

JJF

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PEOPLE'S REPUBLIC OF CHINA**

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**Calibration Specification for Box-type Resistance Furnace
(English Translation)**

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Introduction

This specification is based on JJF 1071-2010 "National Calibration Specifications writing rules" were prepared.

GB/T 10066.4-2004 "Standard Test Method for electric devices - Part 4. Indirect resistance furnaces", JB/T 8195.7-2007 "Indirect resistance furnaces - Part 7. SX series of experiments using a box furnace," is the technical basis for the drafting work.

The main technical content of this specification is as follows.

--- Select temperature zone uses a GB/T 10066.4-2004 Test methods "electric equipment - Part 4.

Indirect resistance furnaces "method (see specification 7.3.2);

--- Distributed measurement points using the GB/T 10066.4-2004 the provisions (see specification 7.3.3);

--- Measuring furnace temperature uniformity and formulas using the GB/T 10066.4-2004 Method (see Specification 7.4.1), in the calculation formula increases the amount of correction;

Measurement Method --- furnace temperature stability are the same as GB/T 10066.4-2004, but the formula is not the same (see Regulation Fan 7.4.2);

--- Increasing the oven temperature calibration methods and formulas deviation (see specification 7.4.3);

--- Increasing the maximum temperature in the furnace calibration methods and calculation formulas (see specification 7.4.4);

--- Volume greater than 0.15m³ box resistance furnace calibration, using GB/T 10066.4-2004 Methods (See Specification 7.3.3b);

--- Furnace temperature furnace temperature uniformity and stability requirements cited reference JB/T 8195.7-2007 "indirect resistance furnace Part 7. SX series of experiments using a box furnace "and JB/T 8195.1-1999" indirect RX series box-type resistance furnace Resistance furnace "technical requirements (see Table 1);

--- Measurement Uncertainty furnace temperature uniformity of assessment, according to JJF 1059-1999 "Measurement Uncertainty Table Show "(see Appendix D).

This specification is the first release.

Box resistance furnace calibration specification

1 Scope

This standard applies to working temperature not higher than 1300 °C box resistance

furnace (hereinafter referred to as box furnace) calibration.

Other similar resistance furnace can also be calibrated with reference to the present specification.

2. References

GB/T 10066.4 Test methods for electroheat installations - Part 4. Indirect resistance furnaces JB/T 8195.1 indirect resistance furnace RX series box-type resistance furnace JB/T 8195.7 Indirect resistance furnaces - Part 7. SX series of experiments using a box furnace for dated references, only the dated edition applies to this specification; undated references, the latest version (including any amendments) applies to this specification.

3 Terms

GB/T 10066.4-2004 "Standard Test Method for electric devices - Part 4. Indirect resistance furnaces" as defined below the terms and definitions apply to this specification.

3.1 Operating temperature workingtemperature Normal temperature box furnace design provisions, usually a range of temperatures. In this temperature range box furnace should be able to meet the prescribed furnace temperature uniformity, etc., on this temperature range, the lower limit respectively, said maximum and minimum operating temperature.

[GB/T 10066.4-2004,3.5] 3.2 nominal temperature Temperature according to the test method requirements specified value or temperature value determined in advance as required. [Quote part GB/T 5170.1-2008,3.1.5]

3.3 Workspace workingzone Regulations and indicated on drawings, furnace temperature uniformity to meet other requirements, allows the furnace space to place the burden of designing a box furnace between. [GB/T 10066.4-2004,3.7] 3.4 furnace temperature uniformity when the box furnace at calibration temperature to reach thermal equilibrium, the temperature measuring point temperature of each zone, the measured maximum, minimum paid Actual temperature difference between the center of each of the actual temperature. [GB/T 10066.4-2004,3.15] 3.5 furnace temperature stability Box furnace at calibration temperature, thermally stable state is reached, the center (monitoring) dot the measured temperature of the maximum and minimum the difference between the average value, respectively. [GB/T 10066.4-2004,3.16] 3.6 furnace temperature deviation when a box furnace to reach thermal equilibrium, each temperature measurement point temperature zone within the specified time, the measured maximum, minimum paid Actual temperature and the nominal temperature, respectively, and lower deviation. [Section references GB/T 5170.1-2008,3.2.4]