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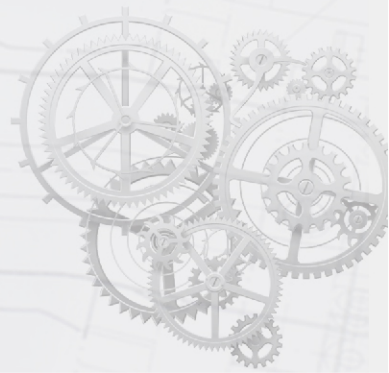


Materials Testing Machine

Impact Tester

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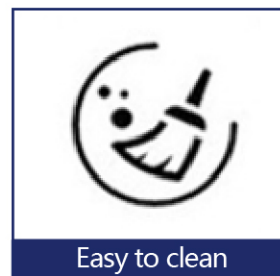
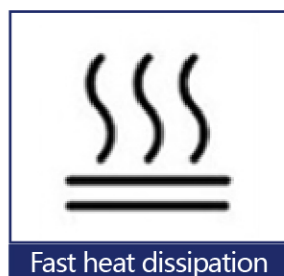
Profile:

Izod & Charpy Impact Tester is innovative multi-test instrument for the determination of polymers and composite materials resilience according to both Charpy and Izod methods. It is used to test or determine the anti-impact capacity of non-metal materials, such as hard plastic, enhanced nylon, ceramic, toughened glass, pottery, cast stone, dielectric etc. and other metallic and non-metallic materials. Being adopted by scientific research institutes, colleges, universities and many non-metallic materials manufactures and laboratories. Also, it has advantages of simple in structure, easy to operate and high accuracy.

This machine is developed according to the standard of Standards ENISO179, ENISO180, ISO9854, DIN53453, ASTM D256
It also can be connected to the PC.

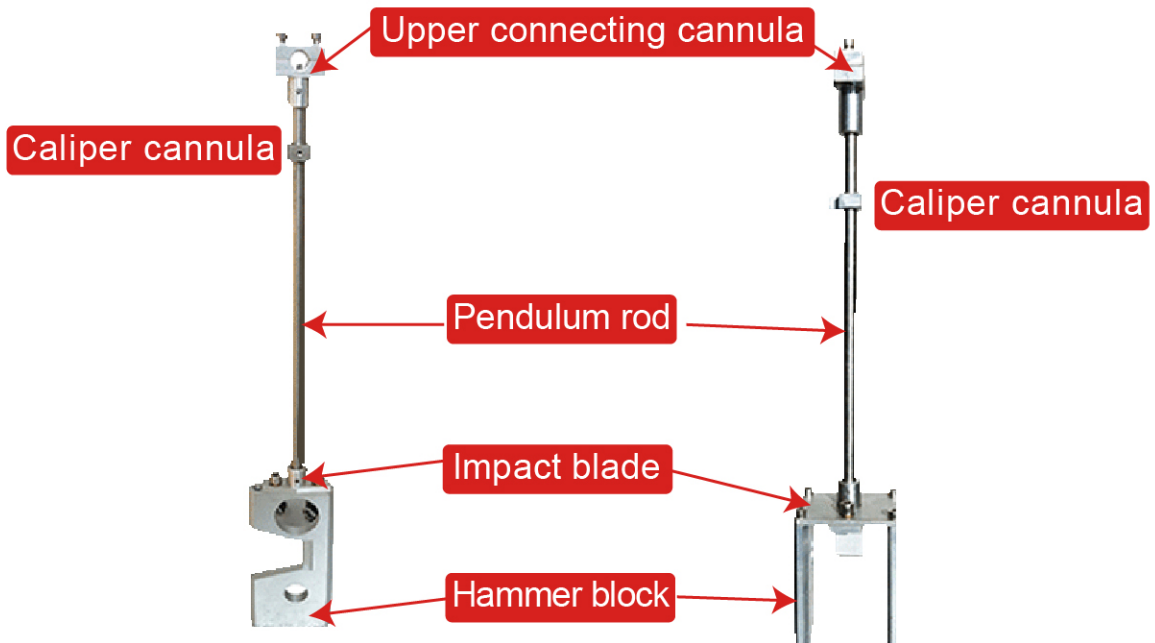
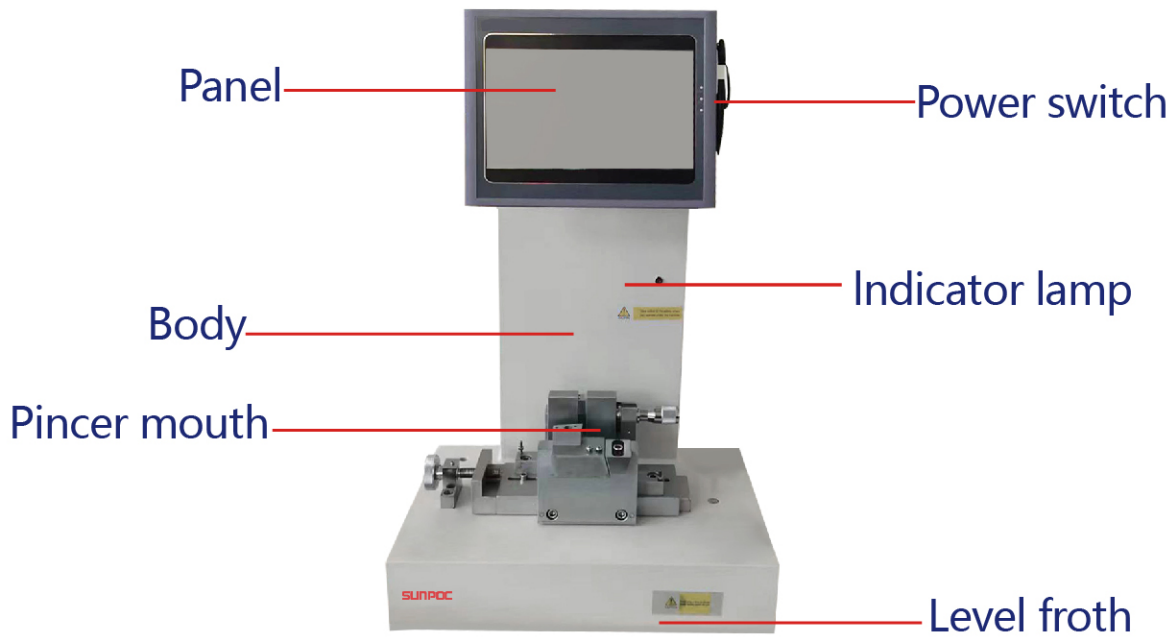
Features:

- 1) Energy: Charpy 1J, 2J, 4J, 5J, 7.5J, 15J, 25J
Izod 1J, 2.75J, 5.5J, 11J, 22J
- 2) Impact Speed: Charpy 2.9m/s 3.8m/s
Izod 3.5m/s
- 3) Support: Charpy 40mm 60mm 70mm 95mm
Izod 22mm
- 4) Size (L×W×H): 500mm×350mm×780mm
- 5) Weight: 130kg
- 6) Power Supply: AC220±10V 50HZ
- 7) Working Condition: 20±5 °C, RH ≤ 80%



Product structure diagram

(JBIC-5D/25D Series Izod & Charpy Impact Tester)



Technical Specification:

Model	Energy	Speed	Display	control
JBIC -5D	Charpy: 1J /2J /4J/ 5J	Charpy: 2.9m/s	digital DRO (LCD)	Auto
	Izod: 1J /2.75/5.5J	Izod: 3.5m/s		
JBIC -25D	Charpy: 7.5J/ 15J /25J	Charpy: 3.8m/s	digital DRO (LCD)	Auto
	Izod: 5.5J /11J/ 22J	Izod: 3.5m/s		

◆ Body

The body is the machine's support structure, and includes the level froth, caliper pin I, caliper pin II, protection indicator lamp, power switch, power socket, and so on.

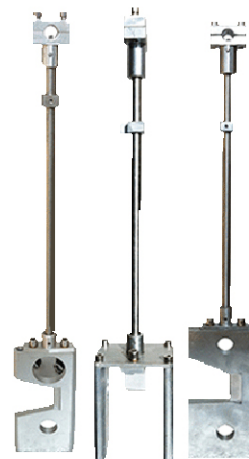


◆ Level froth

Used to observe whether the testing machine is horizontal or not. If the test machine is in the horizontal position, that is, the froth will be located in the center of the Level froth.

◆ Pincer mouth

Pincer mouth is used to fix sample, and it includes the Charpy pincer mouth and Izod pincer mouth. Izod pincer mouth is suitable to the Izod tests by standard of ISO180, JB/T8761, GB/T1843, ISO9854 and ASTM D256, and so on. Charpy pincer mouth is suitable to the Charpy tests by standard of ISO179, GB/T1043, JB/T8762, ISO9854, and so on. (The Izod pincer mouth should be offloaded when you carry out Charpy test)



◆ Pendulum

It includes the upper connecting cannula, pendulum rod, hammer block, and so on. This machine includes two kinds of pendulums, Charpy impact pendulum and Izod impact pendulum.

01 Protection switch

After raising the pendulum and using the caliper pin to stick it, open the power switch so that the protection indicator lamp is on. And then you can carry out the operations safely under the pendulum.

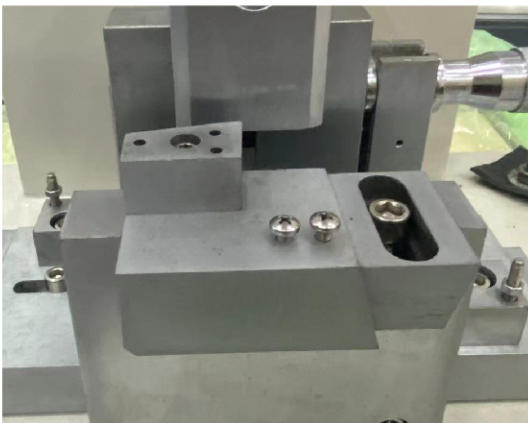


02 Fast running speed

The operation is simple, the page layout is reasonable, and the data of various force values are clear, simple and easy to view.

03 Large storage data

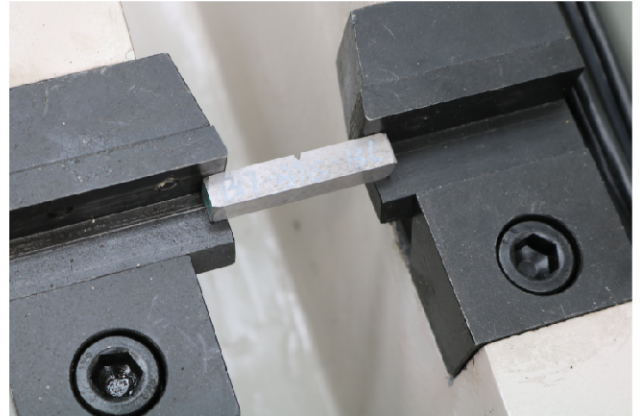
It can store the data of 10 samples to calculate the average value, and USB can store the test data and print the test report, which is simple to operate and stable in performance.



04 Powerful functions

It has the functions of angle measurement, zero clearing, energy loss measurement and automatic compensation; Automatic machine calculates impact strength, standard deviation and other functions, with high measurement accuracy
Fast test speed.

V-notch specimen



Use Method of Machine

1. Installation method of machine

Testing machine should be placed in a stable and no vibration basis and adjusted in a level position. The adjustment methods of level: Observe whether the froth had been located in the center of the Level froth. If not, adjust the foundation of machine and make it.

2. Selection method of pincer mouth

According to the related methods and standards to select the different pincer mouths: directly use the pincer mouth of the machine if the machine is Charpy; if the machine is Izod, need to put the pincer mouth (annex) on the Charpy pincer mouth's middle and fix the bolts and the dowel.

3. Selection method of pendulum

According to the impact toughness of the specimen to select the appropriate pendulum: The selected pendulum should make the consumed energy which the specimen is fractured in the range of 10% -80% of the total energy.

Warm tip:

If you can not in advance determine the scope of energy, you should choose the big energy hammer.

4. Installation of pendulum

The pendulum's installation method of Izod test and Charpy test is the same one.

The method: first offload the pendulum's upper connecting cannula's bolt and the upper half part, then put the pendulum with the upper connecting sleeve fixed firmly on the principal axis.

Warm tip:

The upper connecting sleeve has the orientation pin. When installing the pendulum, you should make the pin positioned on the principal axis's pin hole. At the same time, when loading and unloading the upper connecting sleeve, you should keep the direction's consistency of the up and down parts.

5. Adjustment of pincer mouth's position

Change the position according to the chosen sample.

◆Izod test

Users need to identify the specimen and then make it in a suitable position of pincer mouth by using the benchmark. Screw down the Clamp handle so that the moveable pincer mouth can clamp the specimen.

◆Charpy test

Users need to identify the specimen, and then select the gasket and support distance according to the specimen specification.

●Adjustment of support distance

Release the Clamp block bolt and place the pendulum in a vertical position.

Then put the Center model between the under block and the Clamp block.

Adjust the location of the Clamp block and under block so that the gap of the Center model aims at the pendulum blade. At last, fasten the Clamp block with the Clamp block bolt.

Storage and shutdown

After doing the test or the other group test needing to be done, you need to long press 'Reset' to store this group's test results. After doing the fifth group test, you must copy the data inside the machine (all 5 groups), otherwise the data will disappear automatically.

After the machine is turned off, it can preserve the five groups test data.

Usage Attentions

◆Make sure that the power supply plug center has been connected to the protected ground reliably before using.

◆Before using this testing machine, you should inspect whether the connecting screws of the pendulum rod and the pendulum and so on become flexible.

◆To ensure that the axletree's friction is small, before using it, you should add in the meter lubricating oil to the shaft hole. But the oil is not lubricated too much; otherwise this would increase the friction.

◆This device is total-digital measuring instrument. This machine once mixes up, will never drift and have high stability, so the user does not any adjustment in the process of using it.