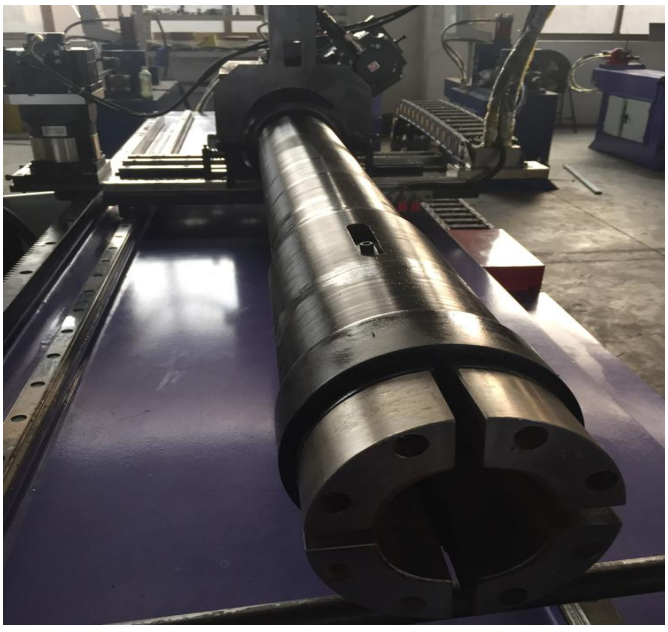
SB-114CNC Automatic tube bending machine









Equipment parameters: 114CNC pipe bending machine

content		parameters
Maximum suitable for carbon steel pipe(bending radius 1.5D as an example)		Φ114*6.0
Maximum core length		4500 mm
Maximum feeding stroke		4000 mm
Maximum bending radius		500 mm
Maximum bending angle		185°
Set the number of bends per fitting		N
Working speed	bend	40° /S
	Corner	160° /S
accuracy	bend	±0.1°
	feeding	±0.1°
	Corner	±0.1°
power	Corner servo motor	2.0 KW
	Feed servo motor	3.0 KW
The oil pump		48 L
Master cylinder bore		220 MM
Oil pump motor		22 KW
Machine size		6000X1600X1800

Machine weight	7500 KG

Note: 1 The elbow adopts hydraulic cylinder

2. Japan Mitsubishi servo motor is adopted

3. Taiwan Qiyang hydraulic solenoid valve is adopted

4. Vinylon touch screen operation

List of purchased parts:

Serial number	Part name	Origin and manufacturer
一、 Electric control part		
1	PLC	Mitsubishi or Yaskawa, Japan
2	Tilt servo motor	Mitsubishi or Yaskawa, Japan
3	Feeding servo motor	Mitsubishi or Yaskawa, Japan
4	Tilt servo driver	Mitsubishi or Yaskawa, Japan
5	Feed servo driver	Mitsubishi or Yaskawa, Japan
6	Oil pump motor	Wuxi Taihu motor
7	Proximity switch	Japan OMRON
二、 Hydraulic part		
8	Oil pump	Taiwan Yongling

9	Solenoid valve	Taiwan Qiyang
10	hydro-cylinder	Precision self-made

Machine features:

1. This model is an economical full-automatic three-dimensional numerical control pipe bender, which can automatically bend, feed and tilt angle. The three-dimensional pipe fittings can be bent automatically at one time. The feeding and tilting axes are controlled and driven by servo motor and servo driver. The elbow axis is controlled by oil pressure value, and the matching speed is adjusted by flow regulating valve.

2. Both feeding and tilting axes can set the speed of section 1-8 through computer according to the actual workpiece conditions. The elbow shaft adjusts the matching speed through the pressure regulating valve.

3. The electric control system adopts well-known brand controller and super large PLC, with strong performance and good stability.

4. Equipped with 10.4 ″ color touch screen, man-machine dialogue operation, easy to understand. All bend data can be input through the touch screen.

5. The text displayed on the screen is equipped with Chinese and English for switching. If you need other countries, you can order.

6. Each pipe fitting can be set with 32 bends (or selected by the user), and the memory capacity can store 330 groups (or 125 groups) of bend data.

7. After data editing, it has the function of key locking to prevent data from being modified arbitrarily.

8. It has power-off memory function, and the data can be saved permanently.

9. Manual, semi-automatic and full-automatic operation modes can be set. During the bending test, the manual decomposition action can be selected to observe the interference point and modify the action.

10. For each bend, the three axes of feeding, bending and tube turning can be set to move simultaneously or differently to avoid interference points, so as to improve production efficiency. There are eight ways to choose from: ① feeding → bending back → tilting; ② (feeding + bending back) → tilting; ③ (feeding + bending back + tilting); ④ Feeding → tilting → bending back; ⑤ (feeding + tilting) → bending back; ⑥ Bending back → feeding → tilting; ⑦ Tilting →

bending back → feeding; ⑧ Bending back → (feeding + tilting).

11. Each bend can set the rebound compensation value and demoulding clearance according to the change of material.

12. There are two feeding modes: direct feeding and non clamping, which can be selected when the workpiece is fed repeatedly.

13. The setting of waiting position, safety position, wheel die interference position and guide die interference position can be fine tuned. The computer has the function of automatic memory position to eliminate the failure of human measurement error and machine collision, and has the function of front and rear limit shutdown, which belongs to double safety insurance.

14. When the direct delivery mode is selected, it has the function of measuring the bending and extension ratio of pipe fittings, which is convenient to calculate the actual material consumption length of pipe fittings.

15. It has counting function for workpieces.

16. It has two axes zeroing function at the same time. Just press the button. It is not necessary to zero the two axes respectively, which saves time and is accurate.

17. It has the function of automatically detecting errors or machine faults and displaying them on the screen for the convenience of the operator.

18. It is equipped with servo proportional valve to control the flow, which is not affected by oil temperature, with high precision and stable equipment.

Detailed equipment supply list:

Serial number	Name of goods	quantity	remarks
1	Pipe bender host	1	
2	Electric control operation cabinet	1	Attached to the host
3	Slow core pulling device	1	Attached to the host
4	Anti wrinkle device	1	Attached to the host
5	Bending die	1	random
6	Mandrel rod	1	
7	tool cabinet	1	
8	Allen wrench (1 set)	9	
9	Open end wrench	1	
10	Butter gun	1	
11	Grease nozzle	2	
12	Product delivery inspection record	1	

13	Product certificate	1	
14	Packing list	1	
15	Operating instructions (including)	1	

After-sales service:

1.Warranty period: We guarantee machine quality for one year, during this year, if spare parts of the machine were damaged, we can send the component to the customer by DHL, TNT freely.

2.Our factory can send our engineer to the customer's factory install, commission and training freely. The customer provide the double trip tickets, food and accommodation for our engineer. The customer also can send the engineer to our factory to learn the operation and maintains freely.

3.Our factory provide the service for the customer forever, if the customer need operation help, can contact us by Skype,Whatsapp,WeChat, Email and Telephone at any time, we provide 24 hours on-line service.

Zhangjiagang City Cedar Technology Co., Ltd