

HY- JBW-300B Microcomputer Controlled Semi-Automatic Impact Testing Machine



(for reference)

1.HY-JBW-300B Introduction:

This machine is mainly used for testing the impact resistance performance of metal materials under dynamic load.

This machine is a semi-automatic impact testing machine with microcomputer screen display. It is controlled by PC microcomputer and can realize microcomputerized operations such as pendulum → impact → measurement → operation → screen digital display → printing, etc., with high work efficiency and high test accuracy. After impacting the sample, the residual energy is used to automatically lift the pendulum to prepare for the next test. It is easy to operate and has high work efficiency. Especially in the laboratories that do continuous impact tests and the metallurgy, machinery manufacturing and other industries that do a large number of impact tests, it can better reflect its advantages. The computer can calculate and digitally display the material impact absorption energy, the pendulum lifting angle and the average value of the test. Remote data transmission can also be realized according to user needs.

1.1. The main body of the testing machine is a single-support column structure, cantilever beam hanging pendulum mode, and the pendulum is designed as a C-shaped pendulum body, which ensures the accuracy of the striking center and the accurate pendulum moment;

1.2. The impact knife is installed and fixed with screws, and the replacement is simple and convenient;

1.3. Equipped with safety protection pins and equipped with safety protection nets;

1.4. Microcomputer control, complete the whole process of taking the pendulum, impacting, automatically raising the pendulum, and re-impacting multiple tests according to the instructions.

1.5. The testing machine complies with the national standard GB/T3808-2002 "Inspection of Pendulum Impact Tester", and performs impact test on metal materials according to the national standard GB/T229-2007 "Charpy Impact Test Method for Metal Materials"

2. Specifications:

1) Impact energy: 300J、150J

2) Scale range and division value:

Energy range	0~300J	0~150J
Division value per cell	2J	1J

3) Pendulum moment:

Pendulum impact energy	300J	150J
Pendulum moment	160.7695N.m	80.3848N.m

4) Pendulum advance angle: 150°

5) Distance from pendulum center to impact point (test center): 750mm

- 6) Impact velocity: 5.2m/s
- 7) Span of sample support: 40mm
- 8) The arc radius at the end of the specimen support: 1~1.5mm
- 9) The inclination angle of the supporting surface of the specimen support: 0°
- 10) The arc radius of the impact knife: 2~2.5mm
- 11) Including angle of impact knife: 30°
- 12) Thickness of impact knife: 16mm
- 13) Specimen specification: 10×10×55mm
- 14) Weight of testing machine: about 450kg
- 15) External dimensions of the testing machine: 2124×600×1340mm
- 16) Power supply: three-phase four-wire system 50Hz 380V
- 17) Motor power: 380V 180W
- 18) The minimum resolution of computer display: 0.1J
- 19) Working conditions:
 - a) The room temperature is within the range of 10-35°C;
 - b) The relative humidity is not more than 85%;
 - c) In an environment without corrosive media and strong magnetic field interference;
 - d) Installed on a concrete foundation with a thickness of not less than 300mm or fixed on a foundation greater than 880 kg;
 - e) Adjust the level of the installation reference surface on the machine base to within 0.5/1000.

3.HY-JBW-300B Main configuration:

No.	Name	Specification	Qty.
1	Host	450Kg	1
2	Pendulum	300J	1
		150J	1
3	Span template	L=40	1
4	Sample centering block	L=40 (V.U type)	1
5	Cancellation device	Solenoid control	1
6	Pendulum device	Solenoid control	1
7	Motor	250W	1
8	Computer	Lenovo	1
9	A4 printer	HP America	1
10	Software	Chengyu	1
11	PLC	Chengyu	1
12	Impact blade	R2 (GB)	1
13	Impact blade	R8 (ASTM)	1
14	Disassembler	Special for changing hammer	1
15	Dumb wrench	S=30	1
16	Anchor bolts	S=250	4
17	Adjust the inclined iron	Adjust the machine level	4
18	Allen key	S=12	1
19	Jaws (including jaw seat)	R1*00.5	1
20	protective net	semi-closed	1
21	hand control box	Aluminum panel	1
22	manual	Chengyu	Each 1

23	Certificate of Qualification	Chengyu
24	Packing List	Chengyu

Remarks: (Optional aluminum alloy fully enclosed protective net)

4.Measurement and control part description:

Windows platform, screen display, mouse operation If you need to output the test report, you need to install Microsoft Word or Excel version of atleast Office2003.

The software supports multiple pendulums.

Record the impact strength, impact energy, etc. The maximum and minimum mean and standard deviation can also be calculated.

The test results are automatically calculated.

Automatic measurement of oscillation period.

The main window (pictured) is the software operation control center. In charge of test results management.



Windows platform for reference

5. Quality assurance:

The equipment is deemed to be officially delivered only after the formal acceptance of the equipment on site by the ordering party. The equipment warranty period is 1 year from the official delivery date. During the warranty period, the supplier will provide free maintenance services for all kinds of equipment failures in a timely manner. All kinds of parts that are not caused by man-made damage will be replaced free of charge in time. If the equipment fails during use outside the warranty period, the supplier will promptly come to the orderer for service and actively assist the orderer to complete the maintenance task.

1. Confidentiality of technical information and data:

This technical solution belongs to our company's technical data, and the user shall bear the obligation of confidentiality for the technical information and data provided by us. Regardless of whether this solution is adopted or not, this clause will be valid for a long time; We are also obliged to keep the technical information and information provided by users confidential.