



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

GB/T 15030-2021

Sisal main cores in steel wire ropes

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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 of Standardization Documents" drafted.

This document replaces GB/T 15030-2009 "Sisal Wire Rope Core", compared with GB/T 15030-2009, except for structural adjustment and editing

In addition to the sexual changes, the main technical changes are as follows.

- Deleted the naming of the product (see 4.1 of the.2009 edition);
- Changed the product structure description (see 4.1, 4.2 of the.2009 edition);
- Changed the representation of product marks (see 4.3, 4.4 of the.2009 edition);
- Increased requirements for grease (see 5.1.2);
- Added requirements and test methods for product appearance (see 5.2 and 7.1);
- Delete the "extremely poor" indicator requirements (see 5.2 of the.2009 edition);
- Increased the index requirements and test methods of "twist direction and lay length" (see 5.4 and 7.4);
- Changed the indicator requirements of "oil content" in "Technical Indicators" (see 5.4, 5.2 of the.2009 edition);
- Increased the index requirements and test methods of "length tolerance" (see 5.5 and 7.9);
- Changed the calculation method for the pretension of the rope core in "Diameter" (see 7.2, 6.2.2 of the.2009 edition);
- Changed the test method of "Linear Density" and the expression of C value (see 7.3,

6.2.1.1 of the.2009 edition);

--- Added "Inspection Rules" (see Chapter 8);

--- Changed the index requirements of "quality tolerance of rope core package" (see 9.4, 7.4 of the.2009 edition);

--- Changed the calculation formula of "water-soluble acidity" (see Appendix A, Appendix A of the.2009 edition);

--- Changed the calculation formula of "salt content" (see Appendix B, Appendix B of the.2009 edition).

This document is drafted with reference to ISO 4345.1988 "Specifications for Wire Rope Fiber Cores", and the degree of consistency is non-equivalent.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

1 Scope

This document specifies the terms and definitions, construction, specifications and markings, requirements, sampling, test methods, inspection rules, packages of sisal wire rope cores

packaging and marking, transport and storage.

This document applies to wire rope cores twisted from sisal fibers.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 6682 Analysis Laboratory Water Specifications and Test Methods

GB/T 8834 Determination of physical and mechanical properties of fiber ropes

NB/SH/T 0387 Grease for wire rope

NY/T 243 Determination of moisture regain of sisal fibers and products

NY/T 245 Determination of oil content of sisal fiber products

NY/T 1523 Sisal yarn for wire rope core

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

solution acidity

The amount of water-soluble acid that can be fully extracted from the sisal wire rope core.

Note. The water-soluble acidity is used to neutralize the fully extracted water-soluble acid per 100g sample and consume 0.1mol/L of sodium hydroxide or potassium hydroxide solution in milliliters (mL/L/L)

100g) indicated.

3.2

salt content

Chloride content in sisal wire rope cores.

Note. The salt content is expressed by the percentage (%) of sodium chloride contained in the rope core.

4.1 Structure

4.1.1 The sisal steel wire rope core (hereinafter referred to as "rope core") is double-twisted, the yarn is twisted into strands, and the strands are then twisted into the rope core. The typical structure is three strands, which are divided into left and right strands.

Twist (S) and right twist (Z).