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

**中华人民共和国国家标准**

**GB 15578-2008**

**Replace GB 15578-1995**

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**Safety requirements for resistance welding  
machine**

**电阻焊机的安全要求**

**Issued on September 24, 2008**

**Implemented on August 01, 2009**

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**Issued by General Administration of Quality Supervision, Inspection  
and Quarantine of the People's Republic of China**

**Standardization Administration of the People's Republic of  
China**

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## Foreword

Clause 3 “Terms and definitions” in this Standard is recommendatory, the rest are mandatory.

This Standard will replace GB 15578-1995.

Comparison with GB 15578-1995, main changes of this Standard are as follows:

- Extended the scope of this Standard. Previous standard only apply to single-phase power frequency AC resistance welding machine.
- Changed the voltage value and limit value of temperature rise of dielectric strength test.
- Added terms and definitions;
- Added electric clearance and creepage distance requirements;
- Added the connecting requirements with protective conduction;
- Added power ON/OFF switch device and leakage protector requirements;
- Added compliance requirements for components and parts;
- Added handbook and label requirements;
- Added annex A and annex B.

Annex A and B of this Standard are informative annex.

This Standard is proposed by China Electrical Equipment Industrial Association.

This Standard is under the jurisdiction of National Technical Committee (SAC/TC 70) on Arc-welding Machine of Standardization Administration of China.

The responsible drafting organizations of this Standard are Tianjin 707 High-Tech Co., Ltd, Guangzhou Songxing Electrical Appliance Co., Ltd, Shanghai Dongsheng Welding Group Co., Ltd, Chengdu Electric Welding Machine Research Center and Chengdu Sanfang Electric Co., Ltd.

The chief drafting staff of this Standard includes He Wei, Liu Guoying, Hu Chengping, Yin Xianhua and Zhang Zuowen.

This Standard was issued on 1995 for the first time, this is firstly revised.

# Safely requirements for resistance welding machine

## 1 Scope

This standard specifies the general safety requirements, inspection rules and test methods of resistance welding machine.

This standard is applicable to the resistance welding machine driven by voltage supply or machine specified in Table 1 of GB/T 156, welding machine used in similar processes and resistance welding controller (hereinafter referred as controller) including independent and multi-operator welding machine.

Controller and resistance welding machine can not only be integrated but also separated. Whatever form of structure is adopted, it shall conform to this standard.

Note: this standard excludes the requirements on electromagnetic compatibility (EMC).

## 2 Normative references

The articles contained in the following documents have become this Standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB/T 156-2007 Standard voltage (IEC 60038-2002, MOD)

GB/T 2900.22-2005 Electrotechnical terminology--Electric welding machine

GB/T 3805-1993 Extra-low voltage (ELV) -Limit values

GB/T 4207-2003 Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions (IEC 60112:1979, IDT)

GB 4208-2008 Degrees of protection provided by enclosure(IP code) (IDT IEC 60529:2001)

GB 5226.1-2002 Safety of machinery—Electrical equipment of machines—Part 1: General requirements (IEC 60204-1:2000, IDT)

GB/T 5465.2 Graphical symbols for use on electrical equipment - Part 2: Graphical symbols (IDT IEC 60417 DB: 2007)



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