements.

Construction:

- The machine is constructionaly designed in that way, so that it corresponds to extreme exertions in productive conditions.
- The arm of machine with columns situated as near the clamping vice as possible minimizes vibrations and enables max. cutting performance.
- The arm of the machine is robust, heavy weldment and it is designed so that a toughtness and a precision of cut was ensured.
- Arm moves on two columns by a help of a four row linear leading with a high loading capacity. Moving of arm using one hydraulic cylinder.
- Drive pulley and tighten pulley are both metal castings.
- Upper position automatically using Pegas DPP system (touching lath placed closely below tooth of blade: T-bar, linear leading, microswitch, adjusting screw).
- Down position using adjusting stop and microswitch. After reaching of bottom position arm goes to upper position automatically.
- Main vice with divided jaw that clamps the material in front of as well as behind the cut. The jaws allow a safe grip.The optimalization of the chip movement through the fixed jaw directly to the chip extractor.
- Jaws of the main vice move in steel leading using hydraulic cylinder. One jaw is longstroke (the movement by longstroke hydraulic cylinder), one is fixed.
- Regulation valves for setting a vice pressure in hydraulic system.

Basic equipment of machine:

- The blade leading in guides with hardmetal plates and leading bearings and along cast iron pulleys.
- The blade is 7 grades sloped regarding the level of the vice => higher performance when cutting, profiles, longer bladelife, higher performance when cutting full materials.
- 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 the blade are adjustable in the whole working range. A giude moving is connected with a vice-jaw movement so that to achieve the minimum distance of the guide and material. That is why it is not neccessary to set the position manually.
- The saw-band is equipped with a guard, which protects the operator from millings and cutting emulsion.
- Manuall tightening of band. Optional: Hydraulic tightening of band.
- Automatic indication of blade tension.
- Cleaning brush is driven by movement of pulley and enables high quality cleaning of blade. Driven cleaning brush is able as option 410-ECK (650 rev/min).
- Drive of machine is solved by worm gear box with maintenanceless oil filling. Three-phases electromotor with double

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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 and with chip extractors. 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:

- Slide of cut pieces.
- Chip extractor
- Lighting of workink space.
- Band saw blade.
- Set of spanners for common service.
- Manual instructions in eletronic form (CD).

Operating cycle:

After START vise will clamp, machine cut with set speed. In bottom arm position will swithch on the microswitch and arm will go to upper position. After it vice will open. Operator handles with material.

cutting parameters				
	○	●	a b	a b
	D [mm]	D [mm]	axb [mm]	axb [mm]
0°	400	250*	400x400	400x400
a b	x	x	400x340	400x340

(Maximal vice opening 400 mm)
*value follows recommendation of blade producer (optimal performance and blade lifetime)

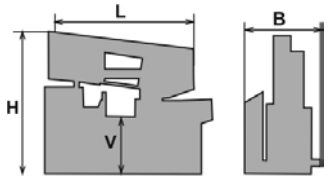
The shortest cutting	mm	10
The smallest diameter	mm	30
The shortest remaind	mm	50 (width of stationary vice jaws 50 mm)

Power parameters		
Blade drive	kW	3,0
Hydr. unit drive	kW	0,75
Cooling emulsion pump	kW	0,12
Total Power	kW	11,5
Shift (cutting) speed – fluently adjustable	m/min	20-100
Blade size	mm	4520x34x1,1
electricity		3x400V, 50 Hz, TN-S

Working movements	
Shift (cut) movement	Hydraulic
Material feeding	Manual
Material clamping	Hydraulic
Blade tightening	Manual
Blade cleaning	Brush driven by blade pulley

Dimensions

Length	Width	Height		Height of table	Weight
[L]	[Bmin]	[Hmin]	[Hmax]	[V]	(kg)
1600	1030	1815	2050	800	940



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