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

CJ/T 540-2019

Replacing CJ/T 3014-1993

**The suspending center driving thickener for gravity sludge
thickening tank**

重力式污泥浓缩池悬挂式中心传动浓缩机

(English Translation)

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Foreword

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

This standard is a revision of CJ/T 3014-1993 "Gravity Sludge Concentrator Suspended Central Drive Sludge Scraper". With CJ/T 3014-Compared with 1993, the main technical content changes are as follows.

- Modified the normative references (see Chapter 2, Chapter 2 of the 1993 edition);
- Added terms and definitions (see Chapter 3);
- Modified the model and basic parameters of the thickener (see Chapter 4, Chapter 3 of the 1993 edition);
- Added and revised the enrichment model and schematic diagram (see 4.1, Chapter 3 of the 1993 edition);
- Deleted the main size table and tank type diagram of the sludge thickening tank (Chapter 4 of the 1993 edition);
- Modify and increase the requirements for the drive device, spindle, bridge frame and scraper arm, scraper, lifting mechanism, safety, painting, etc. (see 6.1, 6.2, 6.3, 6.4, 6.6, 6.8, 6.9, Chapter 4 of the 1993 edition);
- Added the requirements for the concentration grid and the deflector (see 6.5, 6.7, Chapter 4 of the 1993 edition);
- Modified the test methods and inspection rules (see Chapter 7, Chapter 8, Chapter 5 of

the 1993 edition);

--- Modified signs, packaging, transportation and storage (see Chapter 9, Chapter 6 of the 1993 edition).

This standard was proposed by the Standard Rating Institute of the Ministry of Housing and Urban-Rural Development.

This standard is under the jurisdiction of the Municipal Water Supply and Drainage Standardization Technical Committee of the Ministry of Housing and Urban-Rural Development.

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1 Scope

This standard specifies the terms and definitions of gravity type sludge thickening tank suspended central drive thickener (hereinafter referred to as "thickener"), type, Model and basic parameters, general requirements,, test methods, inspection rules, marking, packaging, transportation and storage.

This standard applies to the manufacture and inspection of gravity sludge thickeners in water treatment projects.

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 191 Packaging, Storage and Transportation Graphic Mark (GB/T 191-2008, ISO 780:1997, MOD) GB/T 755 Rotating motor rating and performance (GB/T 755-2008, IEC 60034-1:2004, IDT) GB/T 3768 Acoustic sound pressure method to determine the sound power level of noise sources. A simple method using envelope measurement surface above the reflecting surface (GB/T 3768-2017, ISO 3746:2010, IDT) GB/T 3797 electrical control equipment GB 4053.3 Safety requirements for fixed steel ladders and platforms Part 3: Industrial protective railings and steel platforms GB/T 4208-2017 Enclosure protection class

(IP code) (IEC 60529:2013, IDT) GB/T 4942.1-2006 Protection level (IP code) classification of the overall structure of rotating electrical machines (IEC 60034-5:2000, IDT) GB 5226.1 Electrical Safety of Machinery Electrical Equipment of Machinery Part 1: General Technical Conditions (GB 5226.1-2008, IEC 60204-1:2005, IDT) GB/T 5796.4 Trapezoidal Thread Part 4: Tolerance (GB/T 5796.4-2005, ISO 2903:1993, MOD) GB/T 8923.1-2011 Visual assessment of surface cleanliness of steel surface treatment before coating-Part 1: Uncoated the corrosion grade and treatment grade of the steel surface and the steel surface after the original coating has been completely removed (ISO 8501-1:2007, IDT) GB/T 10089 Cylindrical worm and worm gear accuracy GB/T 13306 signs GB/T 13384 General technical conditions for packaging of mechanical and electrical products GB 18613-2012 Small and medium-sized three-phase asynchronous motors energy efficiency limit values and energy efficiency grades GB 50205-2001 Code for acceptance of construction quality of steel structure engineering GB 50661 Specification for Welding of Steel Structures JB/T 2300 Slewing ring JB/T 2982 Cycloidal pinwheel reducer JB/T 5000.12 General technical conditions for heavy machinery Part 12: Painting JB/T 12932 WP series cylindrical worm reducer SJ20893 Stainless Steel Pickling and Passivation Specification

3 Terms and definitions

The following terms and definitions apply to this document.