

Longbow Technology Solution



Longbow

HYDRAULIC SHEARING MACHINE



QC12K
series

TECHNOLOGY SOLUTION

Maanshan Longbow Machinery Manufacturing Co., Ltd.

catalogue

1.Company profile -----	01
2.Factory strength-----	02
3.Packaging and delivery-----	03
4.Customer service-----	04
5.Hydraulic shearing machine introduction --	05
6.Main application industries-----	14
7.Patent certificate -----	15
8.Cooperative partner-----	16
9.Main customers -----	16

About us

Maanshan Longbow Machinery Manufacturing Co., Ltd.

/COMPANY PROFILE

Our company focuses on the R & D, production and sales of sheet metal equipment and air duct forming equipment

High quality
products

Professional
team

technical
support

Efficient
after-sales

16 YEARS **OEM/ODM**
INDUSTRY EXPERIENCE



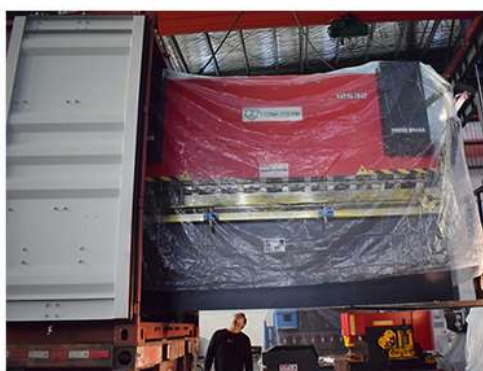
Our company is a comprehensive company integrating product R & D, production and processing, product sales and after-sales service. We have patent application certificate, ISO9001:2008 quality certificate and CE certificate exported to the EU. We have always pursued to provide customers with high-quality products and services. Choosing us is choosing quality and choosing a trusted partner.

Factory
strength

FACTORY
STRENGTH



Packaging and delivery





Customer service

Pre sales service :

Provide appropriate technical guidance and complete set of equipment data according to the development needs of customers and from the perspective of customers' actual use; Solve various problems raised by customers, and design or assist customers with customized laser processing schemes from the perspective of technical feasibility; Provide equipment display for customers to visit, sample, test machine, etc.

On sale service :

Inspect and analyze the commissioning site of the customer's machine, and assist the user in planning and designing the site and arranging the allocation of water, electricity and gas according to the customer's site conditions; Provide customers with operation instructions of a full set of equipment and provide training for customers' equipment operators.

after-sale service :

At the use site, the customer's equipment operators shall be trained in actual operation and processing, daily equipment maintenance and safe use protection, so as to ensure that the users can master the equipment operation procedures and methods as soon as possible and can operate the equipment independently for production and processing; After the installation and commissioning of the whole set of equipment, it will enter the two-year warranty period from the date of training; During the warranty period, the company will also irregularly assign customer service specialists to conduct technical visits to the user's equipment work site, maintain and inspect the equipment, and answer the user's questions.

Hydraulic shearing machine





1. Main Features:

- 1) Totally EU streamlined design, Monoblock by welding robots & apparatus and stress relief process by Annealing treatment.
- 2) Adopt integrated hydraulic system, more reliable and easy for maintenance. and the hydraulic system from Bosch-Rexroth, Germany,
- 3) The Hydraulic Guillotine is a Swing Beam Action machine which is produced in a variety of cutting lengths and capacity options.
- 4) The distance of the backgauge is adjusted by the motor and is well adjustment is displayed by E21S with Delta inverter.
- 5) Equipped with lighting-alignment, so as to align when shearing. The stroke of knife beam can be adjusted in stepless mode.
- 6) Decrease the force of fulcrum through leverage to prolong working life.
- 7) The rolling material support ball decrease scratch of sheet and reduces frictional resistance.
- 8) The oil cylinders in series ensure that the shearing angle do not change during the shearing processing.
- 9) Safety barrier device all around the machinery, electrical cabinets equipped with Open door cut-off function, emergency stop button around front and back, protective cover foot switch to ensure safe working.
- 10) The CNC system adopts frequency conversion control technology, with multi-step programming function, simple and easy to operate.
- 11) with fast and flexible gap adjusting mechanism for high shearing accuracy.

Technical parameters of equipment

Items	Value	Unit
Model	QC12K-4*3200	
Max cutting thickness	4	MM
Max cutting width	3200	MM
Plate strength	450	N/MM ²
Blade length	3300	MM
Shearing angle	1.5	degree
Back-guage max distance	600	MM
Stroke time	18	TIME/MIN
Distance between	3430	MM
Worktable height	800	MM
Main motor power	5.5	KW
Dimension	3840x1675x1600	MM

NOTE :

To some extent, the accuracy of the workpiece depends on the type of workpiece, pretreatment, plate size and the position of the plate in the working area. The above parameters are subject to change without notice, and the final technical parameters shall be subject to the actual order agreement.

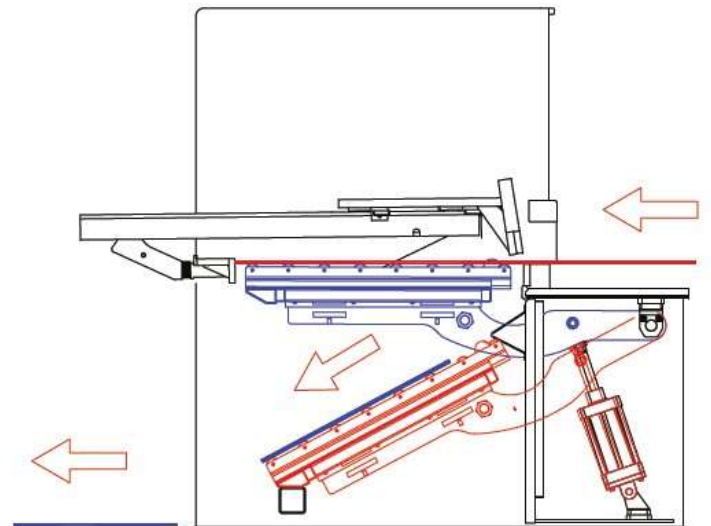
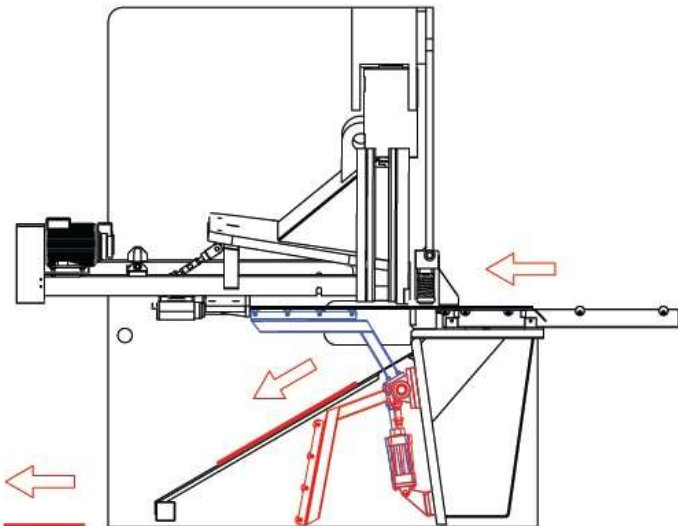
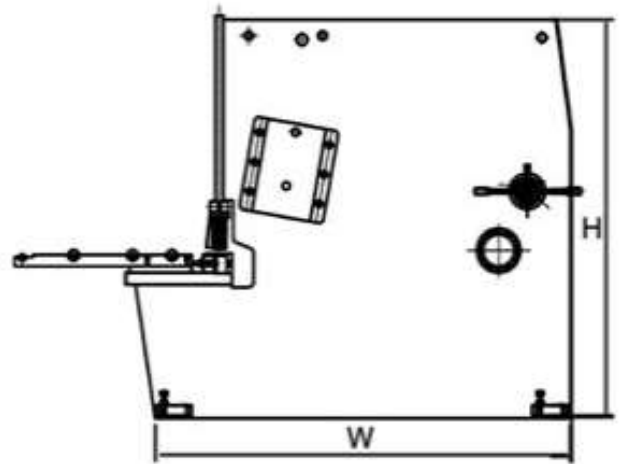
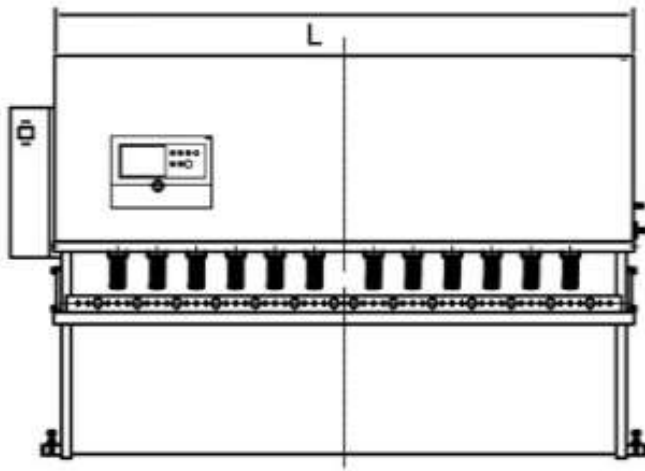
Equipment configuration list

Name	brand
Blade	Longbow/6CRW2SI
Main motor	GERMANY/SIEMENS
Valve group	GERMANY/REXROTH
Tubing connector	GERMANY/EMB
Oil pump	USA/SUNNY
Ball screw and linear guide	TAIWAN/HIWIN
Sealing element	JAPAN/NOK
Electrical components	FRANCE/SCHNEIDER
Control system	CHINA/ESTUN
Foot switch	SOUTH KOREA/KACON
Linear encoder	ITALY/CIVI
Cylinder	ITALY/ATOS

NOTE :

- 1.The above accessories are optional accessories for hydraulic plate shears. Customers can choose the corresponding accessories according to their own needs.
- 2.The warranty period of the whole equipment (natural disasters without force majeure, war, illegal operation, man-made damage and other factors) is 2 years.

Equipment layout



Widely used

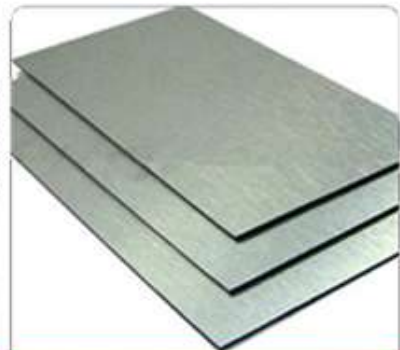
Hydraulic shearing machine are widely used. They can cut plates of different materials. They have the characteristics of high cutting efficiency and no burr.



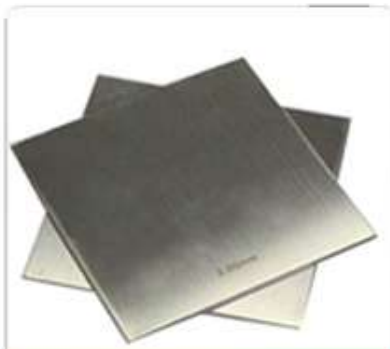
stainless steel



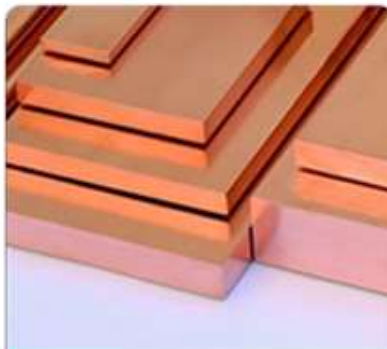
hardware cloth



Aluminum plate



iron plate



Copper plate



Circuit plate



Leatherwear



Plastic plate

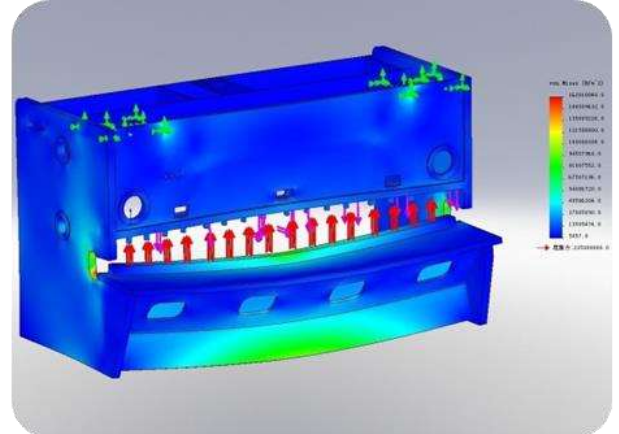


Wood plate

Configuration description

1.Rigid frame construction

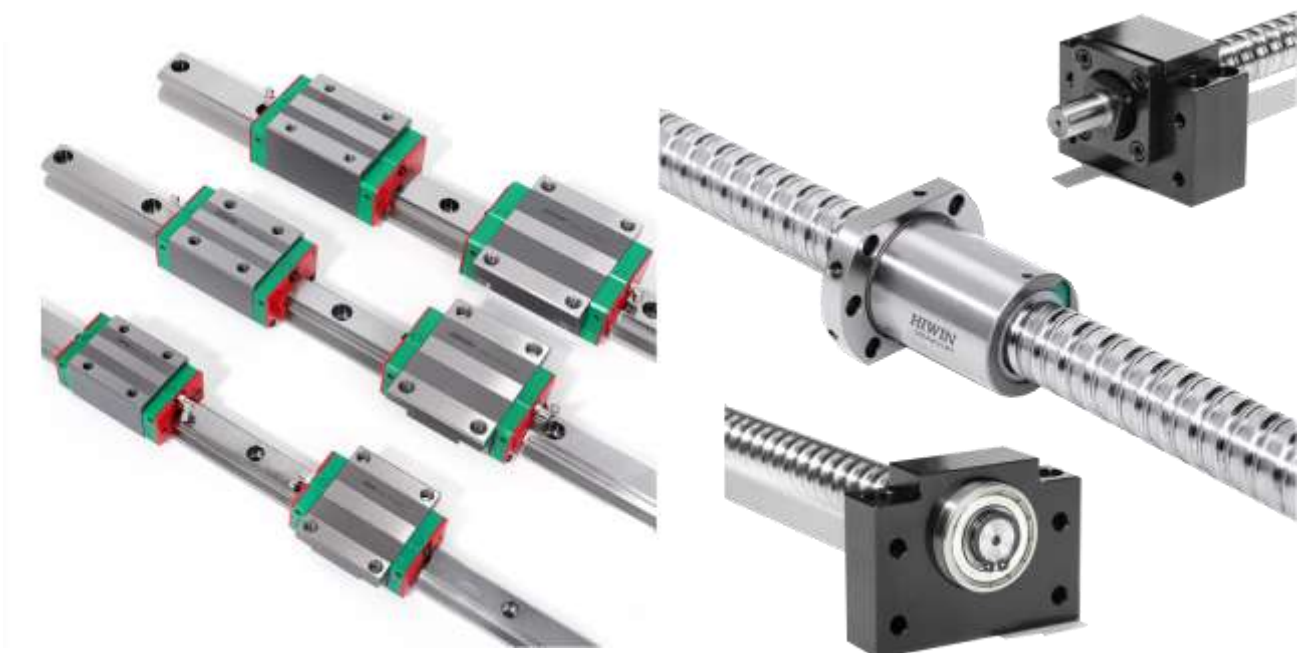
The machine body is in overall welded and overall processed structure, and ANSYS finite element analysis software is applied to main parts of the machine body for analysis, which has ensured the reliability of machine tool and the precision of entire machine. The foundation of every LONGBOW press brake is a solid, mono-block frame made from mill certified, high-yield steel.



2.Ball screw and linear guide(HIWIN)

Ball screw: The carbon content of high carbon alloy steel is more than 0.45%, which is suitable for induction heat treatment. It can make the material have good surface hardness and surface wear resistance. Therefore, the ball screw has excellent service life; High tensile strength and toughness.

linear guide: The linear guide rail adopts linear rolling guidance, which has high positioning accuracy, less wear, can maintain accuracy for a long time, and is suitable for high-speed movement.



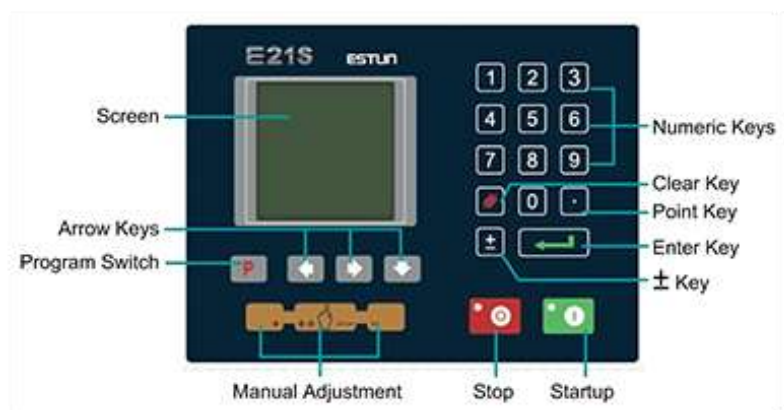
3.Main motor(SIEMENS)

1. The high efficiency level reduces energy consumption and directly enables users to save costs
2. High protection level (IP55) to ensure safe and reliable use of customers
3. High performance.



4.Control system(E21S/ESTUN)

1. Backgauge and block control
- 2.Control for general AC motors, frequency inverter
3. Intelligent positioning
- 4.Stock counter
5. Holding/decompression time setting
- 6.Program memory of up to 40 programs
- 7.Up to 25 steps per program
- 8.One side positioning
9. Retract function
10. One key backup/restore of parameters
- 11.mm/inch
12. Chinese /English



5. Hydraulic system(REXROTH/SUUNY)

Adopt integrated hydraulic control system, more reliable and easy for maintenance. Hydraulic system is from Bosch-Rexroth, Germany. All pipes, flange and joint with vibrations proof and leakage proof design and setting All seals in cylinder is Volqua from Japan, the most famous brand, good quality and high performance



6. Electrical system(SCHNEIDER)

Electrical Cabinet under the standard of IP65, Electrical under international CE Standard, safe and reliable, strong anti interference capability. Protective fence and the safety interlock to ensure the operation safety. Have a movable single-hand pedal switch, easy to operate. Front Side Covers with safety switches, Back light safety guards, Foot pedal conforming to CE regulation.



Main application industries

There are many models of hydraulic shearing machine to choose from. Customers can choose the appropriate model according to the plate thickness and width. It is the best choice for cutting medium and thick plates.

Hydraulic shearing machine is usually used in the manufacturing of large mechanical equipment such as agricultural machinery, textile machinery, food machinery and engineering machinery.



Patent certificate



Cooperative partner



C l i e n t s



Provide global customers with high-quality products and services



Leader in sheet metal industry and provider of
sheet metal equipment solutions

We sincerely invite you to visit our company !

Address : East Of Zhendong Industry Park, Bowang Town, Maanshan, Anhui, China

Tel : 008619155507230

Email : longbowmachine@gmail.com