



Temperature curve tester

Professional furnace temperature test system R & D,
production, sales and testing services

Used in electronics, painting, ink, food, brazing, ceramics,
metallurgy and other industries

【Product introduction】

Mydatatemp® MyDatatemp® the superior thermal insulation performance of the furnace temperature tester enables the test system to perform temperature mapping in harsh thermal environments. Through the heat treatment furnace together with the product, the temperature of the heat treatment furnace and the product can be tracked and monitored in the whole process. Valuable data can be obtained without drag couple test. The formed curve analysis report can be provided to engineers in time. The real temperature state of the product and the furnace will tell you how to optimize the operation. By balancing temperature, time, and heating rate, you can increase production speed and product quality for efficient production.

MyDatatemp® furnace temperature tester has rich practical experience in electronics, powder coatings, inks, automotive, plastics, heat treatment, billet heating and many other industries. We provide users with world-class instruments, equipment, and professional services. We are experts dedicated to the furnace temperature testing industry and can meet the requirements of a full range of customers.

【Technical indicators】

Model	X6,X8,X9,X10,X12,X16	Power consumption	≤35mA
Test channel	Channels 6, 8, 9, 10, 12, 16	Battery	Li-ion 850mA
Acquisition rate	0.05 seconds to 16 minutes	Thermometer size	140mm*62mm*20mm—X6
Measurement accuracy	Full range ± 0.5 °C	Size of insulation box	Customized upon request
Resolution	0.1°C	Operating voltage	DC3.7V~DC4.2V
Operating temperature	85°C	Continuous test	16 sets of data can be stored at the same time
Startup mode	Key start, delay start, temperature start	Memory capacity	64m 4300800 data points

【Configuration list】

Number	Name	Quantity	Number	Name	Quantity
1	Instrument box	1PCS	6	Labor protection gloves	1PCS
2	Instrument host	1PCS	7	High temperature tape	1PCS
3	Insulation box (customized)	1PCS	8	USB stick-software	1PCS
4	Instructions for use	1PCS	9	Thermocouple	6PCS
5	Data connection line	1PCS	10	Scissors	1PCS

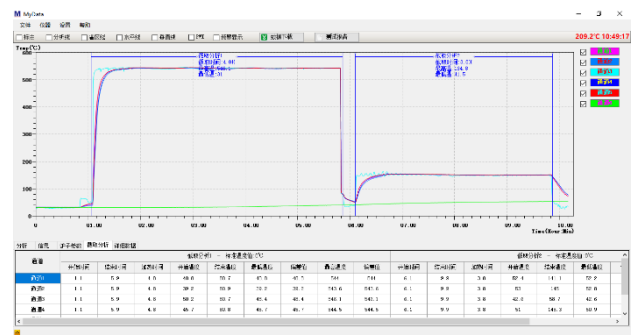
【Instrument parameters】

- Whether it's reflow, wave soldering, or a heat treatment furnace, our software has settings for it
- The number of instrument channels is 6, 8, 9, 10, 12, 1 and 6 (others can be customized according to your needs)
- Three start modes are more convenient, namely, key start, time start and temperature start
- Temperature measurement range: -100 °C -1370 °C
- It can record 16 groups of data continuously and download 16 groups of data at a time after temperature measurement.
- Before each test, the data can be cleared directly on the instrument without connecting the computer settings.
- Sampling period setting (0.05 seconds to 16 minutes), measurement accuracy ± 0.5 °C in full range
- The instrument uses USB interface for data download and charging.
- Up to 50 hours of continuous use and 10 minutes of fast charging
- It can be applied to the temperature measurement requirements of different industries.
- Small size, large storage capacity (4300800 data points), with power failure protection function, any accident will not lose data
- Application: Furnace temperature curve testing in electronics, painting, printing ink, food, brazing, ceramics, metallurgy and other industries



【Software function】

- The process parameters of the software are completely combined, the process you need can be added and displayed, and the process you don't need can not be displayed, which is more convenient for the analysis requirements of multiple industries.
- Different processes can be set for a plurality of furnaces, and different processes can also be set for a plurality of products, and the process conditions are added and reduced without limitation.
- The download software and the analysis software are the same interface, which is more convenient to use
- Calculate the time and slope of multi-interval temperature rise
- Automatically display the peak temperature of each channel and automatically judge whether the peak temperature is within the process requirements.
- Automatically calculate hold time above any number of temperature point



- Automatically display the temperature data of each channel at any time point (curve section temperature)
- The temperature zone line of each temperature zone can be drawn on the curve.
- A horizontal line may be drawn on the curve for any temperature.
- You can draw a vertical line on the curve for any temperature value.
- Field test photos can be inserted in the analysis interface.
- The process parameters can be set to automatically judge whether the temperature value is within the process range according to the process parameters
- Time between any two points, slope between any two points, temperature at any time point
- Set the background temperature curve for multiple curve comparison
- The interception analysis function can analyze the temperature display curves of two furnaces tested at one time.
- Output of company name, product name, remark information, test date and time, etc.
- Test report can be directly printed and output in PDF format or picture format for electronic file storage
- Instrument memory data can be cleared on the instrument or software
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【Instrument size】 Unit: MM

Model	X6	X9	X10	X12	X16
Size	L138*W62*H20	L138*W81*H20	L138*W90*H20	L138*W110*H20	L255*W62*H20

【Size of heat insulation box】 Unit: MM The following is part of the size of the heat insulation box, which is for reference only, and needs to be customized according to the actual situation.

Temperature time	150°C1h	300°C10M	300°C1h	300°C3h	500°C1h
Box size	L280*W125*H45	L255*W90*H36	L300*W160*H110	L360*W280*H150	L300*W170*H135
Temperature time	600°C2h	600°C5h	600°C10h	800°C15m	800°C1h
Box size	L390*W300*H170	L450*W350*H250	L420*W360*H240	L30*W16*H8	L360*W280*H160
Temperature time	900°C2h	900°C12h	1000°C1 小时	1000°C14h	1300 度 5h
Box size	L420*W330*H210	L750*W650*H300	L380*W260*H160	L780*W680*H330	L600*W500*H280

【ABOUT THE INSULATION BOX】

Classification of insulated boxes: A high-temperature waterless heat insulation box、 Composite heat insulation box、 Vacuum furnace insulation box、 There is a water insulation box。

Heat insulation box features: China's leading core technology! Ease of use, durability, ruggedness, security!

All heat insulation boxes are independently developed, designed and manufactured, and the temperature range is 50-1320 degrees, and the time is 1-20 hours.

【ADVANTAGES OF HEAT INSULATION BOX】

At present, only we have mastered the whole set of mature technologies for the high-temperature waterless heat insulation box, composite heat insulation box, vacuum furnace heat insulation box and water heat insulation box independently developed in China. We promise to provide a two-year warranty for each set of heat insulation boxes sold, and provide free service for any damage due to quality problems within two years.

- 1、 For the temperature uniformity test of low and medium temperature furnaces (below 1000 degrees), we use high temperature anhydrous insulation box.
- 2、 In view of the long-term test at high temperature (above 1000 degrees), in order to match the limitations of the inlet size and internal structure of the furnace, we adopt the composite insulation box, which is a scientific supporting scheme combining the traditional water insulation with the most advanced water-free insulation.
- 3、 As the application of vacuum furnace is more and more extensive, the technology of water-free heat insulation box is more important. The unique technology of water-free heat insulation box of vacuum furnace adopted by our company has been successfully applied in relevant enterprises, filling the gap of vacuum furnace test in China at present.

FEATURES OF HIGH TEMPERATURE WATERLESS HEAT INSULATION BOX

The high temperature waterless insulation box is generally used in the environment below 1000 degrees, and its characteristics are as follows:

- 1、 Convenient and fast use: the installation and use process is very simple, and the furnace can be directly tested without on-site filling of thermal insulation materials harmful to human body.
- 2、 No potential safety hazard: the world's most advanced long-life thermal insulation technology is adopted, which will not cause damage and explosion accidents in the use process due to pressure discharge, welding and other problems.
- 3、 Extremely long service life: all of them are made of imported high temperature resistant stainless steel, and the thermal insulation materials and related scientific formulas will never be lost in the use process, with a service life of more than 10 years.

Features of composite heat insulation box

The technology is a scientific matching scheme combining the traditional water heat insulation and non-water heat insulation, and the heat insulation box is mainly applied to an extremely harsh high-temperature kiln which is high in temperature, long in time and limited in size of a furnace door and the inside of the furnace, so that maximization of heat insulation capacity is required to be designed within a limited size range according to the condition:

- 1、 Convenient and quick use: just fill the water tank with water and cover the outer cover to test in the furnace without adding a frame outside the water tank and filling a large amount of heat insulation cotton harmful to human body in the frame.
- 2、 It is clear at a glance whether the water is filled up or not: the designer has fully considered the user's concern in the design. There is a false full phenomenon when filling water. If the water is not filled up, the whole set of equipment will be burned down. Our insulation box eliminates this problem and can be clearly known when filling water.
- 3、 Smooth discharge of pressure: The problem with water insulation is that the water needs to be discharged after vaporization. If the discharge is too much, the performance of the insulation box will drop sharply, which will affect the insulation performance and lead to burning. If the discharge is too little, the pressure in the water tank will be too high, which will lead to an explosion accident. Our designers have carefully calculated in the design to ensure the exhaust volume without affecting the insulation performance.
- 4、 The design of the water tank is reasonable: where the instrument is placed inside the water tank, and the spatial layout around the water tank. The seemingly simple problem has affected many thinkers. The unreasonable design directly leads to water in the tank, but the instrument has been burned down. Our design has been fully recognized by users.
- 5、 Durable: We use a scientific supporting scheme combining waterless heat insulation and water heat insulation. The waterless heat insulation device is used outside the water tank to protect the water tank. The water tank will not be oxidized due to long-term use, resulting in thinning of steel and cracking of welds, which can effectively prolong the service life of the heat insulation box.

Vacuum furnace insulation box features

The invention relates to a temperature uniformity test of a vacuum furnace, which requires that the uniformity of the furnace temperature is not affected by other external factors, a traditional heat insulation box with water can produce a large amount of water vapor when in use, so the heat insulation box without water cannot be used, the pressure in the vacuum furnace is high, and the technology of the heat insulation box without water must be designed according to the use particularity to avoid deformation caused by pressure problems, After repeated experiments, our designers have finally certified this technology, which has been applied to relevant enterprises and achieved excellent results, and has been unanimously recognized by customers.

- 1、 Convenient and quick use: like the use method of the high temperature waterless heat insulation box, it can be directly put into the furnace for testing only by covering the lid, without on-site filling of heat insulation materials harmful to human body.

- 2、 Does not affect the furnace temperature: in the use process will not produce any influence on the stability of the furnace temperature gas, effectively ensure the accuracy of the test results.
- 3、 No deformation: imported high quality high temperature resistant stainless steel is used. Its unique design is to add a decompression system, which makes the pressure in the furnace almost the same as that in the insulation box, effectively ensuring the passing of the test.

FEATURES OF WATER-INSULATED BOX

With the continuous technical innovation of our technicians, the safety of this heat insulation box has been guaranteed. However, considering the durability, firmness and ease of use of users, this heat insulation box is only provided by our company for special users at present. At present, similar products on the market are still on sale because of their low cost or inadequate technology, which will bring great after-sales costs to users in the future. In order to achieve the purpose of user awareness, we also introduce them in detail here:

The invention has the advantages that the manufacturing cost is low, but the margin of the heat insulation performance can be effectively increased.

Shortcoming:

- 1、 It is easy to cause the whole system to be unsustainable due to welding and rust problems.
- 2、 The spatial layout of the water body is unreasonable, so that the margin should be increased, but instead it is reduced.
- 3、 There are serious hidden dangers of safety accidents at the pressure outlet, and it is known that many users have had explosion accidents in the course of use.
- 4、 The installation and use process is very complicated, requiring a black box frame basket, which needs to be filled with a large amount of thermal insulation material before each test to protect the water tank.
- 5、 It is difficult to judge whether the water tank is full of water.
- 6、 The frame basket filled with insulation material has a very short life and will be severely oxidized after several uses, so it has to be remade.

【Use case for insulation box】

✓ Example 1: Technical parameters of billet heating insulation box (10-channel instrument)

- 1、 Heat insulation standard: 1300 °C for 5 hours.
- 2、 Size of heat insulation box: length 760MM, width 500MM, height 360MM.
- 3、 Warranty period: two years.
- 4、 Service life: more than five years.
- 5、 Weight: about 50kg.



✓ **Example 2: Technical parameters of steel pipe heat treatment insulation box (9-channel instrument)**

- 1、Heat insulation standard: 1300 °C for 2 hours.
- 2、Size of heat insulation box: 220mm * 800mm.
- 3、Warranty period: two years.
- 4、Service life: more than five years.
- 5、Weight: about 15kg.

✓ **Example 3: Technical parameters of aluminum hub heat treatment insulation box (9-channel instrument)**

- 1、Heat insulation standard: 600 °C for 10 hours.
- 2、Size of heat insulation box: length 550MM, width 400MM, height 260MM.
- 3、Warranty period: two years.
- 4、Service life: more than five years.
- 5、Weight: about 50kg.

✓ **Example 4: Technical parameters of magnesia-carbon brick insulation box (12-channel instrument)**

- 1、Heat insulation standard: 350 °C for 15 hours.
- 2、Size of heat insulation box: 650MM long, 400MM wide and 320MM high.
- 3、Warranty period: two years.
- 4、Service life: more than five years.
- 5、Weight: about 50kg.



✓ Example 5: Technical parameters of baking finish coating insulation box (6-channel instrument)

- 1、Heat insulation standard: 300 °C for 1 hour.
- 2、Size of heat insulation box: length 300mm, width 150mm, height 110mm.
- 3、Warranty period: two years.
- 4、Service life: more than five years.
- 5、Weight: about 3kg.



【Some honorary customers】In no particular order

太原重工股份有限公司	安徽滁州天大石油管材股份有限公司
黄冈市中凯炉窑设备有限公司	山东宝钢钢管有限公司
蒂森克虏伯富奥辽阳弹簧有限公司	海尔集团
中国船舶重工集团公司第七二四研究所	北京工业大学
巨宝精密加工（江苏）有限公司	山东大学
四川材料与工艺研究所	湖北新冶钢股份有限公司
奥镁（大连）有限公司	南昌易美光电科技有限公司
辽宁奥镁有限公司	江洋散热器（苏州）有限公司
山东博创重工股份有限公司	苏州源成铝制品制造有限公司
浙江凯蒂滑动轴承有限公司	中国核工业物资供销华东公司
膳魔师（江苏）家庭制品有限公司	天津新伟祥工业有限公司
一詮精密电子工业(中国)有限公司	无锡实益达电子有限公司
宝马格（中国）工程机械有限公司	张家港市大明玻璃制品有限公司
承德华富玻璃技术工程有限公司	富钛金属科技（昆山）有限公司
上海三思电子工程有限公司	昆山开乐盖万事自动控制器件有限公司
成都和邦涂料有限公司	江苏博迁新材料有限公司
浙江康顺工贸有限公司	无锡万宝电镀有限公司
上海比亚迪有限公司	滁州市新巨兴涂装设备有限公司
埃迪司汽车饰件系统（上海）有限公司	芜湖海立马瑞利汽车热管理系统有限公司
东营宝丰汽车配件有限公司	马勒发动机零部件（南京）有限公司
一汽解放无锡柴油机厂	哈尔滨哈星汽车部品有限公司
康奈可汽车电子（无锡）有限公司	承德市钓鱼台输送机械厂
延锋伟世通汽车电子有限公司	浙江宁波音王集团有限公司
上海曰井发动机零部件有限公司	志得利（苏州）有限公司



Temperature curve tester

【After-sales service】

- Free recalibration within two years
- Two-year product warranty service
- Provide 7 * 24 hours telephone consultation service

Agent information pasted:

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The information is constantly updated. If there is any discrepancy, please refer to the actual product parameters.

