

Gantry type V grooving machine



LBC gantry type V grooving machine LBC-1250X4000 is improved from the conventional table type grooving machine. The V grooving machine has all the advantages of conventional table type grooving machine(such as the sheet is fixed& static. No scratches on its opposite during grooving, simple structure and good rigidity and better stability).

compared with a conventional table type grooving machine, the improvement of the machine as follow:

1.the rear moving beam is designed to transversal moving, remove the auxiliary clamp and the knife rack can left and right moving.

2.The driving force transmission system is changed from a straight gear into a skew wheel to increasing the speed, reducing the noise and vibration and ensure the transmission more stability and reliability to prolong the life of gear.

The machine is subject to three axis controlling, .

3. Its X axis(longitudinal feed of knife rack) is subject to encoder based numerical control, its axle Y(transversal moving of feeding unit) and Z axis are subject to servo control, it can realize full automatic machining after the parameter are set, comprehensively improving the accuracy of grooving.

4. the worktable can automatically repair after it is worn to prolong life for the machine. The positioning through pressing sheet edges, there is neither contact between the clamping and the sheet surface, no pressing marks on the sheet surface.

the grooving machine are treated by tempering to avoid the stresses. Ensure a high accuracy and good rigidity.

1250X4000

LBC- 1250X5000 CNC sheet metal V grooving machine

1250X6000

Technical data

Overall dimension	5600x2300x2100
Processing range	4000x1250mm
X axis(longitudinal) control and precision	Encoder ± 2 mm
Y axis(transversal) control and precision	Servo ± 0.03 mm
Z axis(depth of cut) control and precision	servo ± 0.03 mm
Power of X axes motor	4KW
Power of Y axes motor	1KW
Power of Z axes motor	1KW
Max. speed of X axis	60m/min
Max. speed of Y axis	6m/min
Max. thrust force of X axis	350kg
Compressed air	0.4Mpa-0.6Mpa
Control system H6D	HUST Taiwang
Servo motor	DELTA Taiwang
Linear guide way	Hiwin Taiwang
Communication cable	IGUS Germany
Hydraulic station	Korea
Low voltage electrical components	Schneider France

Features of LBC V groove machine products list

	Model	Overall dimension
1	1250X3200	4800x2200x2100mm
2	1250x4000	5600x2200x2100mm
3	1250x5000	6600x2200x2100mm
4	1250x6000	7600x2200x2100mm

BC05K V grooving machine



the GBC V grooving machine GBC-1220x4000 is a kind of latest development equipment, it adopt the steel wire as its transmission system. It instead of the gear, rack and pinion and ball screw, to realize flexible drive. It completely avoid the vibration caused by the rigid connection of rack and pinion. And significantly improve the roughness of groove surface and product quality as well.

the machine have three axis to be controlled, its X axle (longitudinal moving of knife rack), Y axle(transversal moving of rear feeding device) and Z axle(vertical moving of knife rack) are all subject to servo control. It can realize full automatic machining after the parameter is set up, comprehensive improving the accuracy of grooving.

clamping system adopt the hydraulic system to drive, large pressure, reliable fastening force. Low noise and small energy consumption.

the rear feeding unit is driven by double screw structure and its surface has high positioning accuracy.

the guide way of knife rack is made of cast iron. it have abrasion resistance and have repair function to prolong the service life

the NC program is reasonably designed and easy to learn to learn. the equipment can realize automatic machining after the parameters are input. there are multiple interlocking safeguard measure for safe operation.

1250X4000

BC05K-1250X5000 CNC sheet metal V grooving machine

1250X6000

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Power of Y axes motor	1KW
Power of Z axes motor	1KW
Max. speed of X axis	60m/min
Max. speed of Y axis	6m/min
Max. thrust force of X axis	350kg
Compressed air	0.4Mpa-0.6Mpa
Control system H6D	HAST Taiwang
Servo motor	DELTA Taiwang
Linear guide way	HIWING Taiwang
Pneumatic components	AIRTAC Germany
Cooling system	Beiqier Germany
Communication cable	IGUS Germany

Features of BC05K V groove machine products list

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Max. speed of X axis	60m/min
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Control system H6D	HAST Taiwang
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SBC V grooving machine



The SBC V grooving machine is used to make a slotting on the sheet metal to get the sharp edge angle after bending, the machine adopts precision ball screw and linear guide way as its transmission, and has high machining accuracy, so it is particularly significant for high class-products. This structure is universally used on relevant equipment in foreign countries.

The Grooving machine is subject to three axis controlling. Its axis X (longitudinal movement of knife rack), axis Y (transversal movement of rear feeding unit) and axis Z (vertical movement of knife rack) are all subject to servo control, it can realize full automatic machining after parameters are set up to improve the accuracy of groove.

The transport ball screw is multiple-thread structure with precise machining. It is characterized with many force bearing points, reasonable stress distribution and reliable drive.

The clamping system adopts the hydraulic system to drive, large pressure, reliable fastening force. Low noise and small energy consumption.

The rear feeding unit is driven by double screw structure and its surface has high positioning accuracy.

The guide way of knife rack is made of cast iron. It has abrasion resistance and has a repair function to prolong the service life.

The NC program is reasonably designed and easy to learn. The equipment can realize automatic machining after the parameters are input. There are multiple interlocking safeguard measures for safe operation.

1250X4000

SBC- 1250X5000 CNC sheet metal V grooving machine

1250X6000

Technical data

The Max. width of the slotting plate	1250mm
The Max. length of the slotting plate	4000mm
The Max. thickness of slotting plate	3mm
The Min. thickness of slotting plate	0.6mm
The Max. distance of rear feeding unit	1200mm
The Min. unit of front& back moving the rear feeding unit	0.01mm
The Max. speed of rear feeding unit	800-2000mm/min
The Max. distance of up& down moving for knife rack	100mm
The Min. unit of up& down moving for knife rack	0.01mm
The Max. distance of left& right moving for knife rack	4300mm
The Max. speed of moving for knife rack	60mm/min
Straightness error in 4000mm long	±0.10mm
The positioning accuracy	±0.05mm
Control system H6D	HAST Taiwan
Servo motor	DELTA Taiwan
Linear guide way	HIWING Taiwan
Pneumatic components	AIRTAC Germany

Features of GBC V groove machine products list

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