



Technical Description of Drop Weight Impact Tester

Description

Sensors India Drop Weight Impact Tester model SIDW-01 is engineered for testing materials, samples, and components of various shapes across a broad spectrum of low to medium energy levels, with nominal energy capacities up to 2000J.

Our advanced equipment enables precise simulation of material and component behavior under diverse conditions, including varying speeds, energy impacts, drop heights, collisions, accidental falls, and repeated impacts.

They feature an integrated touch LCD monitor with DROP Test software or can be paired with a full-fledged PC running DROP Test – BASIC software, ensuring comprehensive compliance with customer requirements and industry standards.

SIDW-01 Drop Weight Testers Features

The SIDW-01 drop weight testers are engineered for high-precision impact testing, featuring:

- Robust Vertical Frames – Designed with high rigidity and resistance to dynamic interference, ensuring durability, an ergonomic layout, and maintenance-free operation.
- PLC Control – Integrated with an LCD touch screen running DROP Test- software, enabling seamless operation at the machine base.
- Comprehensive Test Management – The DROP Test-BASIC software provides full evaluation and test data management for impact testing applications.
- Automated Lifting System – Precisely controlled electronic positioning adjusts the support to the required energy level or defined position.
- Advanced Measuring Electronics – Expandable with measurement speed, ideal for force and impact instrumentation.
- Extreme Condition Testing – Compatible with temperature chambers or high- temperature furnaces for high-precision testing under varying thermal conditions.

SIDW-01 Drop Weight Tester Machine Control

- Centralized Control System – Ergonomically positioned controls for smooth operation and precise test execution.
- Integrated Electronics & Safety Management – The SIDW-01 features a extruded aluminum central enclosure, housing all electronics and machine control components. The system runs on DROP Test-S-XXX safety software within a local control with safety PLC, utilizing electromechanical interlocking and modular expansion options.
- Advanced Touchscreen Interface – Displays real-time test parameters, including fall height, energy dissipation, drop weight, and impact speed, ensuring precise monitoring and repeatability.

**"The value of an idea lies in the using of it.
"Thomas Edison**

SENSORS INDIA LLP

J-103, Sector 4 Bawana Industrial Area
(An ISO 9001:2015 & CE Certified Company)
Delhi 110039 (India) e-mail: sales@sensorsindia.com
www.sensorsindia.com www.sensorsindia.in

+91-1143220005

+91-9810304411

SIDW-01 Drop Weight Tester Extensions

- Advanced Instrumentation Expansion – Optional force measurement and impact trajectory analysis with high-speed 4 MHz electronics, integrated digital control, and the SPEED measurement unit for precise data acquisition.

DROP Test Software Features

DROP Test software is a core component of SIDW-01 vertical impact testing systems, designed to improve productivity and testing accuracy in laboratories and quality control environments.

DROP WEIGHT TESTING SYSTEM

- Purpose-Built for Drop Weight Testing Engineered for precise and efficient impact analysis.
- Customizable Sample & Test Standards – Edit sample types, modify item names, and adjust test parameters with ease.
- Graphical Test Preparation – Visual guidance for individual standards and step-by-step work procedures.
- Comprehensive Data Management – Store measured data in a searchable database with filters for order, date, and custom definitions.
- Built-In Calibration Mode – Includes an extensive calibration suite for enhanced accuracy.
- Advanced Reporting & Export Options – Generate PDF reports, export data to CSV, MySQL, or MS SQL databases.

Technical Specifications

Technical Data	Unit	Specification
Energy Range	J	2.0 – 1800
Impact Speed	m/s	1 – 20
Fall Height Range	mm	25 – 1000
Position Accuracy	mm	0.5
Accuracy Weights Classes	%	According to OIML
Height	in / mm	222 / 2500*



Actual product may differ as picture shown above

International Standards Compliance ISO & EN ISO Standards:

- ISO 6603-2, ISO 6602, ASTM D7136

**"The value of an idea lies in the using of it."
"Thomas Edison**

SENSORS INDIA LLP

J-103, Sector 4 Bawana Industrial Area
(An ISO 9001:2015 & CE Certified Company)
Delhi 110039 (India) e-mail: sales@sensorsindia.com
www.sensorsindia.com www.sensorsindia.in

+91-1143220005

+91-9810304411