



NSW-152-BTC Battery Test Chamber

Advanced Environmental Testing Solutions for Next-Generation Batteries

Precision | Safety | Reliability | Innovation

Battery Test Chamber

Reliable Environmental Testing for Lithium-Ion & Advanced Battery Technologies

NSW INDIA is one of India's leading manufacturers and exporters of Battery Test Chambers, offering advanced environmental simulation systems for testing lithium-ion, lithium-polymer, sodium-ion, lead-acid, and other rechargeable battery technologies. Our chambers are engineered to provide precise temperature and humidity control while incorporating multiple safety features for secure and reliable battery testing.

Designed for battery manufacturers, EV companies, R&D laboratories, aerospace organizations, universities, and quality control facilities, NSW INDIA Battery Test Chambers ensure accurate performance evaluation under real-world environmental conditions.

Key Features

- Temperature Range: **-70°C to +180°C** (Customizable)
 - Humidity Range: **20% RH to 98% RH** (Optional)
 - Temperature Accuracy: **±0.5°C**
 - Temperature Uniformity: **±1°C**
 - PLC-Based Intelligent Control System
 - 7" / 10" Color Touchscreen HMI
 - Programmable Test Profiles
 - Multi-Segment Programming
 - Data Logging & USB Export
 - Ethernet / RS-485 Communication
 - Remote Monitoring Capability
 - Stainless Steel SS304 Inner Chamber
 - Powder-Coated Mild Steel / Stainless Steel Exterior
 - High-Density PUF Insulation
 - Low Noise Refrigeration System
 - Observation Window with LED Light
 - Heavy Duty Castor Wheels
 - Automatic Defrost System (Optional)
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Battery Safety Features

Engineered specifically for lithium battery testing with comprehensive protection systems.

- Explosion Relief Vent
- Fire Resistant Chamber Construction
- Independent Over Temperature Protection
- Emergency Stop Switch
- Door Safety Interlock
- Smoke Detection System (Optional)
- Gas Detection System (Optional)
- Automatic Power Cut-Off

- Alarm & Fault Diagnostics
- Pressure Relief Mechanism
- Battery Abuse Testing Compatibility
- PLC-Based Safety Monitoring

Battery Test Chamber Specifications

MODEL	SIZE(MM)			LTRS
	W	D	H	
NSW-152-BTC-1	455	x 455	x 710	147
NSW-152- BTC-2	600	x 550	x 750	250
NSW-152- BTC-3	605	x 605	x 910	335
NSW-152- BTC-4	600	x 600	x 1200	450
NSW-152- BTC-5	600	x 650	x 1350	540
NSW-152- BTC-6	750	x 800	x 1000	600
NSW-152- BTC-7	800	x 800	x 1200	800
NSW-152- BTC-8	950	x 1000	x 1000	950
NSW-152- BTC-9	1000	x 1000	x 1000	1000
NSW-152- BTC-10	800	x 800	x 1800	1210
NSW-152- BTC-11	1000	x 1000	x 1300	1300
NSW-152- BTC-12	1000	x 1000	x 1500	1500
NSW-152- BTC-13	1600	x 800	x 1570	2000
Brand	NSW INDIA			
Temperature range	-30/-40/-70°C/-80°C/-90°C to +120°C/+150°C +180°C/+200°C//+250°C			
Rate of Heating	1°C/min to 15°C/min			
Rate of Cooling	1°C/min to 15°C/min			
Temperature Control Resolution	1°C			
Temperature Tolerance	±1°C			
Humidity Range	20% to 98% RH (if applicable)			
Material of Construction	SS 304			
Internal Finish	Mirror Finish			
External Finish	Mild steal powder coated			
Sensor Output	Analog 4–20 mA			
Sensor Accuracy	±2% FS			
Controller	PLC with Analog Inputs and Digital Outputs			
HMI	4"/7"/10" Touch Screen			
HMI Functions	Set Point Entry, Alarm Display, History Log			
Exhaust Port	Provided			
Electrical Supply	230V AC, 50 Hz/440V			

Available Chamber Sizes

- 100 Litres
 - 150 Litres
 - 225 Litres
 - 408 Litres
 - 600 Litres
 - 800 Litres
 - 1000 Litres
 - Walk-In Battery Test Chambers
 - Customized Capacities Available
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Applications

Electric Vehicles (EV)

- Battery Pack Testing
- Module Validation
- Cell Qualification
- Thermal Performance

Battery Manufacturing

- Quality Control
- Production Testing
- Reliability Evaluation

Consumer Electronics

- Mobile Phones
- Laptops
- Tablets
- Wearable Devices

Energy Storage Systems

- Solar Battery Testing
- Grid Storage Batteries
- UPS Battery Validation

Aerospace & Defence

- High Reliability Battery Testing
- Environmental Qualification
- Mission Critical Applications

Research & Development

- Universities
 - Government Laboratories
 - Research Institutes
 - Innovation Centers
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Optional Accessories

- Battery Charging Interface
 - Battery Discharge Interface
 - CAN Bus Communication
 - Battery Management System (BMS) Integration
 - CCTV Monitoring
 - Nitrogen Purging System
 - CO₂ Fire Suppression System
 - Automatic Fire Extinguishing System
 - Additional Data Logger
 - IQ/OQ Documentation
 - 21 CFR Part 11 Software
 - Barcode Scanner
 - Remote Monitoring Software
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Why Choose NSW INDIA?

- Over **65 Years** of Manufacturing Excellence
- Trusted by Government, Research & Industrial Organizations
- Advanced PLC & HMI Automation
- High Precision Environmental Simulation
- Comprehensive Battery Safety Design
- Custom-Built Chambers Available
- PAN India Installation & Service Network
- Exporting Worldwide

- ISO Quality Manufacturing
 - Factory Direct Pricing
 - Complete After-Sales Support
 - Calibration & Validation Assistance
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Industries Served

- Electric Vehicle Manufacturers
 - Battery Manufacturers
 - Automotive OEMs
 - Aerospace & Defence
 - Electronics Industry
 - Renewable Energy
 - Research Laboratories
 - Government Organizations
 - Educational Institutions
 - Telecom Sector
 - Medical Device Manufacturers
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NSW INDIA

Manufacturer • Supplier • Exporter

Battery Test Chambers

Environmental Test Chambers

Walk-In Environmental Chambers

Thermal Cycling Chambers

Climatic Chambers

Stability Chambers

Altitude Test Chambers

Thermal Shock Chambers

Engineered for Precision. Built for Safety. Trusted Worldwide.