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

GB/T 5132.4-2024

**Industrial rigid round laminated tubes and rods based on
thermosetting resins for electrical purposes - Part 4: Round
laminated moulded tubes**

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 4 of GB/T 5132 "Industrial rigid circular laminated tubes and rods made of thermosetting resins for electrical purposes". GB/T 5132 has been the following parts have been published.

- Part 1: General requirements;
- Part 2: Test methods;
- Part 3: Round laminated rolled tubes;
- Part 4: Circular laminated moulded tubes;
- Part 5: Circular laminated moulded bars.

This document is modified to adopt IEC 61212-3-2:2013 "Insulating materials - Industrial rigid round laminated tubes and rods of thermosetting resins for electrical use" Part 3: Individual material specifications Part 2: Circular laminated moulded tubes.

This document has made the following structural adjustments compared to IEC 61212-3-2:2013.

--- Adjust Table 1 in Chapter 5 to 4.4.

The technical differences between this document and IEC 61212-3-2:2013 and their reasons are as follows.

--- The content of "Scope" has been rewritten (see Chapter 1) to comply with the requirements of GB/T 1.1;

--- Replaced IEC 60212-1 (see Chapter 5) with the normative reference GB/T 5132.1 to adapt to my country's technical conditions and added Operability;

--- Delete the remarks column in Table 7, and write the content of the requirement clauses in the form of table paragraphs.

The following editorial changes were made to this document.

--- In order to coordinate with the existing standards, the name of the standard is changed to "Industrial rigid circular laminated tubes and rods of thermosetting resins for electrical use Part 4 Points. Round laminated molded tube";

---Change the title of Chapter 4 from "Nomenclature and abbreviations" to "Classification and nomenclature".

Introduction

Thermosetting resin industrial rigid round laminated tubes and rods for electrical use are widely used in the research and development, production, quality inspection, sales, the formulation of this series of standards can guide the industry to more effectively carry out the development of industrial hard circular layers of thermosetting resins for electrical applications.

The inspection and evaluation of pressed tubes and rods can improve the quality and application reliability of industrial rigid round laminated tubes and rods made of thermosetting resins for electrical use.

GB/T 5132 "Industrial rigid round laminated tubes and rods made of thermosetting resin for electrical use" specifies the requirements for industrial rigid round laminated tubes and rods made of thermosetting resin for electrical use.

The general requirements, test methods, and individual material product standards for laminated tubes and rods are intended to consist of the following parts.

--- Part 1: General requirements. The purpose is to determine the definition, nomenclature, General requirements and delivery conditions.

--- Part 2: Test methods. The purpose is to determine the test methods for industrial rigid circular laminated tubes and rods made of thermosetting resins for electrical purposes.

--- Part 3: Round laminated rolled tubes. The purpose is to determine the electrical

industrial rigid round tubes composed of different resins and reinforcement materials.

Classification, naming and requirements of shaped laminated rolled tubes.

--- Part 4: Circular laminated moulded tubes. The purpose is to determine the electrical industrial rigid circular tubes made of different resins and reinforcement materials.

Classification, naming and requirements of shaped laminated molded tubes.

--- Part 5: Round laminated moulded bars. The purpose is to determine the electrical industrial hard round bars made of different resins and reinforcement materials.

Classification and requirements for shaped laminated moulded pipes.

Industrial rigid round laminated tubes and rods of thermosetting resins for electrical use

Part 4: Circular laminated moulded tubes

1 Scope

This document specifies the classification, nomenclature and requirements for industrial rigid circular laminated moulded tubes for electrical purposes composed of different resins and reinforcement materials.

This document applies to industrial rigid circular laminated moulded tubes made of thermosetting resins for electrical purposes.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 5132.1 Industrial rigid circular laminated tubes and rods made of thermosetting resins for electrical use Part 1: General requirements (GB/T 5132.1-2009, IEC 61212-1:2006, IDT)
GB/T 5132.2-2009 Industrial rigid circular laminated tubes and rods made of thermosetting resins for electrical use Part 2: Test methods (IEC 61212-2:2006, IDT)

3 Terms and definitions

The following terms and definitions apply to this document.

(Thermosetting material) The impregnated material layers are wound around a tube core and then placed together in a cylindrical mold to cure under heat and pressure, and then A tube formed by removing the core.

[Source. GB/T 2035-2008, 2.531, modified]

4.1 Overview

Round laminated molded tubes can be classified into different types according to the resins, reinforcement materials, manufacturing methods and identification characteristics they use.

4.2 Naming

The naming is done as follows.

- Resins are indicated by the first two abbreviations;
- The next two abbreviations indicate the reinforcement material;
- Two digits are used to indicate the series number. The first digit indicates the product shape, "3" indicates molded pipe, and the second digit indicates the same the next level classification of a model.

Abbreviations shall be in accordance with 4.3.