SB-38CNC-2A-1S servo automatic pipe bender with automatic feeding



Device parameters:

Content	SB-38CNC-2A-1S
Max. Capacity Carbon steel pipe（**1.5D**）	**Φ38*2.0**

The largest applicable stainless steel pipe（**2.0D**）		**Φ32*1.5**
Maximum core length		**2600 ㎜**
Maximum feeding stroke		**1900 ㎜**
Maximum bending radius		**250 ㎜**
Maximum bending Angle		**185°**
Each pipe can set the number of elbows		**16**
Working speed	bend	**35°/S**
	Corner	**50°/S**
	Feeding	**900 ㎜/S**
Precision	bend	**±1°**
	Corner	**±0.1°**
	Feeding	**±0.1 ㎜**
Power	Oil pump motor	4.0KW
	Corner servo motor	750W
	Feeding servo motor	1.0KW
Oil pump		19L
Machine weight		About1500KG
Size		3500X900X1300mm

List of purchased parts:

Serial number	Part Name	Origin and manufacturer
一、 Electronic control part		
1	PLC	Mitsubishi Japan
2	Tilting Servo Motor	Mitsubishi Japan
3	Feeding servo motor	Mitsubishi Japan
4	Tilting Servo Drive	Mitsubishi Japan
5	Feeding servo drive	Mitsubishi Japan
6	Elbow Servo Motor	Mitsubishi Japan
7	Elbow Servo Drive	Mitsubishi Japan
8	Touch screen	WEINVIEW
9	linear guideway	Taiwan TBI
二、 Hydraulic part		
10	Oil pump	Yongling, Taiwan
11	SOLENOID valve	Seven Oceans of Taiwan
12	hydrocylinder	Precision homemade
13	oil pipe	

Automatic feeding machine:

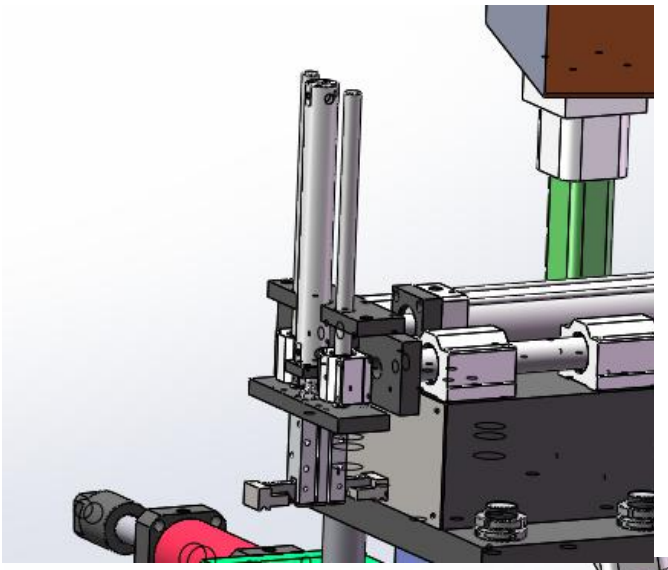


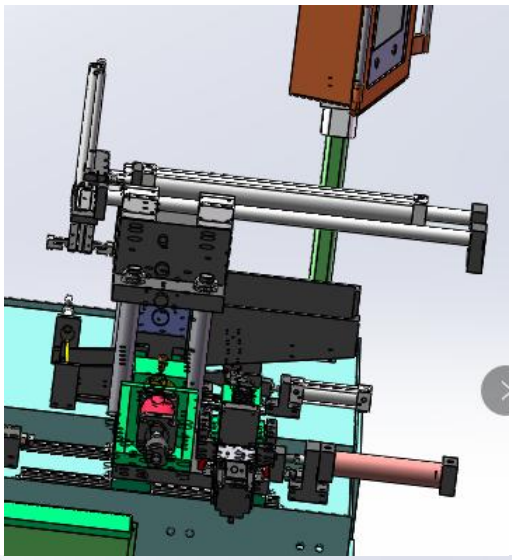


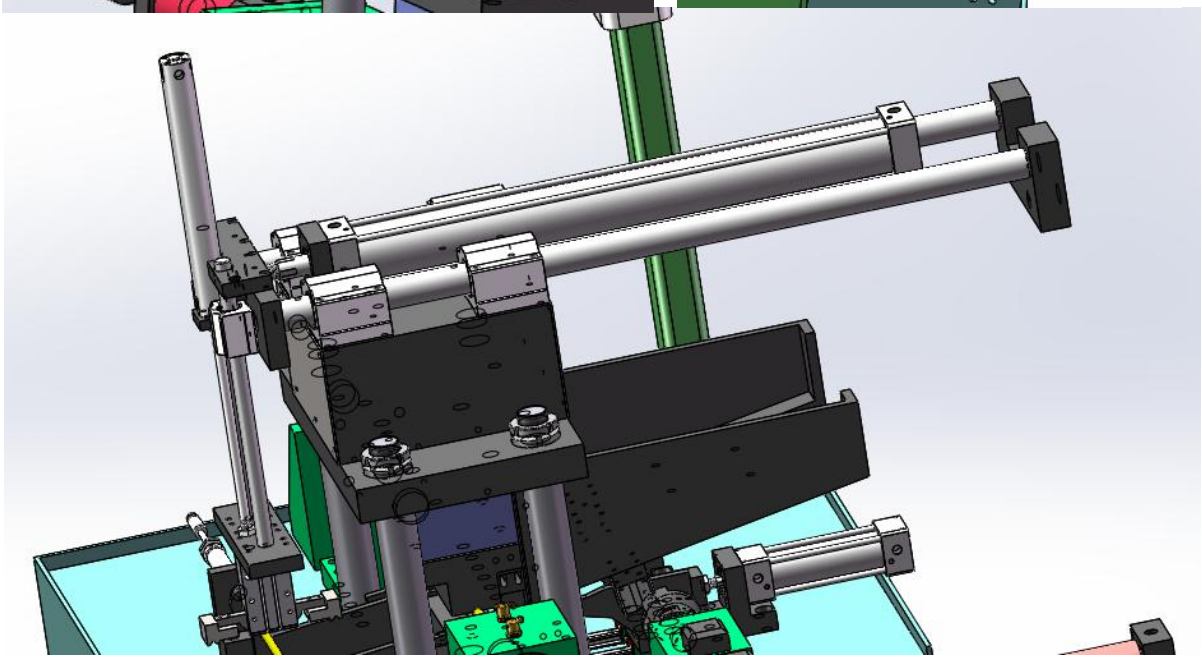

Feeder equipment parameters:

Name	unit	XS-70NC Automatic feeding machine
Feeding diameter	mm	10-70mm
Feeding length	mm	30-300
Feeding speed		1-2 second/root
Upgrade motor power	W	1500
Convey motor power	W	120
Control System		PLC
Box		stoving varnish

Automatic Feeding manipulator:







Name	Automatic Feeding manipulator
Feeding cylinder	AirTAC
Move the cylinder up and down	AirTAC

Grab cylinder	AirTAC

Machine features:

1. This model is an economical full-automatic three-dimensional CNC pipe bending machine, which can automatically bend, feed, and tilt automatically. The three-dimensional pipe can be automatically bent at one time. The feeding, tilting, and two axes are all The drive is controlled by a servo motor and a servo driver, and the auxiliary drive is adjusted to match the speed through a regulating valve.

2. Both feeding and tilting axes can be selected and set 1-8 speeds through the computer according to the actual workpiece conditions.

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

4. Equipped with color screen, man-machine dialogue operation, convenient and easy to understand. All elbow data can be input through the touch screen.

5. The screen display text is equipped with Chinese and English, which can be switched. If you need other country languages, you can choose to order.

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

7. After the data is edited, there is a key lock function to prevent the data from being modified arbitrarily.

8. With power-off memory function, data can be stored permanently.

9. Manual, semi-automatic, and fully automatic operation modes can be set. You can choose to manually decompose the action during the trial bend, observe the interference point, and modify the action.

10. For each bend, the three axes of feeding, retreating and rotating pipe can be set to move simultaneously or differently to avoid interference points, thereby improving production efficiency. There are eight ways to choose: ①feeding→return→tilting; ②(feeding+returning)→tilting; ③(feeding+retracting+tilting); ④feeding→tilting→retracting; ⑤(Feeding + tilting) → retreating; ⑥ retreating → feeding → tilting; ⑦ tilting → retreating → feeding; ⑧ retreating → (feeding + tilting).

11. For each bend, the rebound compensation value and demoulding gap can be set due to the change of material.

12. There are two kinds of feeding methods: direct feeding and pinch feeding. The pinch feeding method can be selected when the core is not worn, and the feeding can be repeated, and the length of the workpiece is not limited.

13. The settings of waiting position, safety position, wheel mold interference position, guide mold interference position, etc. can all be fine-tuned. The computer has an automatic memory position function to eliminate human measurement errors and machine collision failures, and there are front and back limits. The shutdown function is a double safety insurance.

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

15. There is a counting function for the workpiece.

16. There is the function of two-axis zeroing at the same time, just press the button. There is no need to zero the two axes separately, which saves time and is accurate.

17. With automatic error detection or machine failure function, and display on the screen, easy for the operator to eliminate.

18. The equipment adopts automatic loading and unloading, the material is put into the waiting chute, and the robot is automatically fed, automatically grabbed, and automatically delivered to the pipe bender. The pipe bender receives the signal, receives the material, and the pipe bender realizes three-dimensional Automatic pipe bending.

Detailed equipment supply list:

Serial number	item name	quantity	Remarks
1	Bending machine host	one piece	
2	Electric control cabinet	one piece	Attached to the host
3	Slow core pulling device	one set	Attached to the host
4	Elbow mould	one set	random
5	Mandrel rod	one branch	
6	Toolbox	one branch	
7	Allen wrench (1 set)	nine pieces	
8	Grease gun	one	
9	Product factory inspection record form	One serving	
10	Product certification	one page	
11	Packing List	one page	
12	Operating instructions (including)	one book	

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 Shigan import and export trade Co., Ltd