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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 10067.31-2013

**Basic specifications for electroheat installations - Part 31:
Medium frequency coreless induction furnace**

电热装置基本技术条件 第31部分：中频无心感应炉

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Table of Contents

1	Scope
2	Normative references
3	Terms and Definitions
4.2	Model
4.3	The main parameters
5	Technical requirements
5.1	General requirements
5.2	pairs of complementary design and manufacture of claim
5.3	Performance requirements 6
5.5	sets requirements
6	Test methods
6.1	General requirements
6.2	Determination of unit power consumption and the melting rate of
6.3	Measurement member surface temperature 9
6.4	leak test furnace alarm device Noise measuring 6.5
7	Inspection rules 9 8 signs, packaging, transportation and storage
9	Ordering and Delivery

Foreword

GB/T 10067 "Basic electric device technical conditions" existing 12 sections.

- Part 1. Common part;
- Part 2. Arc heating device;
- Part 3. induction electric device;
- Part 4. Indirect resistance furnaces;
- Part 5. high-frequency dielectric heating equipment;
- Part 31. IF coreless induction furnace;
- Part 32. voltage-frequency multi-station frequency coreless induction furnace complete sets of equipment;
- Part 41. network with resistance heating unit;

- Part 42. Push resistance heating unit;
- Part 43. Forced convection pit Furnace (pending approval);
- Part 44. Box-type resistance furnace (pending approval);
- Part 45. vacuum hardening furnace (pending approval). We will continue to develop other parts as needed. This section GB/T 10067 of Part 31, and GB/T 10067.1 and GB/T 10067.3 conjunction. This section drafted in accordance with GB/T 1.1-2009 given rules. This part is proposed by the China Electrical Equipment Industrial Association. This part of the National Electric Equipment Industry Standardization Technical Committee (SAC/TC121) centralized. This section is drafted. Xi'an Institute Furnace Co., Ltd. Suzhou Zhen Wu Furnace, Furnace Co., Ltd. Wuxi Grand Marnier. The main drafters of this section. Ge Hua, Xing - hair, Jia tree years Huangkui Gang, Yan Xiaodong. Electric equipment basic technical conditions Part 31. IF coreless induction furnace

1 Scope

GB/T 10067.31-2013 is the Chinese national standard on basic specifications for electroheat installations - part 31: medium frequency coreless induction furnace, in the field of manufacturing engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 19 July 2013 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 2 December 2013. Classification: ICS 25.180.10, CCS K61. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This section GB/T 10067 specifies the intermediate frequency coreless induction furnace (hereinafter referred to as intermediate frequency coreless furnace) product classification, technical requirements, test Methods, inspection rules, marking, packaging, transportation, storage, and ordering and delivery and so on. This section applies to a frequency higher than the frequency 50Hz, less than or equal to 10000Hz, the rated capacity within 0.01t ~ 120t range from IF frequency semiconductor device powered smelting ferrous and nonferrous metals and alloys coreless induction melting and holding furnaces.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 3785.1-2010 Electric Acoustic Sound Level Meters Part 1. Specification (IEC 61672-1.2002, IDT)

GB/T 3984.1-2004 Power capacitors for induction heating installations - Part 1. General (IEC 60110-1.1998, IDT) Safety - Part 3

GB 5959.3 electric apparatus. Particular requirements for induction and conduction heating and induction melting apparatus means (GB 5959.3-2008, IEC 60519-3.2005, IDT)

GB/T 10066.1-2004 Test methods for electric equipment - Part 1. General section (IEC 60398.1999, MOD)

GB/T 10066.3-2004 Test methods for electric equipment - Part 3. coreless induction furnaces (IEC 60646.1992, MOD)

GB/T 10067.1-2005 basic technical conditions for electric devices - Part 1. General section

GB/T 10067.3-2005 Electric equipment basic technical conditions - Part 3. induction electric device

JB/T 8669-1997 semiconductor frequency induction heating device

JB/T 9691-1999 Heating Equipment Model methodology

3 Terms and Definitions

GB/T 10066.3-2004 and as defined in the following terms and definitions apply to this document.

3.1 Rated capacity ratedcapacity IF no furnace design provisions and on the nameplate, under normal operating conditions of the furnace to accommodate the weight of the liquid charge.

3.2 Rated frequency ratedfrequency Regulations and indicated on the nameplate design IF no furnace, the IF output frequency semiconductor device nominal frequency.

3.3 Rated working voltage ratedworkingvoltage IF no furnace design provisions and on the nameplate, the oscillation loop formed by the furnace induction coil and the compensation capacitor group consisting of The voltage across the induction coil.