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

GB/T 24814-2023

Replacing GB/T 24814-2009

**Round steel short link chains for lifting purposes - Medium
tolerance sling chains - Grade 4, stainless steel**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document replaces GB/T 24814-2009 "Level 4 Ordinary Precision Chains for Hoisting, Short Link Chains, etc." and is the same as GB/T 24814-

Compared with.2009, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- The scope has been changed and the ambient temperature limit range of the hanging chain has been added (see Chapter 1, Chapter 1 of the.2009 edition);
- Deleted the chapter "General Acceptance Principles" (see Chapter 4 of the.2009 edition);
- Change "size" to "size, quality and code", and add corresponding technical content (see Chapter 4, Chapter 5 of the.2009 edition);
- Changed the material requirements (see 5.2, 6.1 of the.2009 version);
- Changed the heat treatment requirements (see 5.3, 6.2 of the.2009 edition);
- Added requirements for pickling and passivation treatment of hanging chains (see 5.4);
- Changed the size requirements (see 5.5, Chapter 5 of the.2009 edition);
- Increased the ultimate working load (see 5.6);
- The requirements for manufacturing verification force, breaking force, and total ultimate

elongation have been changed, and the requirements for bending have been added (see 5.7, 7.1 of the.2009 version);

---Changed the tensile test (see 6.5, 7.3 of the.2009 edition);

---Added bending test (see 6.6);

---Additional markers have been deleted (see 9.2 of the.2009 version);

---Added manufacturer's mark (see 7.2);

---Added traceability marking (see 7.3);

---Deleted inspection (see Chapter 8 of the.2009 edition);

---Added usage (see Chapter 9);

---Added environmental requirements (see Chapter 10);

---Deleted "Temporary additional dimensions for level 4 ordinary precision chains" (see Appendix A of the.2009 version).

This document is equivalent to ISO 1835.2018 "Steel short link chain for lifting, medium precision lifting chain, grade 4 stainless steel".

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

1 Scope

This document specifies the requirements for medium precision grade 4 stainless steel lifting chains for lifting.

This document applies to chains with nominal diameters (d_n) of 4mm~22mm.

The chain is a steel circular link chain with a nominal pitch p_n equal to $3d_n$, and has been verified by electric welding, solution annealing and testing. Use ambient temperature

It is -100 degrees C~400 degrees C, and complies with the general acceptance rules stipulated in ISO 1834.

Note 1. Since the hanging chain is solution annealed in its final state, the steel hanging chain selected according to 5.2 is not subject to corrosion resistance restrictions during use. Because of higher strength

High grade stainless steel chains are achieved by cold drawing the wire prior to manufacturing. Therefore, solution annealing will reduce strength, especially in corrosion resistance

Welds with high performance requirements.

Note 2. Resistance butt welding and flash welding see ISO 4063.

2 Normative reference documents

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

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

this document.

acceptance)

Note. GB/T 20946-2007 General Acceptance Principles for Short Link Chains for Lifting (ISO 1834.1999, IDT)

ISO 7500-1 Inspection and calibration of static uniaxial testing machines for metallic materials Part 1. Tensile and/or compression testing machines
uringsystem)

Note. GB/T 16825.1-2022 Inspection and Standards for Static Uniaxial Testing Machines for Metal Materials Part 1. Tensile and/or Compression Testing Machines for Force Measurement

System inspection and calibration (ISO 7500-1.2018, IDT)

ISO 13385-1 Geometric Product Specification (GPS) Dimensional measuring equipment Part 1. Design and metrological characteristics of calipers [Ge-

ISO 16143-2 General stainless steel Part 2. Corrosion-resistant semi-finished products, rods, rods and profiles (Stainless steels for

3 Terms and definitions

The terms and definitions defined in ISO 1834 apply to this document.

4.1 Dimensions and quality

See Table 1 for dimensions, and see Appendix A for calculations of values and tolerances.