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**INDUSTRY STANDARD OF THE
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**Verification Regulation of Earth Resistance Meters
(English Translation)**

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7.5 Verification cycle (7)

Appendix A Original Record (8)

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Grounding resistance meter verification procedure

1 Scope

This procedure applies to the initial verification, subsequent verification and use of digital grounding resistance meters and analog grounding resistance meters.

In the test.

This procedure does not apply to AC grid power supplies and ground resistance meters manufactured for special requirements.

2 Citations

This procedure refers to the following documents.

JJF1001-1998 "General Terms and Definitions of Measurement" JJF1059-1999 "Measurement and Expression of Measurement Uncertainty" JB/T 9289-1999 "Grounding Resistance Meter" GB/T 7676.1-1998 "Direct-effect analogue indicating electrical measuring instruments and their accessories, Part 1. Definitions and with requirements GB/T 7676.9-1998 "Direct-effect analogue indicating electrical measuring instruments and their accessories, part 9. recommended test Method of inspection GB/T 13978-1992 "General technical conditions for digital multimeters" when using this procedure, care should be taken to use the current valid version of the above cited documents.

3 terms

3.1 Grounding resistance meter A meter used to measure the resistance between a ground conductor and earth.

3.2 Ground resistance the resistance between the ground conductor and the earth. The increased potential of the conductor when the AC test current flows through the ground conductor Divided by the test current, the quotient is the value of the grounding resistance.

3.3 Auxiliary Grounding Resistance when measuring the grounding resistance, the resistance between the auxiliary grounding electrode used as the potential terminal and the current terminal and the ground.

3.4 Ground voltage

The interference voltage on the ground conductor is excluded by the voltage generated by the test current.

4 Overview

4.1 Use

The grounding resistance meter is mainly used to directly measure the grounding resistance and soil resistivity of various grounding devices.

4.2 Principle

The working principle of the grounding resistance meter is divided into reference voltage comparison type and reference current and voltage drop type.