



# Mitech MJB-W Micro - control series impact testing machine

# Overview

Mitech MJB-W micro-control series impact testing machine, throuth the computer control pendulum movement, for metal, which can be for metal, non-metallic and composite materials under dynamic load resistance to the impact of the test. It uses the computer control, with stable performance and high degree of automation, integrated operation. Its structure is strong, simple structure, high efficiency. The machine is widely used in steel, steel pipe and other toughness of ferrous metals and alloys of its anti-pendulum impact performance of the accurate measurement, It is the necessary professional precision testing equipment for improving production efficiency and saving production costs.

# **Technical Parameters**

Technical Parameters	MJB-W300B	MJB-W500B		
Impact energy	150J、300J	250J、500J		
Impact speed	5.2m/s	5.4m/s		
Tilt angle	150°			
Bearing span	40 <mark>m</mark> m			
Angle of support on	0°			
Sample bearing	U			
Angle of impact tool	of impact tool 30±1°			
Impact knife thickness	16mm			
Bearing fillet radius	R1~1.5mm			
Impact blade radius	R2~2.5mm			
Angular accuracy	$\odot$	±0.1°		
Pendulum torque	80.3848N.m	80.3848N.m、160.7695N.m		
Pendulum rotation center				
to the impact point (test	750mm	800mm		
center) distance				
Sample size	10×10 (7.5、5、2.5) ×55mm			
Power	180W			
Power supply	380V			
Dimensions (mm)	2124×600×1340mm			
Total Weight	450kg			

#### **Working Principle**

The hemispherical punches of the impact testing machine impact and pass through the specimen at a certain speed and measure the energy consumed by the punch to evaluate the impact resistance of the specimen.

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#### **Features**

- Widely used in metallic and non-metallic processing industry, quality testing in quality inspection departments, scientific research in higher education institutions and other fields;
- It adopts single-chip control, and tilt pendulum, hanging pendulum, impact, are all under the computer control, and automatic tilt pendulum, with high efficiency, especially for continuous impact test;
- Zero adjustment, calibration, save, etc. without any analog adjustment link, the control circuit is highly integrated;
- The system can realize the automatic calibration of the indication accuracy;
- At the end of the test, the test data is automatically saved for later retrieval.
- With features of novel shape, strong structure, high reliability, simple operation;
- Can be directly observed in the display, intuitive readings, high test efficiency;
- Using a single support column structure, cantilevered hanging pendulum, U-shaped pendulum hammer, with stable performance and high precision;
- Impact knife with screw mounting fixed, easy to replace;
- Sample simple beam support can quickly replace the sample, easy to operate;
- Take the brand computer, Chinese and English Windows operating platform, menu prompts, mouse operation, with fast running, clear interface, simple operation and so on, to meet the needs of different materials test:
- Real-time print output test data, user-friendly data processing, analysis and so on;
- Equipped with safety protection pin, safety protection network, etc., to ensure safety test;
- Consistent with GB, ISO, ASTM, DIN and other relevant domestic and foreign standards.

# Scope of application

It is widely used in the accurate determination of pendulum impact resistance of ferrous metals and alloy materials, such as steel, steel pipe, etc..

#### **Applications**

- Quality control link of Metal processing manufacturing
- Quality control link of nonmetal manufacturing industry
- Teaching experiment of scientific research in Institutions of higher learning
- Material analysis test of scientific research institutions
- Quality inspection link of Quality inspection department

# **Working Conditions**

- Operation Temperature: Ambient temperature ~45°C;
- Relative humidity:20%~80%;
- In an environment free from vibration, corrosive medium and high magnetic field
- Installed on a flat basis.
- Power supply voltage fluctuation does not exceed 10% of rated voltage.

# Configurations

Configuration instructions	NO.	Name	QTY.	Remarks
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Standard Configuration	1	Testing machine main unit	1	
	2	Measurement and control software	1	
	3	Pendulum	2	
	4	Bearing adjuster	1	L=40
	5	Sample centering device	1	/
	6	Disassembler	1	
	7	Feet screw	4	
	8	Adjust the oblique iron	4	
	9	Inside the hex wrench	1	S=12
	10	Safety protection device	1	
	11	Automatic positioning mechanism	1	
	12	Photoelectric Sensors	1	
	13	Computer	1	With display
	14	Printer	1	<u> </u>
	15	Attchment files	7	

#### Maintenance and care

- Before using the instrument, please read the instruction manual carefully, understand the operation steps and precautions, to avoid the damage caused by improper operation or personal safety accident;
- Testing machine is a large precision instrument, should pay attention to avoid water, moisture. Exposed workbench and attached parts should be coated with anti-rust oil to prevent rust;
- It is forbidden to put samples before the pendulum hangs. Before placing the sample, make sure that the pendulum has been stalled and that the insurance pin has been ejected;
- Should pay attention to check the use of jaw support, pendulum, etc. are reliable to live tight to
  prevent the test results inaccurate or accident occurred;
- Pendulum shaft bearings at both ends of the factory has been refueling, users do not have to refuel, if it is repaired, then add 1-2 drops of sewing machine oil or watch oil, the rest of the power bearing plus Vaseline or butter;
- If idle for a long time, at least once a week to prevent rust;
- After the test, the pendulum to be placed in the vertical position, and the handle putter placed in the brake position;
- Don't disassemble the instrument without authorization, maintenance related matters please contact MITECH after-sale service department with 4000600280.

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