

Pendulum Impact Testing Machine for plastic ZBC 1000 Series

The model ZBC1000 Pendulum Impact Testing Machine is mainly designed to perform special tests for plastic material to determine impact resistance performance under dynamic loading.

It allows continuous impact test for large quantities specimens. Special control panel and display can real-time display impact energy, impact ductility, pendulum raising angles.

Two display methods are available, dial type and digital type (LCD monitor).

It complies with ISO179, ISO180, ASTM D256, ASTM D4812, ASTM D4508, ASTM D950 and other similar standards.

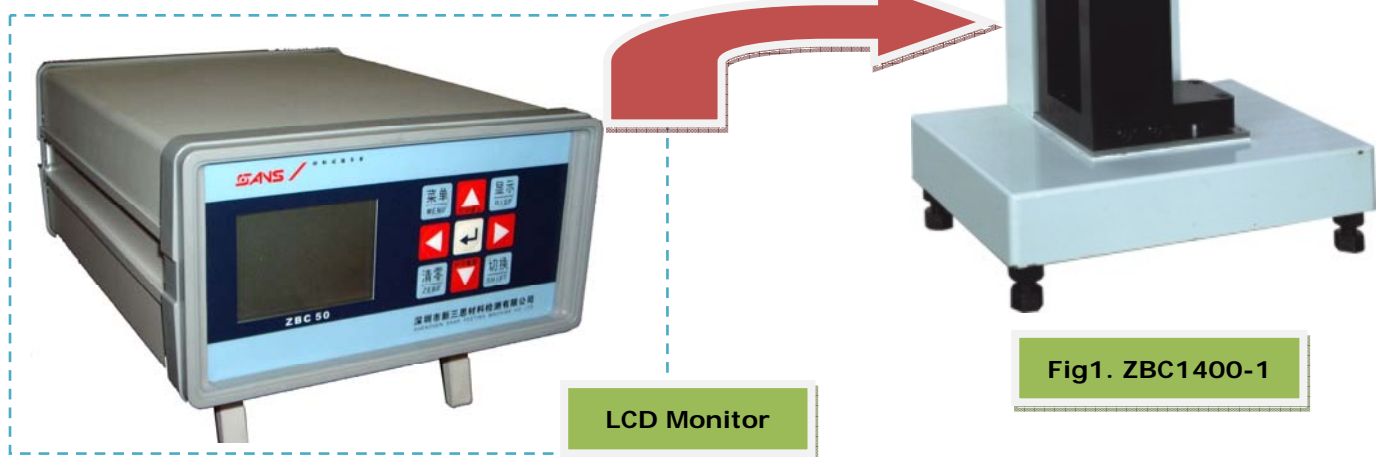


Fig1. ZBC1400-1

LCD Monitor

Key Features

- Fast and simple to change impact energy only by changing pendulum arms.
- Reduced friction bearing shaft assembly and solid vibration-free base.
- Interchangeable anvils ensure constant striker center
- Be capable of determining the impact resistance of nonmetallic materials using either a Charpy or Izod configuration.
- The instrument is controlled manually and semi-automatically and easy to operate.
- The test results can be obtained automatically after finishing test. Its excellence and advantage will be shown apparently in continuous impacting tests lab and abundant impacting tests manufacturers. Digital monitor allows test result through a pin-type printer.
- Two models are available
 - ZBC1400, max Charpy impact energy 4J, max Izod impact energy 2.75J
 - ZBC1251, max Charpy impact energy 25J, max Izod impact energy 22J

ZBC1400 Technical Specifications

| Technical specifications | | |
|--|-----------------|-----------------|
| | Charpy | Izod |
| Maximum impact energy | 4J, 2J, 1J | 2.75J & 1J |
| Angle of pendulum striking | 150° | 150° |
| Impact knife angle | 30° | 75° |
| Impact knife round angle radius | 2mm | 0.8 |
| Anvil round angle radius | 1mm | / |
| Anvil backlash angle | 10° | / |
| Samples anvil supporting face front angle | 5° | / |
| Span of anvil supporters | 70mm/60mm/40mm | / |
| Velocity of striking | 2.9m/s | 3.35m/s |
| Distance between pendulum center and sample center | 230 mm | 335mm |
| Dimension of load frame (L x W x H)(mm) | 360 x 240 x 680 | 360 x 240 x 680 |
| Weight (appro) | 70kg | 70kg |
| power | AC220V,50Hz | AC220V,50Hz |
| Specimen standards | ISO179-1993 | ISO180-1993 |
| Specimen Dimension (LxWxH)(mm) | 80x10x4 | 80x10x4 |
| | 80x10x4 | 63.5x12.7x12.7 |
| | 50x6x4 | 63.5x12.7x6.4 |
| | 120x15x10 | 63.5x12.7x3.2 |

Standard accessories

| Name | Model | |
|-----------------------|--------------|------------------|
| Main frame | ZBC1400-1 | ZBC1400-2 |
| Charpy pendulum (4J) | One piece | One piece |
| Izod pendulum (2.75J) | One piece | One piece |
| Charpy support | One set | One set |
| Izod support | One set | One set |
| Display | Dial display | LCD monitor |
| Printer | ----- | Pin-type printer |
| | | |

Optional accessory

- Charpy Configuration pendulum(1J, 2J)
- Izod Configuration pendulum(1J)

ZBC1251 Technical Specifications

Technical Specifications

| | Charpy | Izod |
|--|--------------------|----------------|
| Maximum impact energy | 25J ⁽¹⁾ | 22J |
| Moment of pendulum | 13.3975N.m | 11.7898N.m |
| Angle of pendulum striking | 150° | 150° |
| Impact knife angle | 30° | 75° |
| Impact knife front angle | / | 5° |
| Impact knife round angle radius | 2mm | 0.8mm |
| Anvil round angle radius | 1mm | / |
| Anvil backlash angle | 10° | 10° |
| Samples anvil supporting face front angle | 5° | / |
| Span of anvil supporters | 70mm/60mm/40mm | / |
| Velocity of striking | 3.8m/s | 3.35m/s |
| Distance between pendulum center and sample center | 395 mm | 306.5mm |
| Dimension of load frame (L x W x H)(mm) | 400x300x805 | 400x300x805 |
| Weight (approx.) | 90kg | 90kg |
| power | AC220V,50Hz | AC220V,50Hz |
| Specimen standards | ISO179-1993 | ISO180-1993 |
| Specimen Dimension (LxWxH)(mm) | 80x10x4 | 80x10x4 |
| | 80x10x4 | 63.5x12.7x12.7 |
| | 50x6x4 | 63.5x12.7x6.4 |
| | 120x15x10 | 63.5x12.7x3.2 |

(1) 50J is available, but need modification on frame. It should be specified in order.

Standard Accessories

| Name | Model | |
|-----------------------|--------------|------------------|
| | ZBC1251-1 | ZBC1251-2 |
| Main frame | ZBC1251-1 | ZBC1251-2 |
| Charpy pendulum (25J) | One set | One set |
| Izod pendulum (22J) | One set | One set |
| Charpy support | One set | One set |
| Izod support | One set | One set |
| Display | Dial display | LCD monitor |
| Printer | ----- | Pin-type printer |

Optional accessory

- Charpy Configuration pendulum(7.5J, 15J)
- Izod Configuration pendulum(5.5J, 11J)