



TruForce

Pendulum Impact Testing Machine | TF-PIT-C



TruForce pendulum impact testing machine addresses the needs of performing Charpy tests on metallic materials, fully complying with ISO, EN, ASTM and other international standards. AC2012-04C series provides the user high quality at the most affordable price, with impact energy ranging 150J, 300J and 450J

Standards:

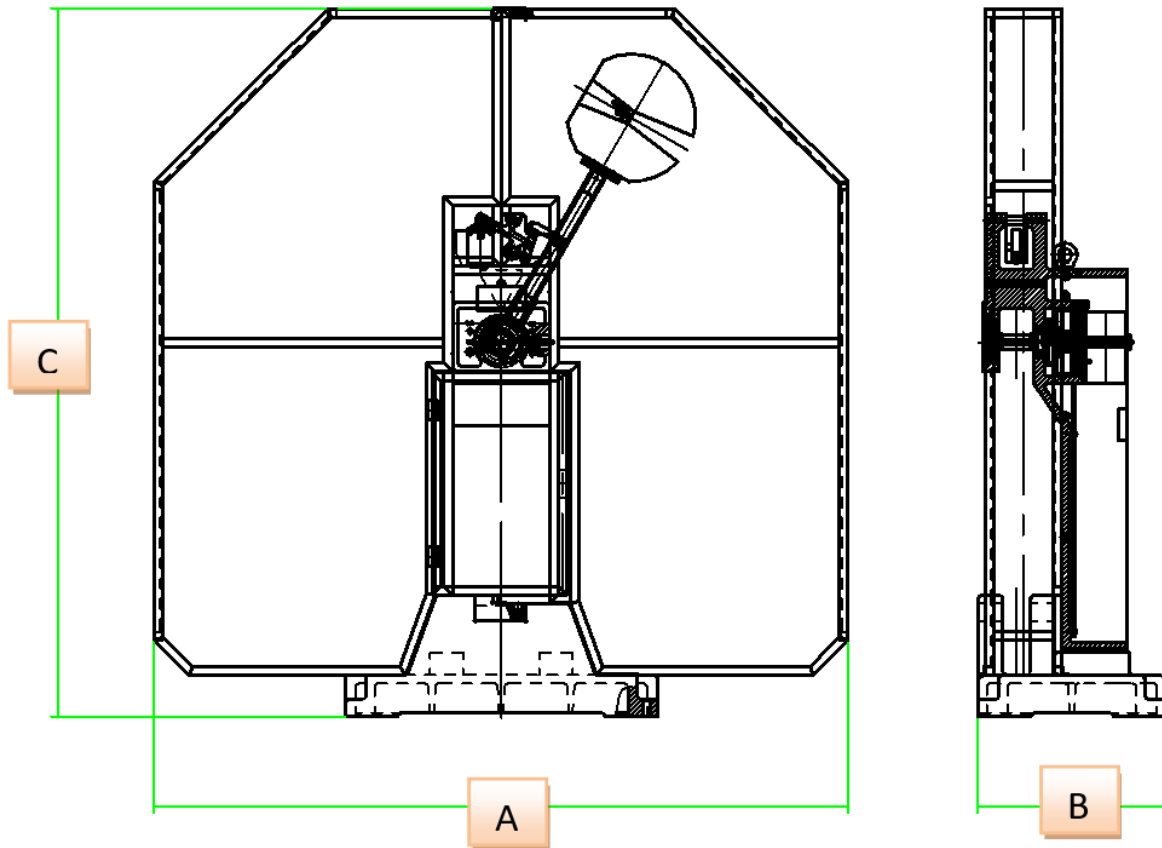
ISO 148, EN10045, ASTM E23, GB/T 229, GB/T 12778

Durability, usability and flexibility

- The basic instrument is designed to be mechanically stiff and is made of vibration damping cast iron.
- Optional touch screen display type, computer display type and instrumented type are available
- Motor-driven raising of hammer with auto-return after test
- Electromagnet can lock the pendulum tightly
- The pendulum height and weight are precisely designed, ensuring high accuracy
- It is convenient to change striking knife to meet ISO and ASTM standard
- High precision bearing with small friction
- Round shape pendulum design effectively reduces wind resistance
- SIMENS PLC controls for pendulum action with high accuracy

Parameters

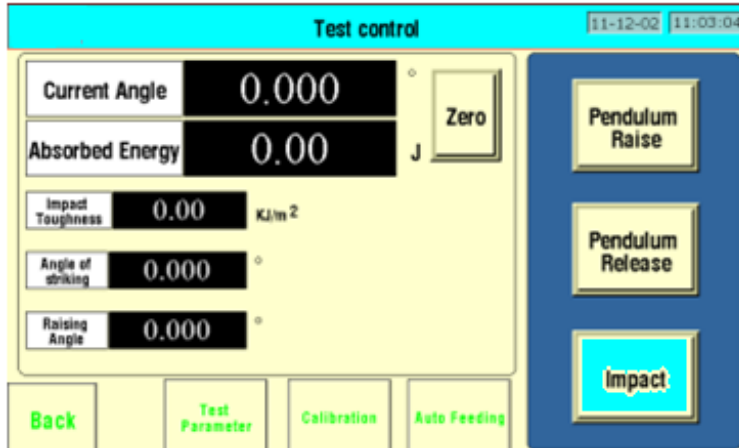
1. Max impact energy: 300J
2. Pendulum moment: 160.7695 N.m,
3. Angle resolution: 0.025°
4. Angle of striking: 150°
5. Distance from the axis of support to the center of percussion: 750mm
6. Velocity of striking: 5.2m/s
7. Support span: 40mm
8. Radius of curvature of supports: 2.5mm
9. Angle of slope of supports: 0°
10. Angle of taper of supports: 11°±1°
11. Radius of striking edge: 2-2.5mm
12. Angle of striking tip: 30°
13. Thickness of striking: 16 mm
14. Specimen dimension (Length x width x height): 55×10×10mm, 55×10×7.5mm, 55×10×5mm
15. Dimension (length x width x height A x B x C): 1950×575×1460mm
16. Weight: 600 kg
17. Power consumption: 800W
18. Power requirements: 3-phase, AC 415V±10% 50Hz



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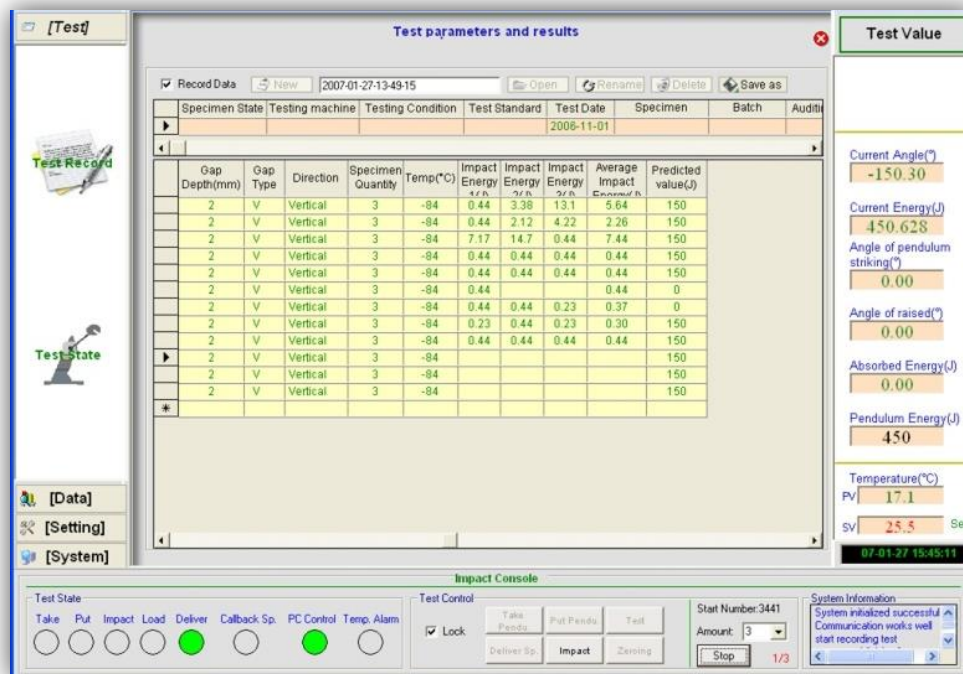
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Optional touch screen display



Optional test software

This software is designed specifically for testing metals to Charpy standards. Software provides an easy-to-use method for gathering, calculating and storing impact test results. The test result can be printed and exported to EXCEL for review.



Display Features

- Status of system limits
- Real-time display of hammer status
- Hammer set up and verification allows for hammer weight input
- Displays potential/impact energy
- Displays theoretical velocity
- Encoder resolution of 0.025°

Standard configurations

Name	Description	Model			
		C-1	C-2	C-3	C-4
Main machine frame	TF-PIT-C	C-1	C-2	C-3	C-4
Display	Analog	✓	N/A	N/A	N/A
	Touch screen	N/A	✓	✓	✓
Control electronics	SIMENS PLC	✓	✓	✓	✓
Full-closed protection enclosure	Metal mesh	✓	✓	✓	✓
Tool kits	Span block Specimen centering block Centering tongs inside-hexagonal spanner Anchor bolts wedge block	✓	✓	✓	✓
Interface to PC	RS232	N/A	N/A	✓	✓
Software	TestPilot, English version	N/A	N/A	✓	✓
Instrumented impact system (model: IIS105)	Data sampling card Data Conditioner Instrumented test software	N/A	N/A	N/A	✓

Optional accessories

Name	Description
Charpy pendulum & specimen support (striking knife: R2/R8) Please specify ISO striker or ASTM striker	150J
	300J
	450J

Optional instrumented pendulums

Name	Description
Instrumented Charpy pendulum & specimen support (striking knife with 30kN force transducer: R2/R8) Please specify ISO striker or ASTM striker	150J
	300J
	450J

Shipping information

Name	Crated dimension (mm)	Crated weight (kg)
Load Frame	1180x1020x1660	650
Full-closed protection shield	2060x550x1250	130

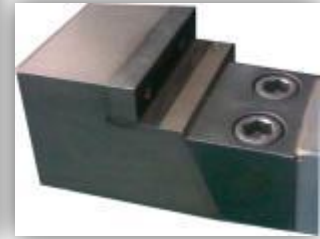
Wedge block



Foundation bolt



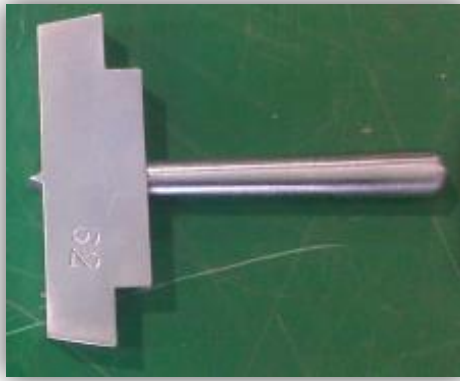
Pendulum



Anvil & support



Span block



Specimen centering block



Centering tongs



Inside-hexagonal