YUE XIN

Jinan YueXin Intelligent Equipment Co.,ltd

Professional Sheet Metal Bending Solutions

ADVANTAGES

Standardized Assembly Workshop

Through the use of standardized production workshops, products can be modularly produced, greatly reducing post-sales issues upon delivery.

CNC Gantry Machine Center

The Haotian Gantry Machining Center improves work efficiency and enhances the accuracy of order delivery.

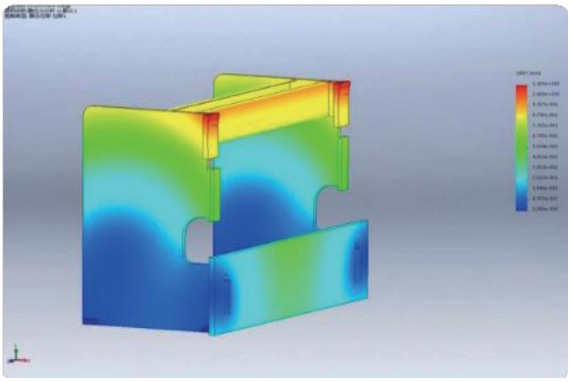
Precision Machining Workshop

Precision manufacturing in the precision machining workshop improves production efficiency.

(I) TECHNICAL PROPOSAL

(1) Main performance features

1. Machine performance
(1) The machine body is optimized by finite element design to ensure high strength and rigidity when the machine is in use.



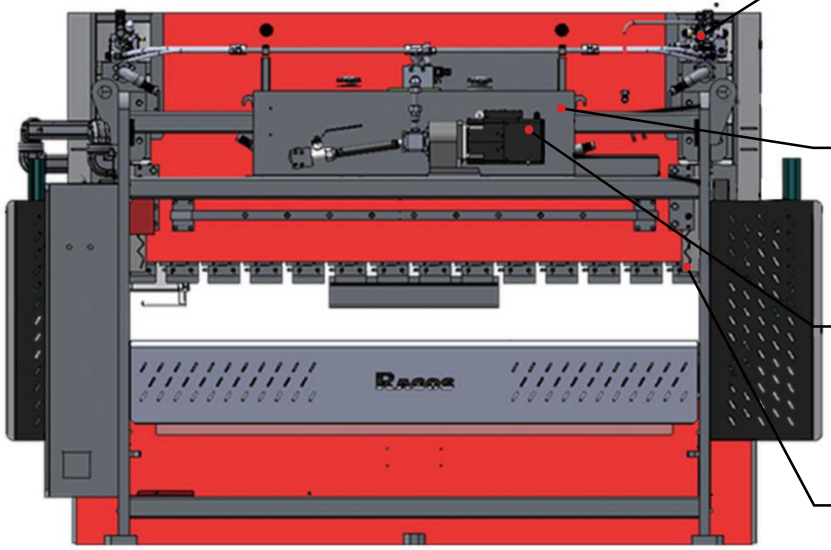
(2) Compared with traditional CNC press brake, the flow rate of the filling fluid and the displacement of the oil pump have been increased, and the cylinder area ratio has been optimized, so that the Y-axis movement frequency is 25% higher than that of the mainstream bending machines in the market.

(3) The use of high frequency response proportional valves ensures high stability and accuracy during high speed operation.

(4) With more reasonable closing height, throat depth, inner stop distance and slider stroke, which are all improved compared to mainstream bending machines, making it easier to bend and pick up large and complex workpieces without additional cost for better realization.
(5) The new series of industrial design of the exterior, using square design elements, simple, practical, leading the market demand.

(2) Frame construction

1) The whole steel plate is welded to form a better overall force situation.
2) Vibration aging is used to eliminate the internal stress of the frame, which will not be deformed after processing.
3) The frame is machined on a CNC five-sided machining centre and clamped in one go to ensure the accuracy of the frame.
4) The C-shaped throat compensation device is installed under the throat of the machine tool and connected to the detection device above, so that the slight deformation of the machine tool bending will not affect the measurement accuracy of the system, ensuring any thickness and any material of the plate.

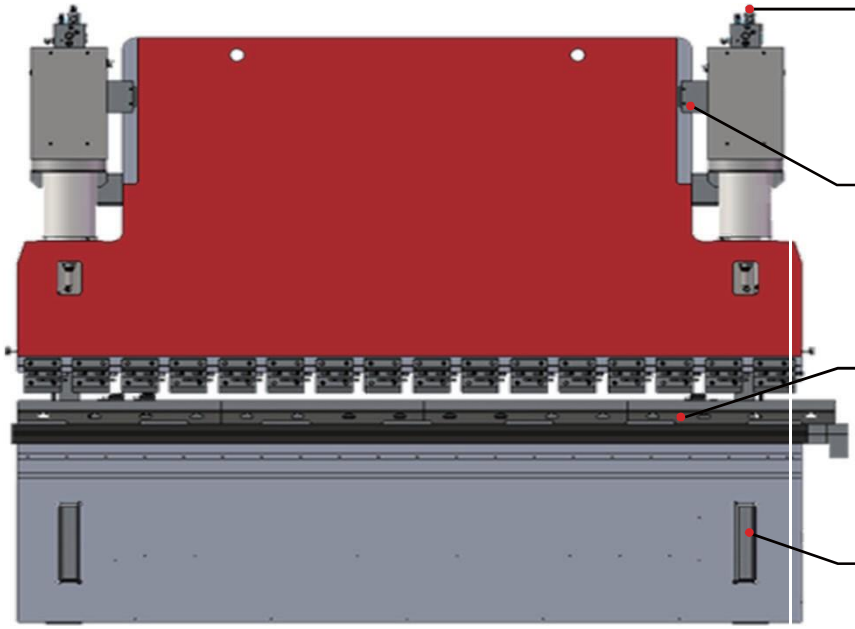


International brand hydraulic system (more stable pressure)

Separate fuel tank (Easy to upgrade to dual pump control models)

Servo motors (power saving and energy saving)

International branded scales (guaranteed accuracy)



Oil cylinder (200/250mm)

Mechanically compensated table (more precise angle adjustment)

(3) Hydraulic system

(1) The use of electro-hydraulic servo system closed-loop control of double-cylinder synchronization, synchronization control accuracy, bending accuracy, repeat positioning accuracy also reached a high level. The use of integrated hydraulic control system, reduce the installation of pipelines, to overcome the phenomenon of oil leakage, improve the stability of the work of the machine, so that the appearance of the machine is simple and beautiful.

(2) A fully functional rear stopper mechanism is adopted, with the rear stopper expandable to 6+1 axes (Z-axis) and a double guide structure to reduce stopper finger jitter, improve balance, effectively control impact and fully enhance the product's performance.

(4) Backstop system (double guide rails, X-axis, R-axis, Z-axis)

(1) Fast backstop speed and high positioning accuracy.

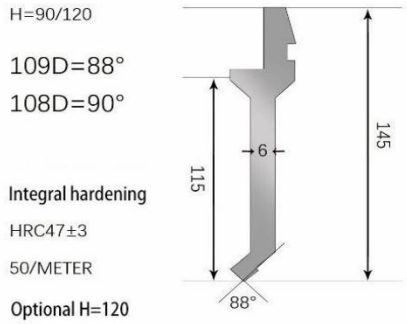
(2) Adopting a fully functional backstop mechanism, the backstop can be extended to 6+1 axes (Z-axis), using a double guide structure to reduce finger jitter, improve balance, and effectively control impact.
This reduces finger jitter, improves balance, effectively controls impact and enhances product performance.

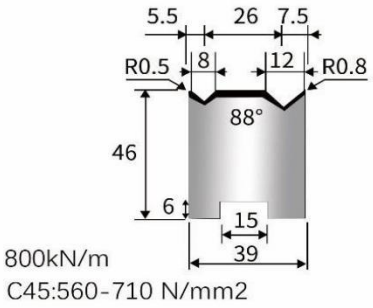
(5) Clamping and mould configuration

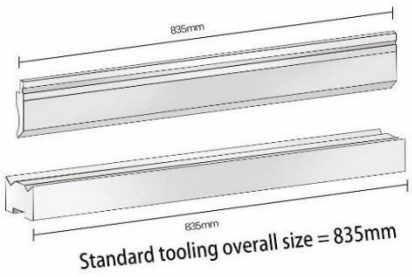
(1) Equipped with manual quick clamping

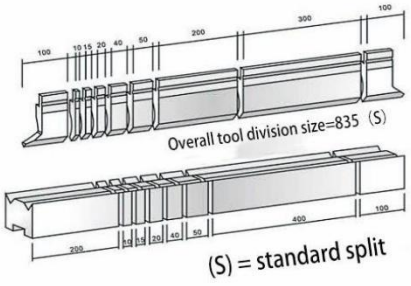
It has the advantages of high precision, easy clamping, no loosening, no knife dropping, etc., and maximum avoidance of small angle bending, workpiece interference. And optional hydraulic upper die automatic clamping device or fast clamping device, reduce the labor intensity of workers, improve production efficiency.

(2) Segmented upper moulds of varying lengths are available and can be assembled to a certain width according to the requirements of the workpiece to suit the processing needs of special workpieces.





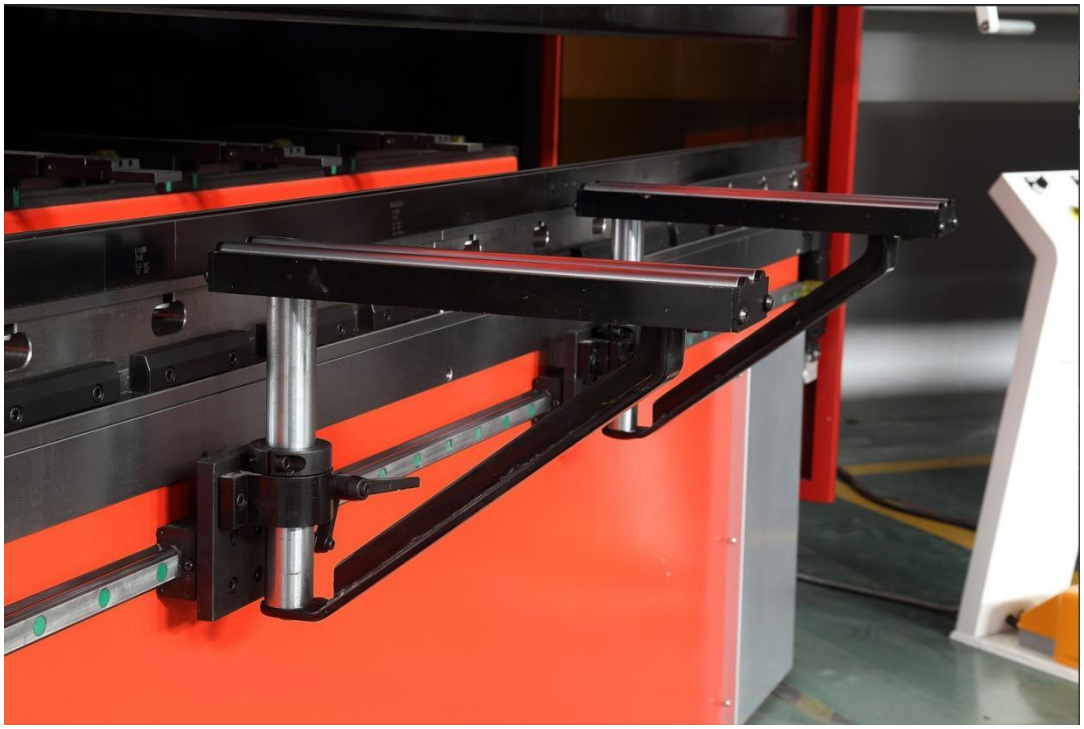




(6) Other configurations

(1) Rotating front drag frame

Two step-adjustable drag stands with swivel function are fitted as standard to avoid interference during workpiece bending.



Equipment Advantages

(1) <5s Accuracy
(2) 20mm Max. thickness
(3) High speed, high precision, high rigidity, large stroke
(4) World-class CNC bending machine special hydraulic system
(5) Multiple security measures for safety and efficiency
(6) Spray car paint, anti-UV, anti-oxidation and anti-peeling

(II) CNC control systems

RAGOS 15 inch (standard)

Model: LT15

- ◆RAGOS self-developed CNC system
- ◆CYBELEC/DELEM can be realized, the operation interface can be switched at will
- ◆ High definition 15" color display
- ◆Can realize the link of enterprise digital management software
- ◆Can be adapted to 4-8 axes
- ◆Graphic sweep function, 2D/3D image display

RAGOS 12/15 inch

Model: TY-12 TY-15

- ◆ Japanese-style bending machine control system
- ◆ Co-developed by RAGOS and NADIC Corporation in Japan
- ◆ High-definition 15-inch color display screen
- ◆ Can be linked to enterprise digital management software
- ◆ Drawing scanning function, capable of displaying 2D/3D graphics
- ◆ Adaptable to 4-8 axis control, with manual and automatic simulation bending programs
- ◆ Equipped with a handwheel device for easy debugging.

CYBELEC

Model: CT-8 CT-12 CT-15

- ◆ Simple and clear display with a large-sized high-contrast touch screen
- ◆ USB interface for easy transfer of parameters and bending programs
- ◆ Can be wirelessly connected to a computer for software upgrades and data backup
- ◆ Optional number of axes: Y1, Y2, X, R, A1, A2, V
- ◆ 2D/3D graphics display with manual simulation bending program
- ◆ "EasyBend" page for easy single-bending function.

DELEM

Model: DA53T DA58T DA66T DA69T

- ◆ 10.1-15" LCD TFT true color display
- ◆ "Quick key" touch navigation
- ◆ Optional number of axes: Y1, Y2, X, R, A1, A2, V
- ◆ Deflection compensation control
- ◆ External USB interface
- ◆ Profile-53TL offline programming software.

Safety protection(Option)

Light curtain

DSP Laser:
Main technical features:

-Laser protection, Multi beam Receiver
-Protective areas, Front, center and rear.
-The safety level is CAT.4 and SIL3
-Detection Case protection degree: IP 65
-Laser classification: class 1 M
-Response time: 5 ms
-Operating temperature 0°C 50°C
-Mounted on the upper beam
-Change Speed Point : 5mm + Stopping Space
-The maximum protective distance is up to 15M
-LED indicators show various states

Side doors

Both sides are equipped with safety doors to prevent safety accidents caused by the proximity of people during machine operation

Rear door

Safety door at the back, the machine will stop and power cut off when the door is accidentally opened to prevent safety accidents caused by the back-gauge movement.

(III) Main technical parameters(HG-250-3200)

Name			Unit	HG-250-3200
Nominal pressure			Ton	250
Length of working table			mm	3200
Distance between columns			mm	2700
Throat depth			mm	400
Pressure plate stroke			mm	250
Opening height			mm	550
Main motor power			kw	18.5
Fast forward			mm/s	150
Work in			mm/s	9
Return			mm/s	130
CNC control systems			Standard: Ragos LT15 Options: Ragos TY12, TY15, Cybelec, Delem Y1, Y2, X, R axis and mechanical deflection compensation.	
Backstop	X axis	Precision	mm	±0.2
		Stroke	mm	500
		Speed	mm/s	400
		Motor power	KW	0.85
	R axis	Precision	mm	±0.10
		Stroke	mm	200
		Speed	mm/s	200
		Motor power	KW	0.85
Dimensions		Length	mm	4010
		Width	mm	2200
		Height	mm	3060
		Machine weight	kg	15000

Nominal pressure :250T
Length of working table： 3200mm
Distance between columns :2700mm
Throat depth ： 400mm
Pressure plate stroke:250 mm
Opening height ： 550mm
Main motor power ： 18.5kw
Fast forward： 150 mm/s
Work in： 9 mm/s
Return mm/： 130s

Backstop
X axis Precision： ±0.2 mm
Stroke： 500 mm
Speed： 400 mm/s
Motor power ： 0.85KW
R axis Precision： ±0.10mm
Stroke： 200 mm
Speed : 200mm/s
Motor power： 0.85 KW
Dimensions Length： 4010 mm
Width:2200 mm
Height： 3060 mm
Machine weight ： 15000kg

(IV) Machine site installation requirements

1. Hydraulic oil: imported VG46# anti-wear hydraulic oil.
2. Power supply: 380V50HZ, voltage fluctuation of 10% - 5%
3. Ambient temperature: 0oC- +40oC
4. Ambient humidity: 20-80%RH relative humidity (non-condensing)
5. far from strong vibration sources and electromagnetic interference
6. dust-free and free from harmful and corrosive gases
7. the foundation should be prepared according to the foundation plan of the supplier
8. the user should be trained to use the machine.

Quality inspection

1. Cleaning and inspection of parts before assembly, including racks, molds, work surfaces, etc. Ultrasonic cleaning is used, and the hardness of the mold is tested, and important parts are performed three-coordinate inspection.

2.During assembly, professional and technical personnel will assemble and clean each part and apply butter. Lubrication, precise installation in accordance with advanced procedures, and dial gauge adjustment to that all components are installed properly.

3. After the assembly is completed, perform processing tests on the machine in accordance with the process requirements to ensure the action of the machine is complete and there is no abnormal noise.

4. After the test run, the machine shall be further debugged and inspected, and the electric power of the machine shall be checked the operation of the device and the system and adjust the system parameters. For upper and lower knives, workbenches, suction final commissioning and accuracy testing of the pan, positioning system and oil circuit system.

After-sales and technical services

Here is a possible revision to improve the clarity and readability of the provided text:

1. The supplier will provide drawings for the equipment foundation, and the demander will be responsible for the actual construction.

2. Once the products are assembled in the supplier's factory, the demand side will be promptly informed of the specific delivery time and any preparatory work necessary for installation.

3. The supplier is responsible for commissioning the equipment on the demand-side use site, provided that the demand side cooperates and provides the necessary conditions, including the installation of required lifting equipment, hydraulic oil, electricity, and any other necessary components.

4. During the installation and commissioning of the equipment on the demand side, the supplier will provide free online training and technical consulting services to the relevant technical personnel. If on-site training is required, the cost will be USD 200 per day.

5. After the installation and commissioning process, both parties will jointly accept the technical agreement and relevant technical annexes that have been signed.

6. The supplier provides a one-year quality assurance period from the issuance of goods. During the warranty period, any damage to the parts caused by reasons other than user error will be replaced free of charge (wearing parts are not covered by the warranty). After the warranty period expires, the supplier will implement a lifetime warranty, with the cost of work charged.

7. The supplier offers online service support for the demand side. Upon receiving a quality report from the demander, the supplier will respond within 4 hours and provide a solution within 24 hours.

Warranty

1. Warranty period:

The warranty period is 12 months after installation and commissioning. Alternatively, a 24-month warranty period option is available.

2. Warranty scope:

A. During the warranty period, any malfunction of the machine during normal operation will be repaired free of charge.

B. Any parts damaged during normal operation will be repaired or replaced free of charge.

3. Exclusions from warranty coverage:

The warranty does not cover the following:

A. Any damage caused by human factors.

B. Any attempt to repair the machine by anyone other than authorized personnel without prior consent.

C. Any damage caused by force majeure events, such as war, fire, typhoon, flood, or earthquake.