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

GB/T 10066.32-2021

**Test methods for electroheating and electromagnetic
processing installations - Part 32: Induction through-heating
installations**

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Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Basic requirements for tests and test conditions	5
5 Comparison of equipment or devices	6
6 Basic measurement and workload	6
7 Numerical simulation	7
8 Test item	7
9 Test method	7
Appendix A (Informative) Energy Efficiency Evaluation	11
Appendix B (Informative) Visual illustration of energy efficiency related situations	12
Appendix C (informative) Energy recovery rate	13
Appendix D (informative) Energy use assessment	14
Appendix AA (Normative) Diagrams of symbols and definitions related to the main circuit of induction diathermy equipment	15
Appendix BB (informative) Symbols used in this document	19
Appendix CC (Normative) Determination of Blank Temperature Uniformity Δt_{θ}	21
References	25
Figure AA.1 Basic main circuit of induction diathermy device	15

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is part 32 of GB/T 10066 "Test Methods for Electric Heating and Electromagnetic Processing Devices". GB/T 10066 has been released

The following parts.

---Part 1. General part;

---Part 2. Direct electric arc furnace;

---Part 3. Heated induction furnace and coreless induction furnace;

- Part 31.Determination of the output power of the generator of the high-frequency induction heating device;
- Part 32.Induction diathermy device;
- Part 4.Indirect resistance furnace;
- Part 5.Plasma equipment for electric heating and electrochemistry;
- Part 6.Measuring method of output power of industrial microwave heating device;
- Part 7.Electric heating device with electron gun;
- Part 8.Electroslag remelting furnace;
- Part 9.Determination of the output power of high-frequency dielectric heating devices;
- Part 11.Submerged Arc Furnace;
- Part 12.Infrared electric heating device.

This document is revised and adopted IEC 63078.2019 "Test Method for Induction Diathermy Device of Electric Heating and Electromagnetic Processing Device".

Compared with IEC 63078.2019, this document deletes the "Appendix DD (informative appendix) safety test method" of the international standard, and changes

The three safety test methods have been moved to "9 Test Methods" in this document as 9.108~9.110.

The technical differences between this document and IEC 63078.2019 and the reasons are as follows.

a) Replace IEC 60398.2015 with the normative reference GB/T 10066.1-2019, the degree of consistency between the two documents

To modify to adapt to my country's technical conditions;

b) By referencing GB/T 10066.1-2019 "Test Methods for Electric Heating and Electromagnetic Treatment Devices Part 1.General Part"

(IEC 60398.2015, MOD) added test items and test methods related to machinery, vacuum and thermal

Meet the needs of actual product testing;

c) In "7 Numerical Simulation", the content of "Note" is changed to the main text, and the normative appendix cannot be cited in the note;

d) It is stipulated that the safety-related cold test items listed in "8.2 Cold Test" are mandatory;

e) Incorporate the content of IEC 63078.2019 informative appendix DD "safety test method"

into Chapter 9 "test method", making it

Normative content, which is more technically reasonable.

This document has made the following editorial changes.

a) In order to be consistent with my country's technical standard system, the standard name is changed to "Test Methods for Electric Heating and Electromagnetic Treatment Devices Part 32.

Induction diathermy device";

b) In the "Supplement" of 4.4, the content required for measuring instruments is deleted, and its technical content is the same as that of GB/T 10066.1-2019.

"4.8 Measuring Instruments" is repeated;

c) Change the name of Chapter 9 from "Technical Tests and Device Energy Efficiency" to "Test Methods" in order to maintain compliance with GB/T 10066.1-2019

Unanimous.

Introduction

Electric heating and electromagnetic treatment devices are important thermal process equipment in various industrial sectors of the national economy. The electric heating device in the device is divided into 10 types

The same electric heating method is classified, and it can also be classified according to different applications, different working frequencies and different working atmospheres. In order to correctly assess and evaluate electric heating

And the performance and quality of electromagnetic processing devices, and to promote its development, it is necessary to develop test methods for electric heating and electromagnetic processing devices.

Its product standards provide the necessary conditions. In this regard, my country has established the GB/T 10066 Test Method for Electric Heating and Electromagnetic Processing Devices.

The "Law" series of standards consist of general parts and other parts of various types of electric heating and electromagnetic treatment devices classified mainly according to different electric heating methods.

GB/T 10066 aims to describe the test methods for electric heating and electromagnetic processing devices, and is intended to be composed of 14 parts.

---Part 1.General part. The purpose is to describe the general test methods for various electric heating and electromagnetic treatment devices.

---Part 2.Direct electric arc furnace. The purpose is to describe a special test method for a direct electric arc furnace.

---Part 3.Heated induction furnace and coreless induction furnace. The purpose is to describe special test methods for intentional and unintentional induction melting furnaces.

--- Part 31.Determination of the output power of the generator of the high-frequency induction heating device. The purpose is to describe the occurrence of high-frequency induction heating devices

The method of measuring the output power of the device.

---Part 32.Induction diathermy device. The purpose is to describe a special test method for induction diathermy devices.

---Part 4.Indirect resistance furnace. The purpose is to describe the special test method of the indirect resistance furnace.

---Part 5.Plasma equipment for electric heating and electrochemistry. The purpose is to describe the characteristics of electrothermal and electrochemical plasma equipment

Special test methods.

---Part 6.Method for measuring the output power of industrial microwave heating devices. The purpose is to describe the output power of an industrial microwave heating device

The method of measuring the rate.

---Part 7.Electric heating device with electron gun. The purpose is to describe a special test method for an electric heating device with an electron gun.

---Part 8.Electroslag remelting furnace. The purpose is to describe the special test method of electroslag remelting furnace.

---Part 9.Determination of the output power of high-frequency dielectric heating devices. The purpose is to describe the output power of the high-frequency dielectric heating device test methods.

---Part 10.Electromagnetic processing device. The purpose is to describe the special test method of electromagnetic treatment device.

---Part 11.Submerged arc furnace. The purpose is to describe the special test method of submerged arc furnace.

---Part 12.Infrared electric heating device. The purpose is to describe the special test method of infrared electric heating device.

The other parts are formulated according to the general part, and the relevant regulations in the general part can be improved and improved according to the characteristics of various