### Battery Explosion Proof High & Low Temperature Chamber

**Why does battery heat, fire and explosion? What will happen under such phenomenon?**

**Environmental test necessity and test method**

**Battery type:**

- Primary cell just needs equipped with a few batteries, and nickel metal hydride battery, the internal material adopts cold rolled steel sheet / powder spraying, its volume can be charged and discharged under any condition, has over-charge and over-thermal safety. Secondary battery just needs equipped with a few batteries, have nickel-cadmium battery, lead storage battery, NI-MH battery, fuel cell, thermoelectric, battery, primary cell just needs equipped with a few batteries, high and low temperature chamber, battery, and nickel metal hydride batteries; it can test surface temperature of the sample with multiple temperature sensors.

**Temperature requirement:**

- Operating ambient temperature: +5 ~ 35℃
- Humidity control range: 20.0%RH ~ 98.0%RH
- Pressure: 760-780mmHg
- Gas detector: CO2, O2, H2 gas detector

<table>
<thead>
<tr>
<th>Temperature Chamber</th>
<th>Optional Test</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High &amp; Low Temperature Chamber</strong></td>
<td>- Temperature uniformity</td>
<td>- For higher or lower temperature chamber, dual-mode chamber can be used, and can connect to objects in two sides with different temperature, so it can test the performance of components affected by temperature fluctuation in chemical reaction, and secondary battery applied under such environment.</td>
</tr>
<tr>
<td>- Humidity control</td>
<td>- Primary cell and secondary cell can be charged repeatedly and check every cycle, so it can test the performance of secondary battery under different usage.</td>
<td></td>
</tr>
<tr>
<td>- Conductivity, current</td>
<td>- It can test the performance of components affected by temperature fluctuation in chemical reaction, and secondary battery applied under such environment.</td>
<td></td>
</tr>
<tr>
<td>- Environmental test chambers</td>
<td>- The controller adopts SANWOOD self-developed controller, which can be used to acquire surface temperature points of multiple products.</td>
<td></td>
</tr>
<tr>
<td>- Thermal chamber</td>
<td>- It can test the performance of components affected by temperature fluctuation in chemical reaction, and secondary battery applied under such environment.</td>
<td></td>
</tr>
</tbody>
</table>

**Material / Electric tools, automobile:**

- Household appliances, mobile phones, computers, will also be changed as used, the environmental test necessity and test method can visit our official website.

**Battery Explosion:**

- When the test sample produces harmful gas, ventilate and exhaust internally.
- When the battery will produce gas, it will detect gas solubility and discharge to outdoor when it exceeds the standard.
- When the battery will produce gas, it will detect gas solubility and discharge to outdoor when it exceeds the standard.

**Size:**

- W*H*D: 700*1680*1180, 700*1720*1275, 700*1930*1290, 1000*2050*1400, 1200*2100*1590

**Volume m³:**

- 80L, 150L, 225L, 408L, 800L, 1000L, 1500L

**Condenser / Refrigerant:**

- Condenser: Air cooling, water cooling
- Refrigerant: R404A, R23, R508

**Heater / Fan / Evaporator / Fin - and - Tube Heat Exchanger / Condenser:**

- Heater: Nickel chromium alloy heating wire
- Fan: Centrifugal blower
- Evaporator: Fin - and - Tube Heat Exchanger
- Condenser: Air cooling

**Controller / Fan / Evaporator / Fin - and - Tube Heat Exchanger / Condenser:**

- Controller: Adopting SANWOOD self-developed controller, which can be used to acquire surface temperature points of multiple products

**Exhaust valve:**

- When the test sample produces harmful gas, ventilate and exhaust internally.

**Security:**

- Automatic fire extinguishing and automatic shutdown of the machine to protect the equipment from burning.

**Temperature sensors:**

- Temperature sensors are used to measure the temperature of the objects in the chamber.

**Transport test:**

- Transport test (UN) specification and storage of air transport, equipment preservation test.

**Conclusion:**

- It is necessary for environmental test, and can be used to acquire surface temperature points of multiple products.