ICS 91.120.40
CCS K 10

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 33588.7-2020

Replacing GB/T 33588.7-2017

Lightning protection system components(LPSC) - Part 7: Requirements for earthing enhancing compounds

Issued on: November 19, 2020 **Implemented on: June 1, 2021**

Issued by: State Administration for Market Regulation, China National Standardization Administration

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Foreword

GB/T 33588 "Lightning Protection System Components (LPSC)" is divided into 7 parts.

---Part 1.Requirements for connectors;

---Part 2.Requirements for air-termination, down conductor and grounding electrode;

---Part 3.Requirements for Isolation Discharge Gap (ISG);

---Part 4.Fastener requirements for conductors;

---Part 5.Requirements for grounding electrode detection boxes and grounding electrode seals;

---Part 6.Requirements for Lightning Strike Counter (LSC);

---Part 7.Requirements for grounding resistance-reducing materials.

This part is Part 7 of GB/T 33588.

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

This part replaces GB/T 33588.7-2017 ``Lightning Protection System Components (LPSC) Part 7.Requirements for Grounding Resistance Reduction Materials",

Compared with GB/T 33588.7-2017, the main technical changes are as follows.

---Added test steps for resistivity measurement of powder grounding resistance reduction materials (see 5.3.3);

---Added requirements for flat steel, round steel and galvanized steel for grounding body samples (see 5.9.1);

--- Deleted the "corrosion test of buried ground resistance reduction materials to steel grounding bodies" (see 5.9.3 of the.2017 edition);

--- Added "Type test procedure for grounding resistance-reducing materials" (see Appendix A).

This part uses the redrafting method to refer to IEC 62561-7.2018 ``Lightning Protection System Components (LPSC) Part 7.Ground Resistance Reduction

"Material Requirements" is compiled, and the degree of consistency with IEC 62561-7.2018 is not equivalent.

Please note that certain contents of this document may involve patents. The issuing agency of this document is not responsible for identifying these patents.

This part was proposed and managed by the National Standardization Technical Committee for Lightning Protection (SAC/TC258).

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Co., Ltd., Tianjin Zhongli Lightning Protection Technology Co., Ltd., Jiangsu Jinheyi Composite New Material Co., Ltd., China Association for Standardization.

Introduction

This part of GB/T 33588 involves the use of lightning protection systems (LPS) designed and installed in accordance with GB/T 21714 (all parts)

Requirements and test methods for grounding resistance-reducing materials.

Lightning Protection System Components (LPSC)

Part 7.Requirements for grounding resistance reducing materials

1 Scope

This part of GB/T 33588 specifies the requirements, test methods and test reports for grounding resistance-reducing materials in lightning protection systems (LPS)

Structure and content.

This section applies to the test of grounding resistance reducing materials.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 702 Hot-rolled steel bar size, shape, weight and allowable deviation

GB 6566 Radionuclide limits for building materials

GB 15618 Soil Environmental Quality Agricultural Land Soil Pollution Risk Control Standard (Trial)

GB/T 23769 General method for determination of pH value in aqueous solution of inorganic chemical products

3 Terms and definitions

The following terms and definitions apply to this document.

ISO and IEC continuously update the terminology standardization database at the following website.

3.1

Ground resistance reducing material

Materials laid around the grounding device to reduce grounding resistance.

4.1 General requirements

4.1.1 The grounding resistance-reducing material should be designed and constructed to ensure that it has reliable performance and is harmless to people and the surrounding environment.

4.1.2 The selection of grounding resistance reduction materials should be adapted to the special requirements in actual applications.

4.1.3 The grounding resistance-reducing material should be in close contact with the grounding body.

4.2 Documentation

The manufacturer or supplier of grounding resistance-reducing materials should provide at least the following documents to ensure that users can select and use them reasonably and safely.

a) Factory certificate and sample test report of this batch of products. If necessary, the type test report within the validity period shall be provided.