



MRB-08A
Automatic Bending Machine

Operation Guide

SUZHOU INDUSTRIAL PARK MATE AUTOMATION

TECHNOLOGY CO.,LTD

www.suzhoumate.com

Thanks for using our products. Before use, please read this menu carefully and keep it for future reference. Thanks for your understanding if there's any discrepancies between the manual and practical operation process due to technical update ceaselessly.



Company brief

Suzhou Industrial Park Mate Automation Technology Co., Ltd. is a metallic gasket and equipment manufacturing and selling company. We are located in Suzhou - a city well known for its Chinese classic garden, south of Jiangsu Province, China. With our technology, we offer our customer very wide variety of metallic gasket equipment, such as

Spiral wound gasket winding machine;

Kammprofile machine;

Guide rings grooving machine;

Inner ring Chamfering machine;

Bend & weld machine;

Laser marking machine;

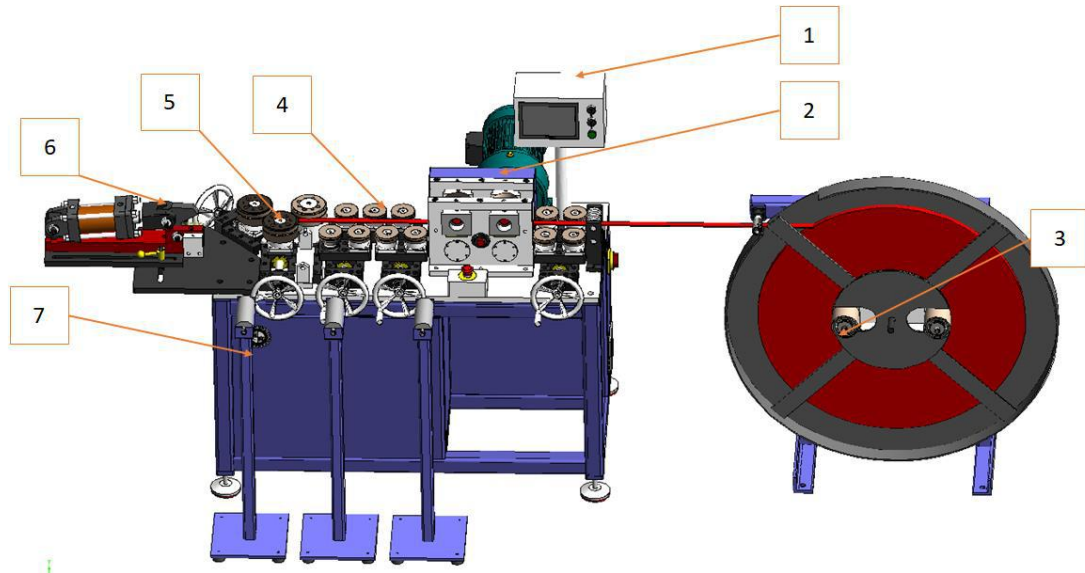
as well as computer controlled compression tester.

Our concept is to provide our customers with one-stop service for all metallic gasket related products, parts, and equipment. We have successfully sold our products and equipment to customers in the Asia India USA Europe and South America.

We welcome all customers from abroad and home.



MRB-08A Automatic Ring Bending Machine (Pic1)



1. HMI ----- Operation guide, buttons
2. Driven mechanism ----- Driven the bar go through bending roller set
3. Un-coiler ----- Un-coil the steel bar
4. Straighten roller set ----- Consist of 9 rollers, 4 allocated before mechanism, 7 after it
5. Bending roller set----- Consist of 3 bending rollers
6. Scissors----- Cut off the ring when its perimeter hit setting length
7. Support roller ----- 3 Support roller is useful when make large size ring

Machine main features

1. Machine basically consists of 4 parts: Un-coiler / Driven mechanism / Straighten roller set / Bending roller set / Scissor.
2. It is designed to bend all sizes of guide rings and inner rings from 6" up to 3.5 meters' diameter, with this machine, you can make ring much more efficient and very much cost effective because the material utilization will be much higher;
3. Major processes include straighten, bending and cutting off. This machine can accomplish all those processes in one process;
4. PLC programmed process control, make very precise diameter, and very easy to operate.
5. Hydraulic power pack automatically cut off the bended rings.
6. Interfaces allow people to set up parameters, display necessary production information, such as ring size, line speed, production volume and so on.



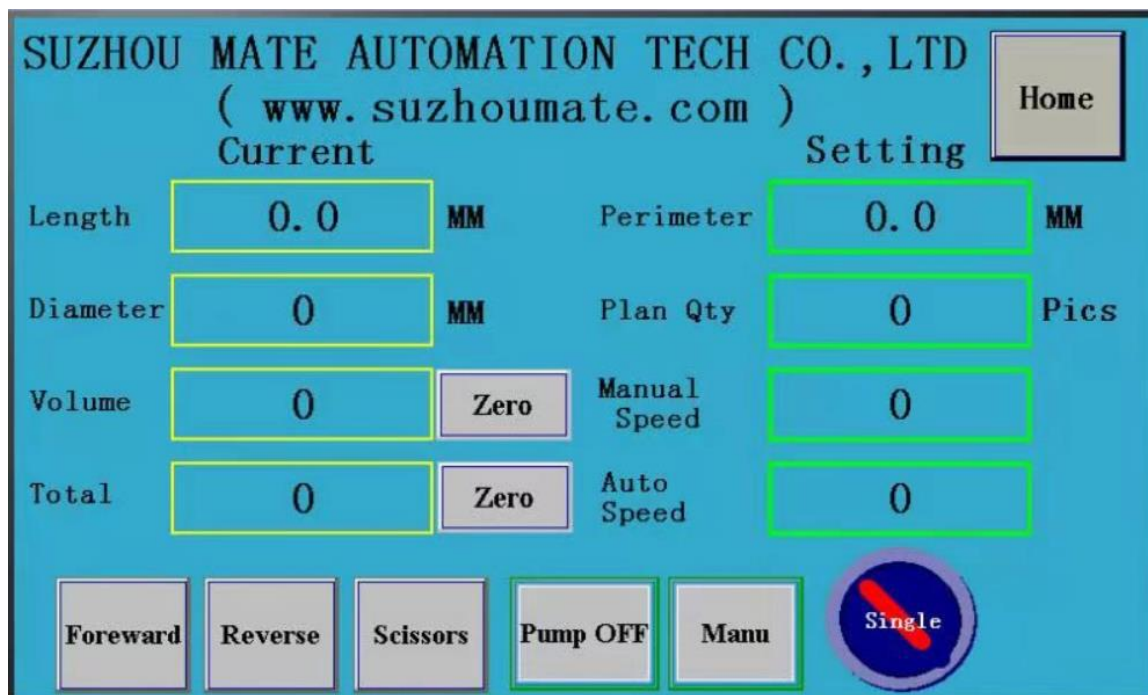
Machine Specification

Machine set up

1. Connect cable to power. 380V 3 phase.
2. Turn on power, the interface will show as following pic,



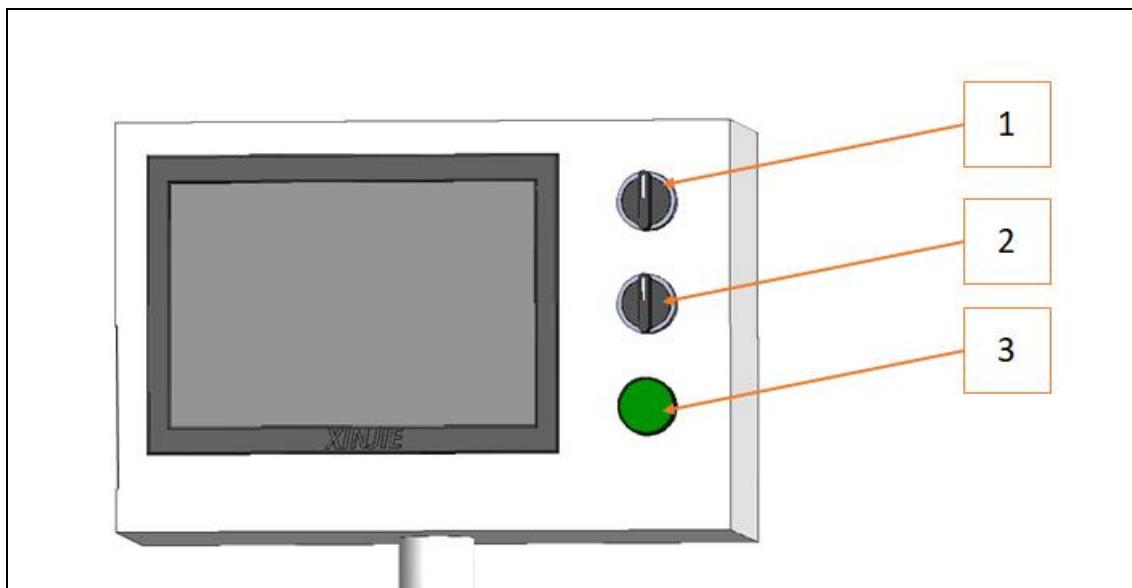
Click “English” button, come to the next page below,





1. Length----- How long bar have been gone through the machine
2. Diameter----- The diameter of the ring
3. Volume----- Quantity of the ring been made for today
4. Total----- Quantity of the ring been made from very beginning
5. Perimeter-----It determines when the scissors cut off the bar, this is the key parameter for making all sizes of ring.
6. Manual speed----- Means the bar driven speed under manual mode
7. Auto speed----- Means the bar driven speed under automatic mode
8. Forward----- Controls bar move forward
9. Reverse----- Controls bar move reverse
10. Scissors----- Manually control scissors cut
11. Pump off/on -----Controls hydraulic pump off/on
12. Single/Auto----- Switch single mode or auto mode, under single mode, machine only produce one single ring, which is useful for machine set up

Control panel is as following



1. Pump on/off switch
2. Manual / Auto switch
3. Start Button

Step 1 Feed the bar from uncoil device into machine, the bar must go through straighten roller set to make sure bar perfect straight before bending.

Step 2 Set up the perimeter of ring, ring perimeter = (the ring outside diameter – inside diameter)/ 2 * 3.14. Perimeter is in mm.

Step 3 Manually control the bar go forward into the bending roller set, adjust front bending roller to right position until you get the right diameter of the ring. For first ring, you need to use the manual button to move the bar forward/reverse several times.



Meanwhile manually move the front bending roller little by little until you get right diameter.

Step 4 after set up the first ring diameter, switch to automatic mode, then press automatic button, and the machine will run automatically, bending and cutting.

Machine Specification

Machine Profile	1500*1350*1600 mm
Power Supply	380 V 50 HZ
Drive Motor	3.7 KW
Main Shaft RPM	36 RPM
Linary Speed	0-200 mm/s
PLC Controlled	Yes
Bending Wheel Diameter	120 mm
Work Range	150-3500 mm
Thickness	3-5 mm
Max Flange Width for CS	50 mm
Max Flange Width for SS	40 mm
Cycle Time	5 S/Piece (8")
Accuracy	±0.2 mm
Automatic cut off	yes
Volume count	yes

Safe Instruction

1. When feed bar, make sure keep finger certain distance away from the press roller.
2. Operator must ware glove, don't pull bar with hand in any cases.
3. Don't open electronic box when electrician is absence.

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