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

GB 15579.4-2014

Arc welding equipment -- Part 4: Periodic inspection and testing

弧焊设备 第4部分：周期检查和试验

(English Translation)

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Foreword

Part 3 of this chapter are recommended, the rest are mandatory.

GB 15579 "arc welding equipment" is divided into 13 parts.

--- Part 1. Welding power sources;

--- Part 2. Liquid cooling systems;

--- Part 3. Arc and Arc Stabilisation Unit;

--- Part 4. Periodic inspection and testing;

- Part 5. Wire feeders;
- Part 6. Load limits for manual metal arc welding power source;
- Part 7. torch (gun);
- Part 8. Welding and plasma cutting system gas path means;
- Part 9. Installation and Use;
- Part 10. Electromagnetic compatibility (EMC) requirements;
- Part 11. Electrode holders;
- Part 12. Coupling devices for welding cables;
- Part 13. Welding clamp.

This is Part 4 GB 15579's.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method is equivalent to using IEC 60974-4:2010 "welding equipment - Part 4. Periodic inspection and testing." Consistency correspondence between this part of the normative international documents referenced with our document Appendix NA.

This part made the following editorial changes.

- Increase the informative appendix NA.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Welding Standardization Technical Committee (SAC/TC70) centralized.

This section is drafted. Tangshan Matsushita Industrial Equipment Co., Ltd., Chengdu tripartite Electric Co., Ltd., Hangzhou Kai Erda Welder Co.

Division Shenzhen Christie Technology Co., Ltd., Zhejiang Kende Mechanical & Electrical Co., Ltd., Nantong-Hong welding Electrical Co., Ltd. Zhejiang PUMA Welding Equipment Manufacture Co., West Germany (Hangzhou) Co., Ltd. inverter, Chengdu Institute of electric welding.

1 Scope

GB 15579 of the provisions of this part of the cycle of the test procedure and to ensure electrical safety inspection after repair. The same test procedure Suitable for equipment maintenance.

This section applies to press GB 15579.1-2013 or IEC 60974-6 standard design of arc

welding and similar processes used in power. according to According to the independent auxiliary means other part of the standard GB 15579 design can be tested in accordance with this section.

Note 1: The welding power source can be any auxiliary devices may affect the test results of the installation to be tested together.

This section does not apply to new welding power source or an internal combustion engine-driven welding power source test.

Note 2: The design of the power supply fails GB 15579.1-2013 Appendix C.

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 15579.1-2013 welding equipment - Part 1. Welding power sources (IEC 60974-1:2005, IDT) and magnetic devices IEC 60050-151 International Electrotechnical terminology electricity [International Electrotechnical Vocabulary (IEV) -Part 151.

Electrical and magnetic devices] IEC 60050-195 Electrotechnical terminology grounding and protection against electric shock [International Electrotechnical Vocabulary (IEV) -Part 195.

Earthing and protection against electric shock] IEC 60050-851 International Electrotechnical Vocabulary - Chapter 851. Welding (International Electrotechnical Vocabulary (IEV)

-Chapter 851. Electric welding) IEC 60974-6 Arc welding equipment - Part 6. Load limits for manual metal arc welding power source (Arc welding equipment-Part 6.

Limited duty manual metal arc welding power sources) IEC 61557-4 1000V AC and 1500V DC low voltage distribution systems for electrical safety protection measures for testing, measuring or monitoring equipment - Part 4. equipotential grounding resistance and grounding resistance

(Electrical safety in low voltage distribution systems up to 1000V a.c. and 1500V d.c. - Equipment for testing, measuring or monitoring of protective measures-Part 4.

Resistance of earth connection and equipotential bonding)

3 Terms and Definitions

GB 15579.1-2013, IEC 60050-151, IEC 60050-851 and IEC 60050-195 and the following definition of terms and definitions Apply to this document.

Professional expert

Industry personnel competent person Skilled skilled person Professionally trained, they have some knowledge of the equipment and enough experience to judge and deal with possible accidents of people.

NOTE: In the related art for many years practical work is considered to be professionally trained.

[GB 15579.1-2013, the definition 3.3] 3.2 Trained personnel instructed person Familiar with the assigned work and understand because of negligence or other reasons may occur accidents or hazards involved.

NOTE: If necessary, you can receive some training in advance.

[GB 15579.1-2013, the definition 3.4] 3.3 Periodic inspection and testing periodic inspection and test to reduce the risk and at a certain time interval Check carried out.

Maintenance in order to reduce the risk of failure and prescribed maintenance intervals performed.

Maintenance repair

Restored to a safe operating state established.

Test personnel Trained and authorized to perform periodic inspection and test personnel or specialists.

4 General requirements

The level of 4.1 pairs of test personnel requirements Personnel welding power source test may lead to dangerous, so should be trained electrical maintenance training and are familiar with welding, cutting and allied processes or expert test. If the device is not necessary to open the housing, trained personnel should be considered eligible for simple cycle checkpoint and maintenance.

Note: hazardous voltages and currents inside the equipment housing may cause electric shock, burns, or death, only professional test personnel may open the device.

4.2 Test conditions

Test ambient temperature of 10 °C ~ 40 °C, the subject of the welding power supply should be dry and clean.

4.3 Measuring Instruments

Precision measuring instruments should be at least 2.5, except when the insulation resistance measurement. For insulation resistance measurement accuracy of the instrument is no regulation Set, but shall be tested for accuracy problems.

4.4 Periodic inspection and testing

Requirements in accordance with Table 1 will be periodic inspections and tests.