



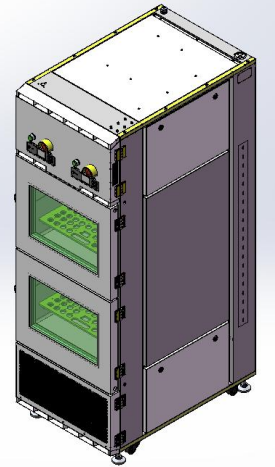
**MHW-100-2-160 CH Dual Temperature Temperature Test Box all-in-one**

# **Technical specifications**

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**[www.neware-usa.com](http://www.neware-usa.com) Telephone: 800-830-8866 / 0755-83108866**

**1, product name: double temperature area constant temperature test box**



Note: The pictures are for reference only, subject to the material objects

**1.1 Product model number**

MHW-100-2-160CH - 220V - B

**1.2 Model naming method**

model	MHW	-	100	-	2	S	-	160CH	-	220V	-	B
characteristic	①		②		③	④		⑤		⑥		⑦
meaning	①	Constant temperature test box series										
	②	Nominal content product of single-temperature zone box: 100L (other digital analogy)										
	③	2:2 temperature zone box type (1 temperature zone does not indicate, other numbers by analogy)										
	④	Refrigeration mode: S represents the semiconductor refrigeration (temperature range: 15℃ -60℃) Compressor refrigeration is not indicated (temperature range: 0℃ -60℃)										
	⑤	160 CH: 160 channel (other digital analogy)										
	⑥	220V: Equipment voltage 220V (default 220V omitted not indicated, other voltages by analogy)										
	⑦	B: Product iteration update version number, then A, B, C....., Default A does not indicate										


**2. Product application**

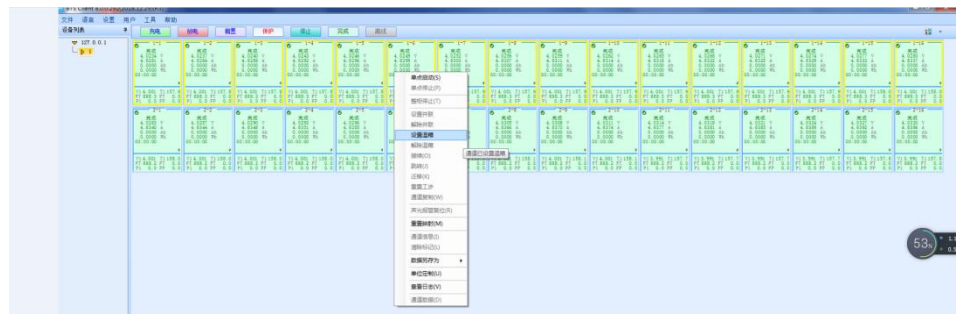
Constant temperature test of the buckle-type cell  
 Electronic, electrical, instrument, materials, semiconductor and other production enterprises to non-flammable, non-explosive items for constant temperature test  
 Environmental protection, agricultural and livestock, aquatic scientific research institutions and production of water analysis, bacteria, mold,

	microbial culture, preservation, plant cultivation, breeding test of constant temperature test
<b>3. Limit the sample</b>	<p><b>This test equipment is prohibited by:</b></p> <p><b>Test or storage of samples of inflammable, explosive and volatile substances</b></p> <p><b>Test or storage of test samples of corrosive substances</b></p> <p><b>Test or storage of samples of strong electromagnetic emission sources</b></p> <p><b>Test and storage of test samples of radioactive substances</b></p> <p><b>Test and storage of test samples of highly toxic substances</b></p> <p><b>Testing or storage of specimens of the such substances or objects that may be produced during testing or storage</b></p>
<b>4. Volume, size and weight</b>	
4.1 Nominal content product	200L (100L)
4.2 Inner box size	W 500 mm D 500 mm H 400 mm (single-temperature zone)
4.3 Overall dimensions	W 600 mm × D 920 mm × H1920 mm
4.4 Net weight of the equipment	About 260kg
<b>5. Performance</b>	
5.1 Test the environmental conditions	Ambient temperature is + 25°C, relative humidity is 85%, with no sample in the test box (no load)
5.2 Temperature range	0~60°C
5.3 Temperature fluctuation degree	1°C (equivalent to ± 0.5°C, with no load and stable temperature)
5.4 Temperature deviation	± 2.0°C (when no load and temperature is stable)
5.5 Heat-up time	25°C 60°C 30 min (no-load, average nonlinearity)

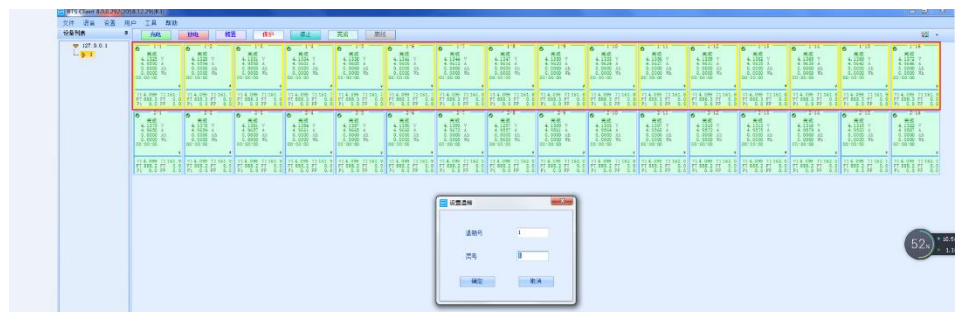
5.6 Cooling down time	25℃ 0℃ 50 min (no load, average nonlinear)
<b>6. Structural characteristics</b>	
6.1 Thermal insulation and envelope structure	Outer wall material: high quality cold-rolled steel plate, surface plastic spraying and paint treatment Inner wall material: stainless steel plate SUS304 Box insulation material: polyurethane foam (insulation thickness of 50mm)
6.2 Air conditioning channel	Axial flow fan, heater, and evaporator
6.3 Standard configuration of test box (single temperature zone)	Observation window: multi-layer insulating electric heating film heating anti-fog observation window (located on the door) Lead hole (with soft glue plug): $\phi$ 50mm / 2 (located at the back of the box) Caster: 4 pcs (with brakes) Cell tray: electric insulation, cell tray 2 layers, load-bearing (all cloth): 10kg / layer Lighting: LED lighting lamp
6.4 The Control Panel	Touch-type control button
6.5 Heater	Stainless steel, a heating pipe Heater control mode: no contact and other periodic pulse widening, SSR (solid state relay)
<b>7. Refrigeration system</b>	
7.1 Refrigeration compressor	Fully enclosed piston compressor
7.2 Cooling mode	air-cooled
7.3 The throttle device	capillary
7.4, the refrigerant	R134a



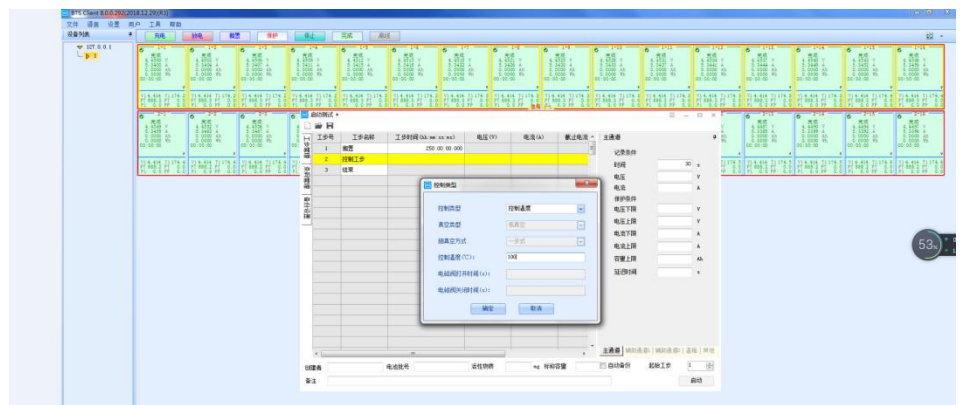
7.5 Welding process	Nitrogen-filled protective welding
<b>8. Electrical control system</b>	
8.1 controller	LED digital display + touch key type controller
8.2 Setting mode	Touch key type
8.3 Control mode	Forced circulating ventilation and balancing temperature regulation method. The control system controls the output of the heater through the PID automatic operation output result according to the set temperature value, so as to achieve a dynamic balance
8.4 Communication mode	The Ethernet standard interface
8.5 Temperature control module	Independent research and development (high and low temperature shock, vibration and EMC)
<b>9. Cell testing equipment and test interconnection</b>	
9.1 Testing equipment	Up to 20 units total 160 CH (mA equipment)
9.2, the median machine	Up to 2
9.3 The Network Switch	One
9.4 Upper computer programming control interface (see equipment random data for details)	<p>Step 1: Open the software interface</p>  <p>Step 2: Select to set up the test box</p>



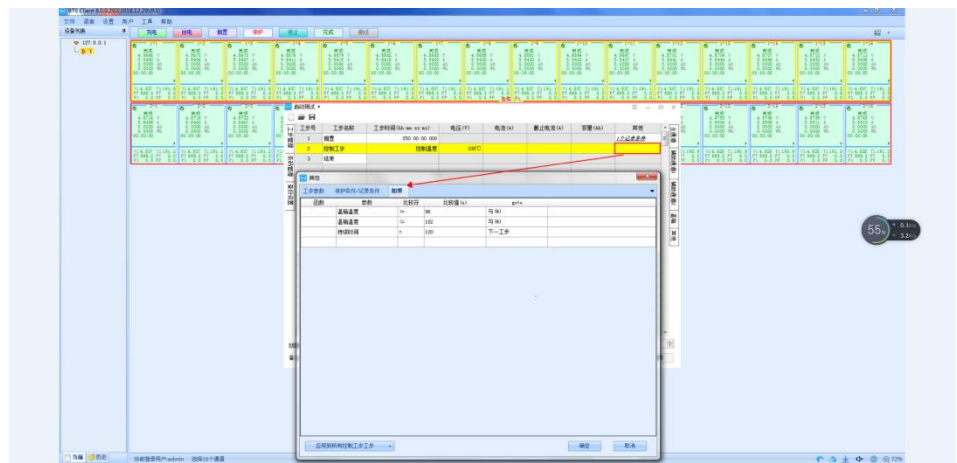
Step 3: Find the test box to be set up



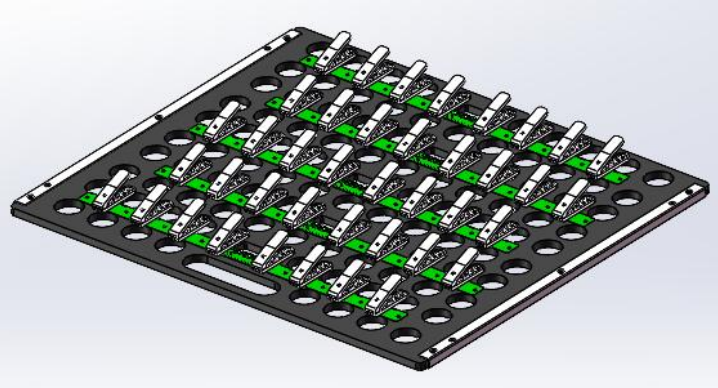
Step 4: Set up the test box to control the temperature



Step 5: Set the working step control conditions



<b>10. Safety protection device</b>	
test box	Leakage protection, short circuit protection and circulation fan operation
<b>11. Other configurations</b>	
11.1 Power supply cable	(Single-phase + protected ground wire) 1 cable (the specific specifications are selected according to the contract requirements)
11.2 Main power supply leakage circuit breaker	Single-phase + protective ground line
<b>12, transportation test box is integral, overall transportation</b>	
size	Maximum shipping size (excluding packaging): "See 4.3 Outline dimensions"
<b>13. The following conditions are guaranteed by the user (the user is responsible for the installation of the power supply line of the equipment)</b>	
13.1 Installation site	<p>The ground is level off with a flatness of 5mm / 2m</p> <p>well-ventilated</p> <p>No strong vibration around the equipment</p> <p>There is no strong electromagnetic field influence around the equipment</p> <p>There is no flammable, explosive, corrosive substances and dust around the equipment</p> <p>There is appropriate space for use and maintenance around the equipment. There should be room for the opening door of the equipment, and there should be no other objects in front of the</p>

		equipment door
13.2	The Environmental conditions	Temperature: 5 °C ~35 °C; relative humidity: 85%; air pressure: 86 kPa ~ 106 kPa
13.3	Power supply conditions source Power capacity maximum current	AC (220 ± 22) V (50 ± 0.5) Hz single-phase + protected ground wire The protective ground ground resistance is less than 4 Ω The user is required to configure an air or power switch for the equipment at the installation site, and the switch must be independent for the equipment 3k W 16A
13.4	Other	Opening the door of the test box will cause the temperature fluctuation in the box; If opening the door several times or opening the door for a long time or the test sample emits wet steam, the heat exchanger of the refrigeration system may cause frost or freeze and fail to work normally
14. Specification and placement mode of the battery cell (single temperature zone)		
.114	cell specifications	Button cell
.2	14 cell, placement mode	Second floor placement (up to 40 buckle cells can be placed on each layer)
.3	14. Cell tray form and cell fixing mode (cell tray can be customized as needed)  Cell tray using electric, insulated electric wood quality	 <p>pour: Pictures are for reference only, subject to the</p>
15. Simulation diagram during stable temperature operation in the test box (schematic diagram only)		



