Pendulum Impact | Charpy | PIT Series Type C | 450J

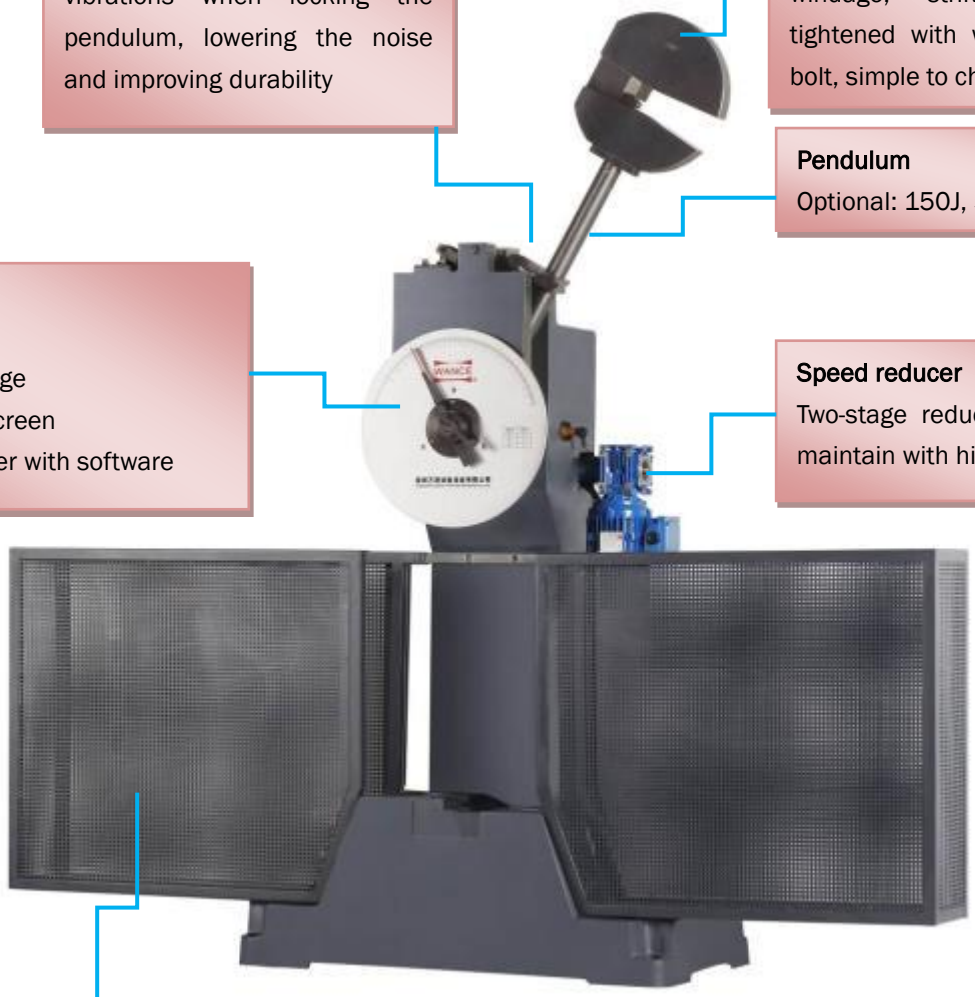
Striker
Designed by 3D design software with precise striking; round shape can greatly reduce windage; striking knife is tightened with wedge block by bolt, simple to change knife

Damper
Buffering design reduces vibrations when locking the pendulum, lowering the noise and improving durability

Pendulum
Optional: 150J, 300J, 450J

Display
Optional:
1. Dial gauge
2. Touch screen
3. Computer with software

Speed reducer
Two-stage reducer is simple to maintain with high durability



Protective screening
To protect operator from hurting by broken specimens

PIT452, type C-1

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

Standards:

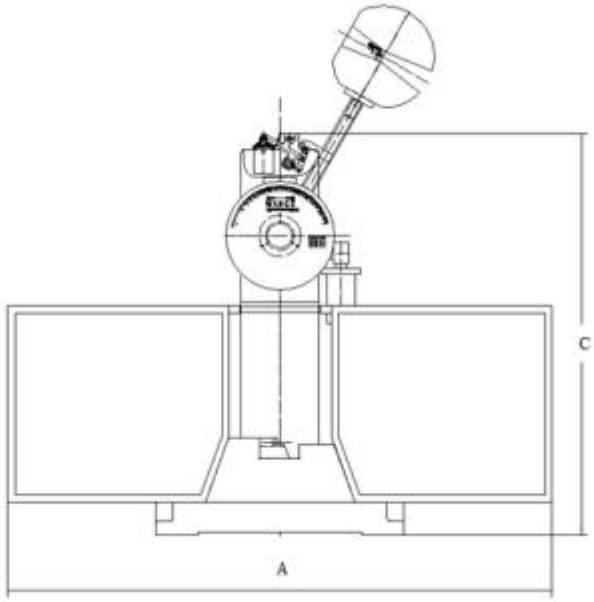
ISO 148, EN10045, ASTM E23, GB/T 229, GB/T 12778

Durability, usability and flexibility

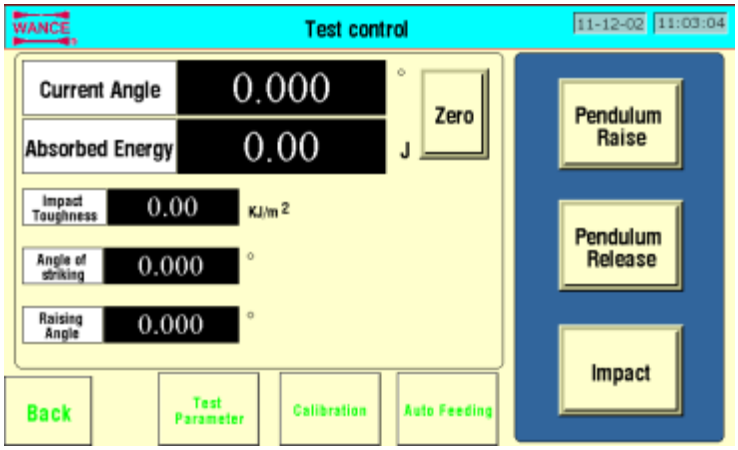
- The basic instrument is designed to be mechanically stiff and is made of vibration damping cast iron.
- Optional touch screen display type, computer display type and instrumented type are available
- Motor-driven raising of hammer with auto-return after test
- Electromagnet can lock the pendulum tightly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

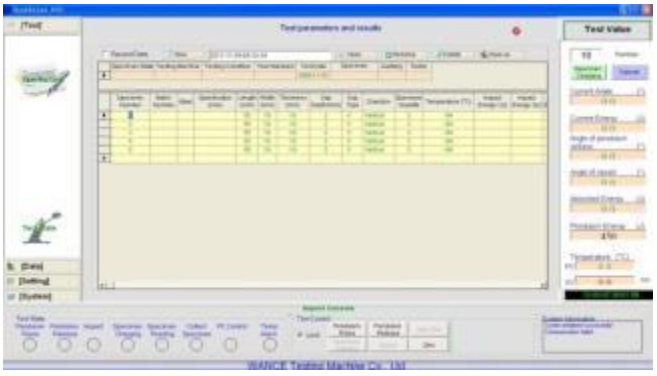


Optional test software

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.

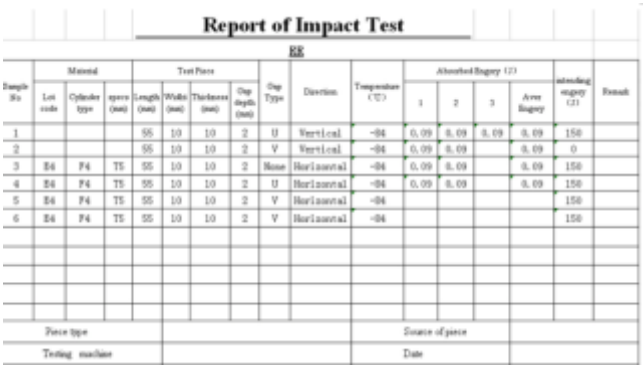
Display Features

- 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°



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	PIT452, Type C	PIT452 C-1	PIT452 C-2	PIT452 C-3	PIT452 C-4
Display	dial gauge	√			
	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

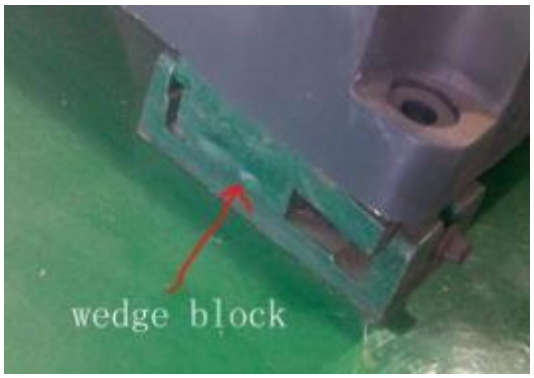
Name	Description	Compatible Model
Charpy pendulum & specimen support (striking knife: R2/R8) Please specify ISO striker or ASTM striker	150J	PIT452-C
	300J	
	450J	

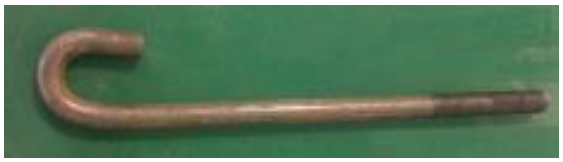
Optional instrumented pendulums

Name	Description	Compatible Model
Instrumented Charpy pendulum & specimen support (striking knife with 30kN force transducer: R2/R8) Please specify ISO striker or ASTM striker	150J	PIT452-C
	300J	
	450J	

Shipping information

Name	Crated dimension (mm)	Crated weight (kg)
Main machine with half-closed protection shield	1180x1020x1660	650
Optional full-closed protection shield	2060x550x1250	130



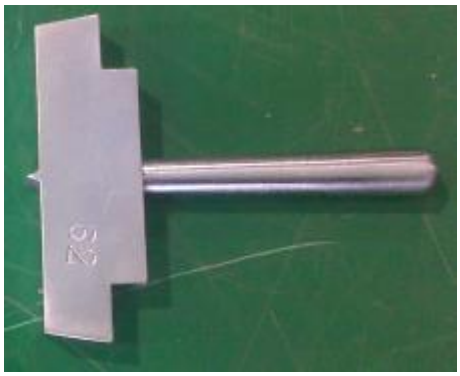


Foundation bolt

Pendulum

Anvil & support

Span block



Specimen centering block

Centering tongs

Inside-hexagonal spanner