PENDULUM IMPACT TESTER
SERIES C

STANDARD

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

RoboTest Series C Pendulum Impact Tester addresses the needs of performing Charpy tests on metallic materials, fully complying with ISO, EN, ASTM and other international standards. RPIT-C series provides the user high quality at the most affordable price, with impact energy ranging 150J, 300J and 450J

IMPACT ENERGY

450J, 300J, 150J

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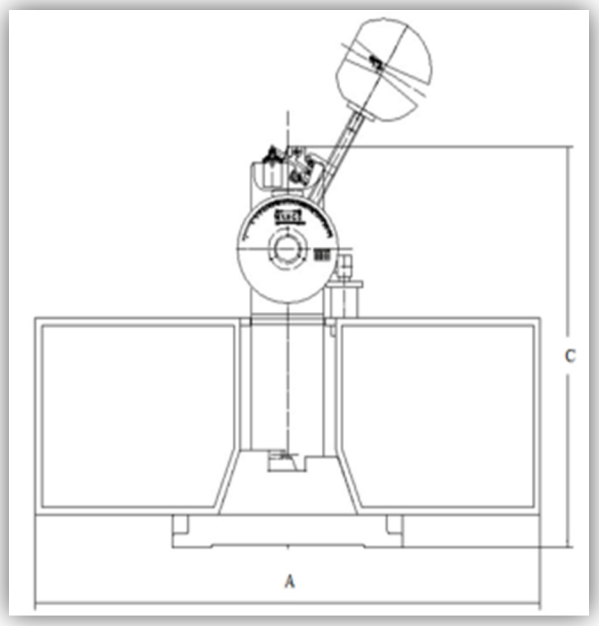
RPIT452, type C-1
Half-closed protection shield

RPIT452, type C-2
Half-closed protection shield

FEATURES

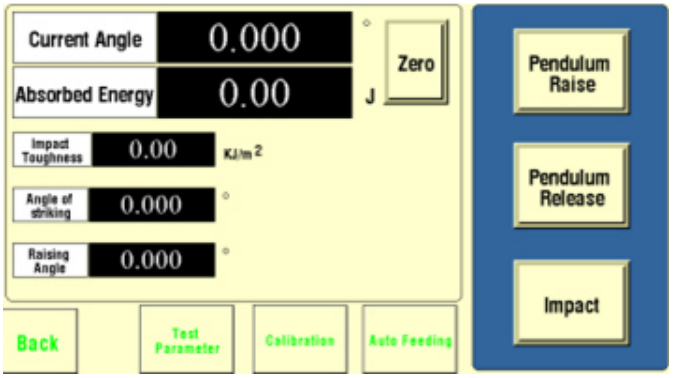
- The basic instrument is designed to be mechanically stiff and is made of vibration damping cast iron.
- Optional touch screen display type, computer display type and instrumented type are available
- Motor-driven raising of hammer with auto-return after test
- Electromagnet can lock the pendulum tightly
- 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

SPECIFICATIONS

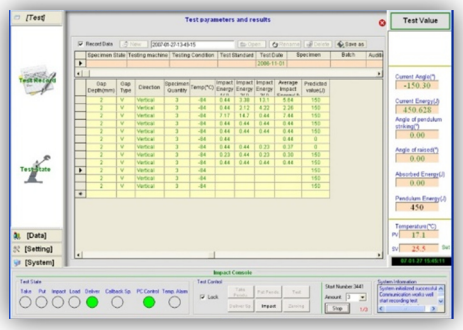


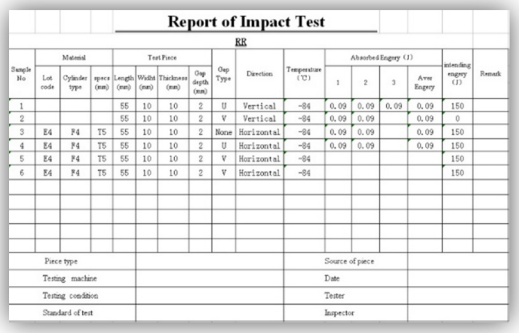
1. Max impact energy: 150J, 300J, 450J
2. Pendulum moment: 80.3848 N.m, 160.7695 N.m, 241.1543 N.m
3. Angle resolution: 0.025°
4. Angle of striking: 150°
5. Distance from the axis of support to the center of percussion: 750mm
6. Velocity of striking: 5.2m/s
7. Support span: 40mm
8. Radius of curvature 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, 5-line, AC 380V±10% 50Hz

OPTIONAL TOUCH SCREEN DISPLAY



OPTIONAL TEST SOFTWARE





Report of Impact Test

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Sample No	Material: Lot code	Material: Cylinder type	Material: spece (mm)	Test Piece: Length (mm)	Test Piece: Width (mm)	Test Piece: Thickness (mm)	Test Piece: Gap depth (mm)	Gap Type	Direction	Temperature (℃)	Absorbed Engergy (J): 1	2	3	Aver. Engergy	Absorbing engergy (J)	Remark
1				55	10	10	2	U	Vertical	-84	0.09	0.09	0.09	0.09	150	
2				55	10	10	2	V	Vertical	-84	0.09	0.09		0.09	0	
3	E4	F4	T5	55	10	10	2	None	Horizontal	-84	0.09	0.09		0.09	150	
4	E4	F4	T5	55	10	10	2	U	Horizontal	-84	0.09	0.09		0.09	150	
5	E4	F4	T5	55	10	10	2	V	Horizontal	-84					150	
6	E4	F4	T5	55	10	10	2	V	Horizontal	-84					150	

Piece type		Source of piece	
Testing machine		Date	
Testing condition		Tester	
Standard of test		Inspector	

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.

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Display Features

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

Test report

- Template can be customized according to requirements
- The report can be exported to EXCEL for review

STANDARD CONFIGURATIONS

Name	Description	Model			
Main machine frame	RPIT452, Type C	RPIT452 C-1	RPIT452 C-2	RPIT452 C-3	RPIT452 C-4
Display	Analog	√			
	Touch screen		√	√	√
Control electronics	SIMENS PLC	√	√	√	√
Half-closed protection enclosure	Metal mesh	√	√	√	√
Tool kits	Span block Specimen centering block Centering tongs inside-hexagonal spanner Anchor bolts wedge block	√	√	√	√
Communication cable to PC	RS232			√	√
Software	TestPilot, English version			√	√
Instrumented impact system (model: IIS105)	Data sampling card Data Conditioner Instrumented test software				√

OPTIONAL PENDULUMS

Name	Description	Compatible Model
Charpy pendulum & specimen support (striking knife: R2/R8)	150J	RPIT452-C
	300J	
	450J	
Please specify ISO striker or ASTM striker		

OPTIONAL INSTRUMENTED PENDULUMS

Name	Description	Compatible Model
Instrumented Charpy pendulum & specimen support (striking knife with 30kN force transducer: R2/R8)	150J	RPIT452-C
	300J	
	450J	
Please specify ISO striker or ASTM striker		