

Steel Bar Positive and Negative
Bending Test Machine

Brand: JNG

Model: JG-40A



(For reference only)



Overview

- JG-40A The steel bar bending test machine is the steel bar for Panels Test equipment for reverse bending test, the device main technical parameter and indicators meet GB/T1499.2-2018 (instead of GB/T1499.2-2007) Steel for reinforced concrete-part 2nd: Hot-rolled ribbed steel bars", GB/T28900-2012" test method of steel reinforced concrete, YB/T5126-2003 "Test method for flexural and reverse bending of reinforced concrete steel bar" (instead of GB5029-85" test method for horizontal reverse bending of steel bars") Standard requirements, for steel mills and construction units to test the reverse bending performance of steel bar cannot be less test equipment, at the same time applicable to the construction industry site steel bending, to achieve the test and construction of a dual-machine.
- JG-40A Type is the original GW-40 Type of replacement products, by replacing different specifications of a machine can be replaced by two machines, for customers to save money. The equipment has a complete performance, good quality and compact structure, small size, simple and easy to grasp, bending angle digital display intuitive, smooth running noise low, the use of reliable life long, reasonable design maintenance easy lubrication and simple characteristics. The device's limit position change to mechanical limit switch, use more convenient and durable, the design of vulnerable parts is more reasonable and the edge of wearing parts is replaced. In addition, the equipment also increased the photoelectric switch abnormal controller alarm function, to avoid the due to the proximity of the switch acquisition signal problems system non-stop machine and cause equipment damage.
- Steel bending tester is special equipment for cold bending test and plane reverse bending test of steel bar. Its main technical parameters meet GB1499.2, YB/T5126 and ISO10065: 1900 The rules and requirements for cold bending test and plane reverse bending test are provided. This equipment is ideal test equipment for steel mills and construction units to test bending and bending properties of steel bars. The steel bending tester has the characteristics of compact structure, simple operation, intuitive bending angle, easy maintenance, stable running, safe and low noise.

Installation

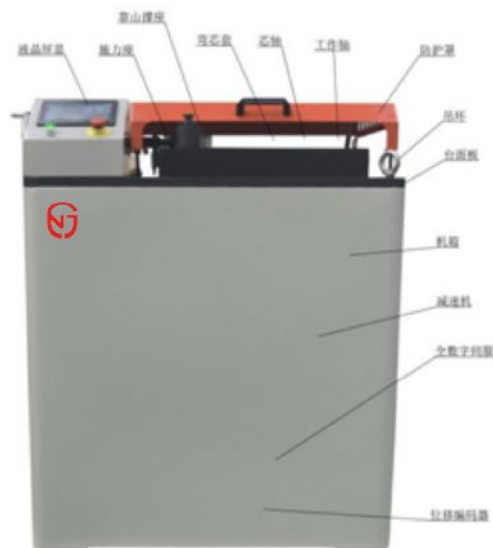
- Installed on a stable basis, the level of the error should not be greater than 0.5/1000; then Two-phase Three wire system, 50Hz, 220V Power.



Technical Specifications

Model	JG-40A
Diameter range of curved rebar	Ø6 – Ø40mm
Forward bending angle	0-180° Arbitrary settings within
Reverse bending angle	0-90° Arbitrary settings within
Rotate speed of working disk	0-1.4r Arbitrary setting in/min
Motor power	1.5kw
Machine profile	1000 x 750 x 1200mm
Machine weight	1500kg

Structure Introduction



The main structure of the host is composed of the following parts:

1. Full digital servo motor
2. Cycloid reducer for needle wheel
3. Work disk
4. Compression device
5. Machine frame
6. Table
7. Work shaft and Bent Center Sleeve
8. Electrical part



Electrical Working Principle

Electrical Control Panel Settings:

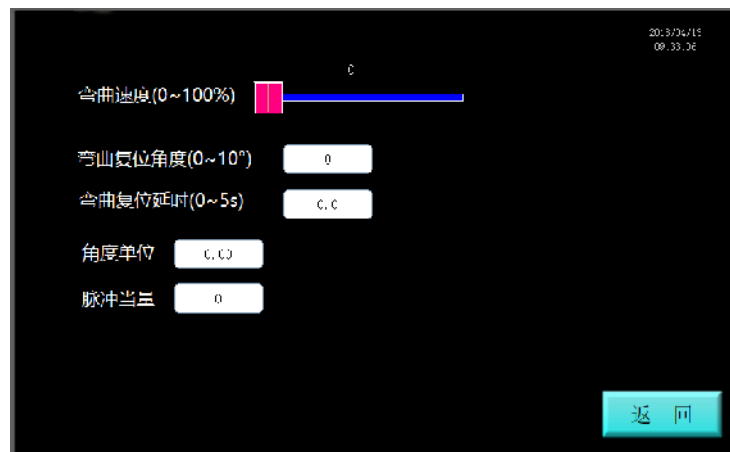
Touch screen hand control positive bend, hand control reverse bending, automatic forward bending, automatic bending button, angle clear 0 button; There are emergency stop buttons and led buttons on the panel.

The touch screen operation interface is shown in the following illustration

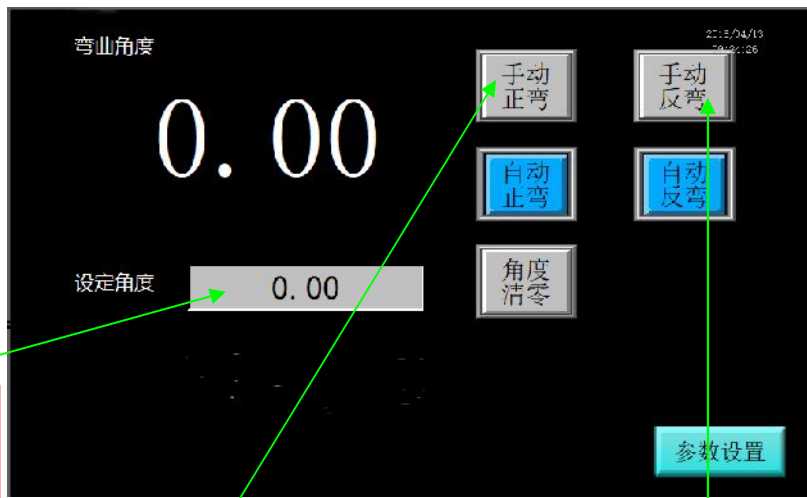
Click anywhere to enter the main operation screen, as shown in the following figure



Click "Parameter Settings" to enter the Setup interface



Operation:
Main Operation Interface

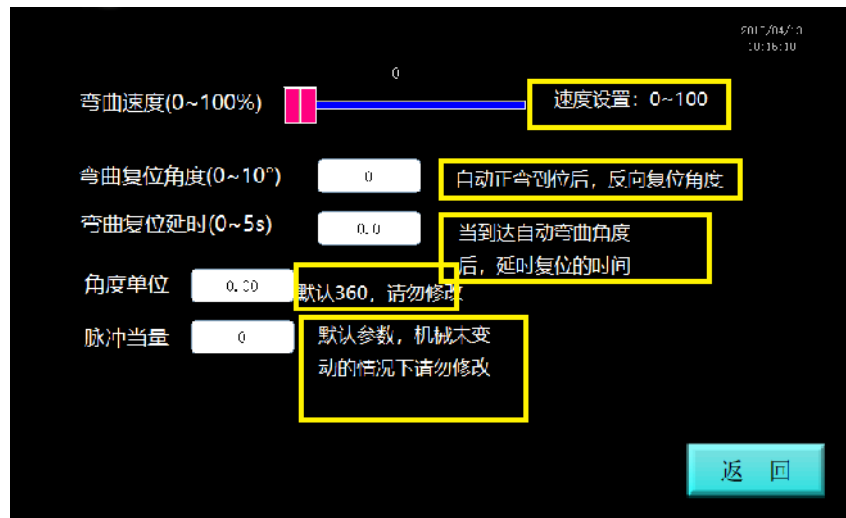


Set the automatic ending angle, use the same set value for positive and negative bends

Hand Control Positive Bend

Hand Control Reverse Bend

Parameter Settings Interface

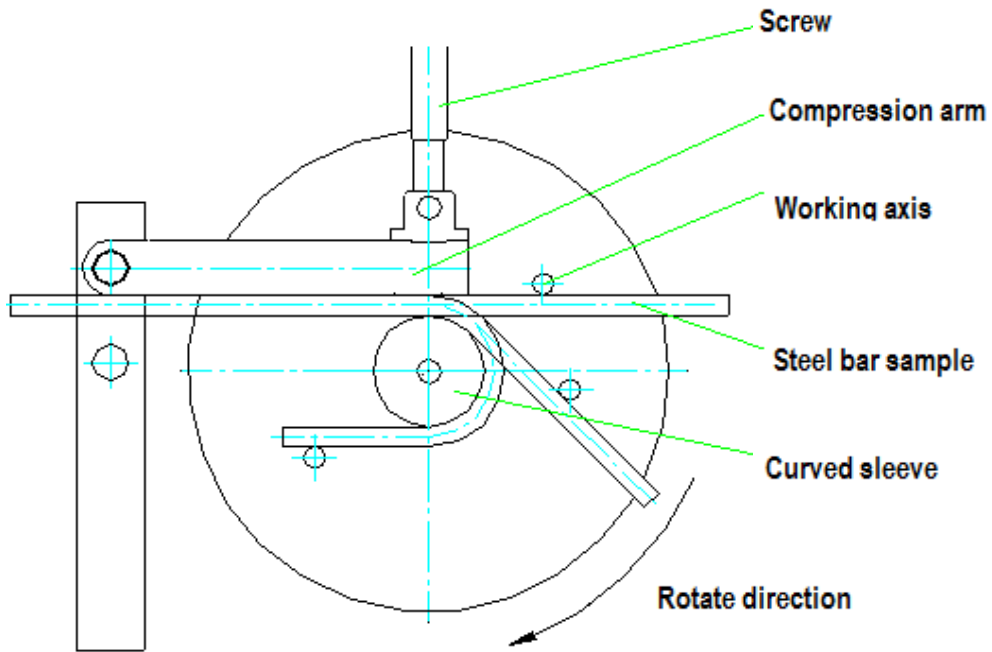


Auto Bend

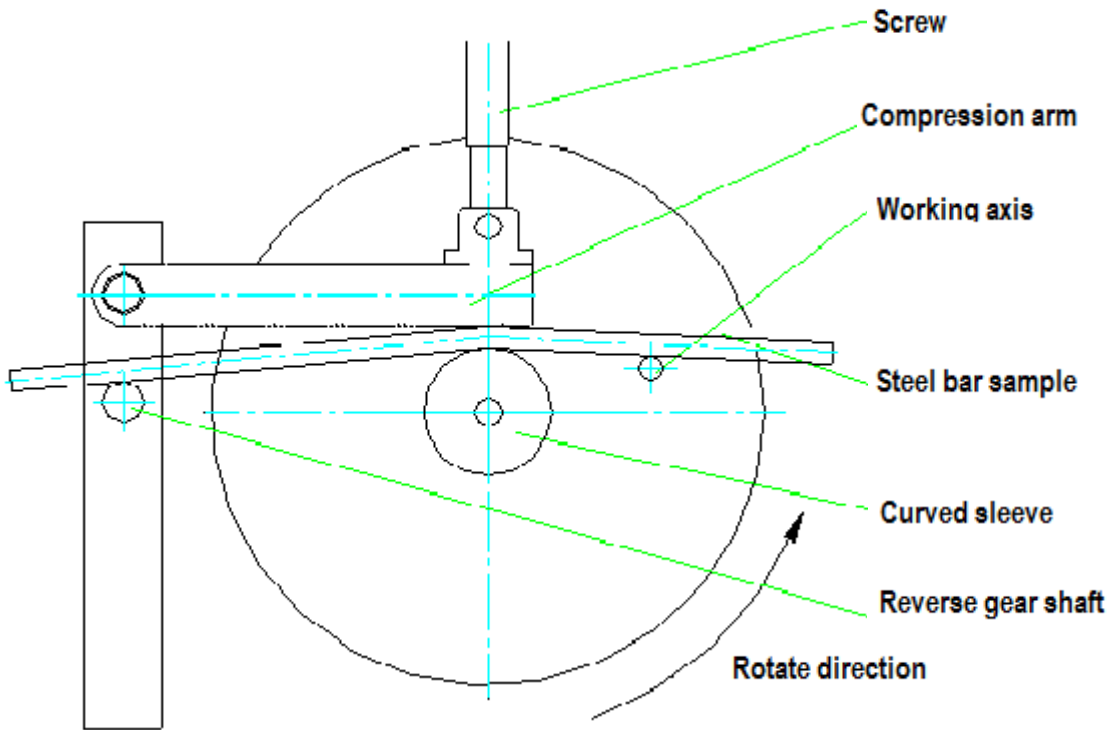
Connect Power, click set angle  Sets the value of the positive and reverse angles, by " Hand Control Positive Bend" or " Hand Control Reverse Bend" key can be Bending Test of Steel bar;

1. Automatic positive bending test: according to the drawings 3 the work shaft and the bend center are shown on the work disk, as "Hand Control Reverse Bend" button transfer the working disk to the starting position, put the steel bar test, press the specimen tightly by the pressing device, then press " Hand Control Positive Bend" push button close the working axis of the positive bend and contact the specimen, press "Clear Zero" push button by "Automatic Positive Bend" button, the tester will automatically do forward (clockwise) bending, and constantly show the current bending angle, when bending to the set angle, the tester will automatically stop, test complete.
2. Automatic reverse bending test: The normal bending of the specimen and the reverse bending work shaft according to the drawings. The sample is placed and pressed by a pressing device and pressed "Hand Control Reverse Bend" push button, so that the back-bending work shaft is close to the specimen, and the other end of the specimen is close to the back-bending shaft, press "Clear Zero" push button, and then press move "Automatic back Bending" push button, then the tester can automatically do reverse (counterclockwise) bending, and constantly show the current reverse bending angle, when the switch to set the angle of the reverse, the test machine will automatically stop to prepare for the next test.
3. Machine front finite position switch, after triggering motor will stop running.





(Picture 3) Working principle diagram of forward bending



(Picture 4) Working principle diagram of reverse bending



Main Configuration Of Testing Machine

Console 1

Randomly equipment with bent heart sleeve (mm) HRB400	4xØ6, 4xØ8, 4xØ10, 4xØ12, 4xØ14, 4xØ16, 4x Ø18, 4xØ20, 4xØ22, 4xØ25, 5xØ28, 5xØ32, 5xØ36, 5Ø40 Each 1 piece total 14 pieces.
Work rollers	Ø42 Two pieces
Curved Center axis	Ø25, Ø42 Each / piece

Note: Reverse curved core and other multiple bending cores for customer selection. (For another charge)

Work disk	1 Piece
Full digital servo motor	1 Set
Servo drives	1 Set
Built-in inlet angle measuring device	1 Set
Low noise precision reducer	1 Set
Squeeze arm	1 Piece
Press the seat tightly	1 Piece
Pressing screw	1 Piece
Hand wheel	1 Piece
Positive bending, Reverse bending axis	1 Piece/each
Electrical control board	1 Piece
PLC	1 Set
Closer control system	1 Set
Touch screen	1 Piece
"Start, Stop" button	1 Piece/each
Settings, Actions, Stops, Etc buttons	Total 9 pieces
Protection switch	1 Piece
Orange protective cover (Steel plate)	1 Piece
Technical information	1 Set
(Use manual, packing list, certificate of conformity)	

