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

GB 5959.6-2008

Replacing GB 5959.6-1987

**Safety in electro-heat installations -- Part 6: Specifications for
safety in industrial microwave heating equipment**

电热装置的安全 第6部分: 工业微波加热设备的安全规范

(English Translation)

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Foreword

All technical contents of this section is mandatory.

GB 5959 "electric safety devices" has the following 12 sections.

- Part 1. General requirements;
- Part 2. Particular requirements for arc furnace means;
- Part 3. Particular requirements for induction and conduction heating apparatus and an induction melting apparatus;
- Part 4. Particular requirements for resistance heating device;
- Part --- 41. --- Special requirements for resistance heating device heating and melting glass equipment;
- Safety Specification plasma apparatus;. --- Part 5 --- Part 6. Industrial microwave heating apparatus of the safety regulations;
- Part 7. Particular requirements for the apparatus having the electron gun;
- Part 8. Particular requirements for electroslog remelting furnace;
- Part 9. Particular requirements for high-frequency dielectric heating device;
- Part 10. for industrial and commercial heating systems Particular requirements for resistance profiling;
- Part 11. electromagnetic stirring of molten metal, or the special requirements of the transport means pouring. This is Part 6 GB 5959's.

This section is equivalent to using IEC 60519-6:2002 "Safety Section heating means 6.

Industrial safety regulations of the microwave heating device" (Second edition, in English).

This partial replacement GB 5959.6-1987 "Safety electric part 6. Particular requirements for industrial microwave heating apparatus", and Latter technology changes compared as follows.

1) is "1" and added to "This section applies to the frequency of 300MHz ~ 300GHz industrial microwave heating equipment. "

2) increase the "2 normative references."

3) "3 Terms and Definitions" and the standard of "term 2" compared.

a) adds the following terms --- microwave heating device;

--- material to be treated;

--- microwave interlock.

b) the original standard "heater door" to "door applications."

4) "4 nameplate and flag" in --- the original "product model and name" to "equipment model and serial number";

--- deleted the original "product number";

--- the original "In the steady state, the maximum internal voltage of the microwave generator, the microwave frequency and the maximum output power" to "Microwave Maximum internal voltage generator, a microwave frequency and maximum output power is measured in accordance with GB 4824-2004 microwave generator rate";

--- added "according to the grade and category of cases GB 4824-2004";

--- added "In addition, it should be noted this equipment is for industrial use";

--- original standard "writing on the brand-name brand-name should be clear and durable equipment should be installed at eye-catching part of the main body of the microwave."

Becomes "NOTE. For Affixed that marking, see GB 5959.1-2005 ";

--- increased "Instructions also be given the full address of the manufacturer and the type of generator";

--- deleted the second warning flag in the original standard.

5) increased by reference.

2 Normative references

Terms of the following documents constitute provisions of this section by reference in this part of GB 5959. For dated references, All subsequent amendments (excluding corrections) or revisions do not apply to this section, however, encouraged to reach an agreement under

this section Whether the parties to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 2900.23 Electrotechnical term & Industrial Heating Equipment (GB/T 2900.23-1995, neq IEC 60050-841. 1983)

GB 5959.1-2005 Safety of electric devices - Part 1: General requirements (IEC 60519-1:2003, IDT)

GB/T 18662-2002 industrial microwave heating method for measuring power output apparatus (eqv IEC 61307:1994)

GB 4824-2004 industrial, scientific and medical disturbance characteristics (ISM) radio equipment limits and measurement methods (CISPR 11:2003, IDT)

GB /16855.1-2005 mechanical safety control system safety member first portion T. General principles for design (ISO 13849-1. 1999, MOD)

GB 10436-1989 standard for microwave radiation in the workplace

GB 5294-2001 individual monitoring occupational exposure monitoring for external exposure

3 Terms and Definitions

GB 5959.1-2005 Chapter 3, GB/T 2900.23 established following terms and definitions apply to this section.

3.4

Leaked from the microwave heating apparatus of microwave radiation

3.3

Heated by the microwave heating device of the substance

3.1

Frequency range of 300MHz ~ 300GHz electromagnetic energy generator

3.2 The electrical and mechanical components for the assembly of microwave energy transmitted to the material to be treated, typically includes a power generator, is applied, even

Cables and waveguides, a control circuit, material transfer means and ventilation.

3.5

Microwave heating device loaded material to be treated and the portion exposed to microwave energy.

3.6

The applicator can be opened without tools or relieved, so that access to all the internal structural member applicator.

3.7

In addition to the microwave heating device is applied, it can be opened without tools or any Remove all the structural member as a backup inlet.

3.8

Any use of the tools on the microwave heating device to open or remove, providing access node for routine maintenance, replacement of consumables and other services member.

3.9

A permanent opening in the continuous microwave heating device application, a material to be treated by the application is input or output port.

3.10 It refers to the export in addition to internal staff touchable parts

Note: internal or external surfaces of import export believed to be inaccessible.

3.11

Mechanical or electrical safety devices of the microwave heating device or system, whose function is prohibited when an accident does not exist in another state level occur.

Note 1: For example, if the application is not closed the door interlock to prohibit a microwave generator work.

Note 2: For interlocking design, see GB/T 16855.1-2005.

4 Nameplate and logo

Fixed microwave heating device on each plate should include the following.

- name of the manufacturer;
- date of manufacture;
- equipment model and serial number;
- microwave warning signs;
- rated input voltage and frequency;
- Apparent nominal input power (kVA);