



BANBROS ENGINEERING PVT. LTD.

The Precision Measurement People

CHARPY IMPACT TESTING MACHINE



- **VALUE**
- **VERSATILITY**
- **PERFORMANCE**

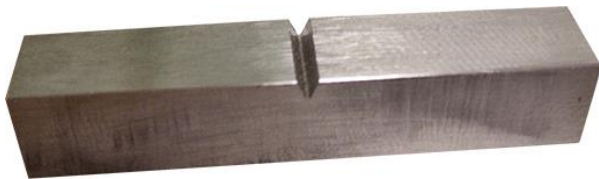
BJBS-500N

**DESCRIPTION:**

BJBS-N series semi-automatic impact tester is mainly used to determine the anti-impact capability of ferrous metal materials with high toughness, especially for steel and iron and their alloy, under dynamic load. For both the Charpy and IZOD test method.

This series tester is operated semi-automatically, the pendulum of the machine can be raised or released automatically. Be applicable for continuing testing in different kinds of laboratories and other metallurgy industrial manufactories.

It is designed and developed according to standard of ISO148, ASTM E23.



According to ISO 148, standard specimen sizes are 10mm × 10 mm × 55 mm. Subsize specimens are: 10 mm × 7.5 mm × 55 mm, 10 mm × 5 mm × 55 mm and 10mm × 2.5 mm × 55mm.

ASTM E23 “Standard Test Methods for Notched Bar Impact Testing of Metallic Materials”

ISO 148 “Metallic materials -- Charpy pendulum impact test”

BS EN 10045 “Charpy impact test on metallic materials. Test method (V- and U-notches)”

GOST 9454 “Metals. Method for testing the impact strength at the low, room and high temperature”

FEATURES:

- Pendulum rising, impact, is realized as automatically by micro control meter or remote control box; 2),
- Safety pin guaranties the impact action, standard protection shell to avoid any accident
- With two pendulums (big and small), digital display the energy loss, impact tenacity, rising angle, and test average value, meantime the dial scale show test result as well.
- Built-in micro printer to print test result.

DESCRIPTION OF TOUCHING SCREEN:

- Operating Language Model: Chinese/English, switch freely between Chinese and English except Print interface
- Automatic taking pendulum: first time taking pendulum by hand, after taking pendulum, the impact tester will taking pendulum again. The display area will display test result when each testing is finished. In groups of three tests, One group is finished, the average value of three impact tests can be available. New group test will be done after restarting
- Store function: 100 test data will be stored, including test name, original test value, average value, test time etc.,
- Print function: the present data and past data can be stored by USB, invented print the picture
- Alarming functions: when the impact tester have trouble, touch screen will display and provide handing method.



Main Interface

Welcome to
冲击试验机测控系统

English 中文 Enter

Energy J Angle °

Energy 1: J Toughness1 J/cm²

Energy 2: J Toughness2 J/cm²

Energy 3: J Toughness3 J/cm²

AVER: J Aver J/cm²

UP PIN IMPACT DOWN

150J 300J SYSTEM ZERO INFO BROWES REDO SAVE

Test result

Standard: Energy (J) Toughness1

Type: Name: 1:

width: mm Thickness mm 2:

Depth: mm Area: cm² 3:

Data: Aver

Standard:

TEST RESULT INTERFACE



ConfigSysPara

Angl (°):	<input type="text" value="0.00"/>	Number:	<input type="text" value="0"/>
MaxEnergy (J):	<input type="text" value="0"/>	Mean period(s):	<input type="text" value="0.0000"/>
EncoderPulse (B):	<input type="text" value="0"/>	Center Length(m):	<input type="text" value="0.0000"/>
Elevation(°):	<input type="text" value="0.00"/>	Impact Speed(m/s):	<input type="text" value="0.00"/>
BigBobCorrection(°):	<input type="text" value="0.00"/>	BigBobElevation(°):	<input type="text" value="0.00"/>
SmallBobCorrection(°):	<input type="text" value="0.00"/>	SmallBobElevation(°):	<input type="text" value="0.00"/>
BigBobZeroCorrection:	<input type="text" value="0.00"/>	BigBobPointErr (J):	<input type="text" value="0.00000"/>
SmallBobZeroCorrection:	<input type="text" value="0.00"/>	SmallBobPointErr (J):	<input type="text" value="0.00000"/>

PARAMETER SETTING

MACHINE SETTING

Start Time Set

Span Set

✕

Year	<input type="text" value="2012"/>	hour	<input type="text" value="11"/>	Day	<input type="text" value="30"/>	Time	<input type="text" value="0"/>
Month	<input type="text" value="6"/>	Min	<input type="text" value="17"/>	Min	<input type="text" value="0"/>	Sec	<input type="text" value="0"/>
Day	<input type="text" value="27"/>	Sec	<input type="text" value="53"/>				

Auto Print:

Automatic Print Time interval: Min

Print Start column:

Print Termination column:

Print unit line spacing: Sec

Note: Automatic Printing Must report Screen to achieve!

**TECHNICAL SPECIFICATIONS: -**

Model No.	BJBS-500N
Display mode	Touching Screen Display
Impact energy	Charpy: 500J/250J (two pendulum) Izod: 250J pendulum
Angle measuring accuracy	0.1°
Impact velocity	Charpy: 5.4m/s IZOD: 5.22m/s
Pendulum preparing angle	150°
Pendulum shaft center to specimen center distance	Charpy: 800mm IZOD: 740mm
Span of specimen seat	40+0.2mm
Round angle radius of Grips	Charpy: R1.0-1.5mm IZOD: R0.5mm
Round angle radius of striking edge	Charpy: R2mm R8mm ; IZOD: R0.56mm
Thickness of impact blade	Charpy: 16mm ; IZOD: 20mm
Angle of impact knife	30°
Charpy Specimen size	10*10*55 (10*7.5*55mm, 10*5*55mm,10*2.5*55mm)
IZOD specimen size	According customer requirement. Standardsupply 1 kind specimen fixture, extra more specimen size need extra cost.
Power supply	3 phases 4 lines, 50Hz, 380V
Dimension of rame	2300×760×1400mm
Weight	850Kg

MAIN ACCESSORIES:

High Stiffness Frame(500J)	1 set
Large pendulum 500J for charpy	1 set
Small pendulum 250J for charpy	1 set
Pendulum 250J for IZOD	1 set
Charpy impact blade R2 (2 pcs), R8 (1 pcs) IZOD impact blade 1 pc Charpy anvil/IZOF anvil	Each 1 set
Touching screen controller	1 set
PLC system	1 set
Angle measuring encoder	1 pc
Motor (on the loadframe)	1 set
Rising pendulum driving device (on the loadframe)	1 set
Automatic hitch pendulum device (on the loadframe)	1 set
Safety pin (on the loadframe)	1 set
Manual control box	1 set



Charpy/Izod Supporting seat span adjusting device	Each 1 set
Charpy/Izod Specimen center device	Each 1 set
Safety cover	1 set
Device to dismantle pendulum	1 set
Terra anchor bolts (M16×300)	1 set
Documents (Manual, packing list, certificate)	



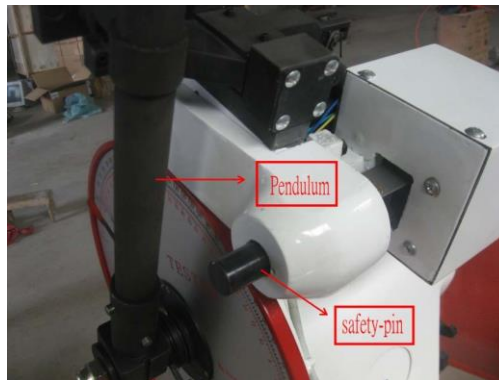
Manual control box



Specimen centering device



Supporting seat span adjusting device



Device to dismantle pendulum



Terra anchor bolts and cushion irons