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

GB 5959.7-2008

Replacing GB 5959.7-1987

**Safety in electro-heat installations -- Part 7: Particular
requirements for installations with electron guns**

电热装置的安全 第7部分：对具有电子枪的装置的特殊要求

(English Translation)

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Table of Contents

- Preface
- 1 Scope
- 2 Normative References
- 4 electron beam apparatus structure
- 5 type electron gun
- 6 main danger
- 7 maintenance of high-voltage electron gun chamber 3 ground
- 7.1 Mobile grounding device
- 7.2 Mechanical grounding device
- 7.3 automatic grounding devices

Foreword

This part of all except art in Chapter 16 of the mandatory content.

GB 5959 "electric safety devices" has the following 13 sections.

- Part 1. General requirements (GB 5959.1-2005, IEC 60519-1:2003, IDT);
- Part 2. Particular requirements for arc furnace apparatus (GB 5959.2-2008, IEC 60519-4:2006, IDT);
- Part 3. Particular requirements for induction and conduction heating apparatus and an induction melting apparatus (GB 5959.3-2008, IEC 60519-3:2005, IDT);
- Part 4. Particular requirements (GB 5959.4-2008, IEC 60519-2:2006, IDT) resistance heating means;
- Part 41. Particular requirements for resistance heating means for heating and melting glass --- means (GB 5959.41-2004, IEC 60519-21:1998, IDT);
- Safety regulations plasma apparatus (GB 5959.5-1991, eqv IEC 60519-5.. 1980) --- first portion 5;
- Part 6. Safety Specification Industrial microwave heating apparatus (GB 5959.6-2008, IEC 60519-6:2002, IDT);
- Part 7. Particular requirements for the apparatus having the electron gun (GB 5959.7-2008, IEC 60519-7:2008, IDT);
- Part 8. Particular requirements for electroslag remelting furnace (GB 5959.8-2007, IEC

60519-8:2005, IDT);

--- Part 9. Particular requirements (GB 5959.9-2008, IEC 60519-9:2005, IDT) high-frequency dielectric heating apparatus;

--- Part 10. for industrial and commercial heating systems special requirements (IEC 60519-10:2005, to be transformed) resistor profiling;

--- Part 11. electromagnetic stirring of the liquid metal, the special requirements of the transport or pouring (GB 5959.11-2000, idt IEC 60519-11:1997);

--- Part 13. Particular requirements for the heating apparatus having an explosive atmosphere (GB 5959.13-2008). This is Part 7 GB 5959's.

This portion IEC 60519-7:2008 "Safety electrothermal Part 7. Particular requirements for the electron gun having means" (second, English) while drafting amendments.

IEC 60519-7:2008 translation drafted in accordance with this section.

For ease of use, for IEC 60519-7:2008, made in this section, the following editorial changes.

--- "This standard" be replaced by "this section";

--- deleted international standards foreword and preface;

--- account of the requirements and high-frequency dielectric heating apparatus for the personal protection of integrated mechanical and electrical equipment, which range expansion To the relevant physical and mechanical means comprising the necessary special safety requirements;

--- increase "GB 18871-2002 Ionizing Radiation Protection and Safety of Radiation Sources basic standards." This partial replacement GB 5959.7-1987 "safe heating apparatus Part VII. Particular requirements for the apparatus having the electron gun", and The latter is mainly technical changes compared as follows (listed only project name).

--- According to GB 5959.1-2005 text structure, the standard increased to 11 from the original Chapter 16 chapter, number, title change all over again Row; text "present standard" to "this section";

--- full article by article number and title IEC 60519-7:2008 corresponding to the modification, the preparation according to GB/T 1.1 provisions;

---range. Add "Special requirements for personal safety device" provisions;

Edit "electric equipment applicable to one or more electron guns," the scope is "applicable to all electric with electron guns Heating means ";

Increase "This is also applicable to preparing and using glow discharge electron gun assembly of an electron gun of the non-heating device and the electron gun High voltage

power supply ";

Increase the safety Part 1 "GB 5959.1-2005" electric apparatus. General Requirements "all requirements apply to this section.

This section presents all the additional requirements "of the electron gun assembly in Chapter 6 through 16;

--- add "2 Normative References" chapter, references GB/T 2900.23-2008, IEC 60204-1:2005, GB 5959.1-2005, IEC 60364-4-43, GB 18871-2002 standard;

3.1 ~ 3.13 --- increase of 13 terms and definitions;

--- increase in Chapter 4 to Chapter 6;

--- increase "7 maintenance period of the high-pressure ground electron gun room";
Increase "mechanical grounding 7.2"; Increase "7.3 automatic grounding devices";

--- increase in Chapter 9 to Chapter 11;

--- increase "and the control circuit 12 controls";

--- increase "12.1 control circuit";

--- increase "12.2 Control function";

--- increase "or risk processing certain processes member 14 due to";

--- increase "14.1 Fire";

--- increase "the risk of explosion 14.2";

--- increase "14.3 environmental pollution";

--- increase "14.4 health hazard";

--- change the original standard "vacuum system 9" and "9.1", "9.2", "9.3" to "14.5 Vacuum System";

--- delete the original standards "9.4";

--- change the original standard "6 X- rays and ultraviolet" to "15 X- ray";

--- add "16 mark, nameplate, technical documents and specifications" chapter;

--- increase "16.2 detection, and delivery of the device with the electron gun use and maintenance instructions."

This part of the jurisdiction of the National Electric Industry Standardization Technical Committee (SAC/TC121) equipment.

This section was drafted. Xi'an Jiaotong University, Xi'an Electric Furnace Institute Co., Ltd.

1 Scope

This part of GB 5959 provides for a special about the personal safety of the device to device (hereinafter referred to as the electron gun device) with electron guns to begging. This section applies to all electric apparatus having an electron gun.

This section also applies to non-heated high-voltage power source and the electron gun assembly and the electron gun preform using glow discharge electron gun assembly.

GB 5959.1-2005 "Safety heating means Part 1. General Requirements" all requirements apply to this section. This part Chapter 6 through 16 are given all the additional requirements of the electron gun assembly.

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 2900.23-2008 Electrotechnical term industrial heating means (IEC 60050-841:2004, IDT)

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

GB 18871-2002 Ionizing Radiation Protection and safety of radiation sources basic standards

IEC 60204-1:2005 Safety of machinery Electrical Equipment Part 1. General requirements 1)

Part 4 of the building electrical apparatus IEC 60364-4-43. Safety Chapter 43. Overcurrent Protection 2)

1) Description adopt standard. GB 5226.1-2002 Safety of machinery Electrical Equipment Part 1: General requirements (current valid version) (to IEC 60204-1:2000, IDT)

2) Description adopt standard. GB 16895.5-2002 Electrical installations of buildings Part 4: Safety Chapter 43. overcurrent protection (currently valid version This) (IEC 60364-4-43:2001, IDT)

3 Terms and Definitions

GB/T 2900.23-2008 and GB 5959.1-2005 established following terms and definitions apply to this standard.