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

GB/T 10855-2016

Replacing GB/T 10855-2003

Inverted tooth(silent) chains and sprockets

齿形链和链轮

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 10855-2003 "Tooth chain and sprocket". This standard compared with GB/T 10855-2003, the main technology changes As follows:

- modified the toothed chain guide form, an increase of dual-lead structure type diagram (see Figure 1,.2003 version of Figure 1);
- modified the typical link plate structure (see Figure 2,.2003 Figure 1c)); - Revised some of the pitch values in Table 1 (see column 2 of Table 1, column 2 of Table 1,.2003);
- the maximum full width of the chain M is modified to increase the maximum full width M (see column 4 of Table 2, column 4 of Table 2 of.2003);
- modified the recommended lubricating oil viscosity table, the ambient temperature from -5 ~ 5, 5 ~ 40, 40 ~ 50, 50 ~ 60 four grades to < 5, 5 ~ 32, > 32 three grades, the pitch from the original two files to not split the file, the recommended viscosity of the lubricating oil decreases (see Table A.1,.2003 Table A.1);
- modified the working conditions in the appendix table, an increase of some application equipment, the original working hours were 10h and 24h of the three The power source is changed to two sources of power that do not take into account the working hours (see Table A.2,.2003, A.2);
- modified the appendix rated power table, increased the rated power per 1mm chain width and small sprocket speed (see Table A.3 to Table A.8, Table A.10 ~ Table A.11,.2003, Tables A.3 to A.8, Tables A.10 to A.11);
- Added "A.4 Tooth chain use limit and replacement" (see A.4). This standard is proposed by the China Machinery Industry Federation. This standard by the National Chain Drive Standardization Technical Committee (SAC/TC164) centralized. This standard is responsible for drafting units. Hangzhou Donghua Chain Group Co., Ltd., Suzhou Global Group Chain Drive Co., Ltd., Hangzhou Shunfeng chain industry Limited company. This standard participates in the drafting unit. Jilin University Chain Drive Research Institute, Taicang Chun Union Chain Transmission Co., Ltd., Zhejiang Shenniu Machinery

Manufacturing Co., Ltd. Company, Zhejiang Changxing Xilin Chain Sprocket Co., Ltd., Zhejiang Jianhong Chain Drive Material Co., Ltd. The main drafters of this standard. Ye Bin, Lu Jiguang, Xu Huikang, Chen Xinglong, Wang Lili, Wang Haiou, He Hanzhao, Guo Chijian, Wang Zhijun, Zhang Jianhong This standard replaces GB/T 10855-2003. The previous versions of GB/T 10855-2003 are.

--- GB/T 10855-1989. Toothed chain and sprocket

1 Scope

GB/T 10855-2016 is the Chinese national standard on inverted tooth(silent) chains and sprockets, in the field of mechanical systems and components. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 24 February 2016 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 September 2016. Classification: ICS 21.220.30, CCS J18. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the basic parameters and technical requirements for the toothed chain and sprocket. This standard applies to external contact type sprockets and sprockets.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 1801 Geometrical Product Specifications (GPS) Limit and Matching Tolerance Belt and Matching Options

3 Chain and sprocket axial profile

3.1 Chain structure type The tooth chain is composed of a series of tooth plate and guide plate alternately assembled and connected with a pin or a combination of articulated components, adjacent links between Hinge section. The guide plate of the outer guide ring is crossed on both sides of the sprocket as shown in Fig. 1a). The guide plate of the inner guide ring is on the sprocket Or a plurality of circumferential guide grooves, as shown in Figure 1b), Figure 1c). Chain guide plate to ensure the stability of the horizontal chain. Typical chain plate structure shown in Figure 2. Allow the chain plate to be changed, but the link plate must be able to engage the sprocket as specified in this standard The center is

located on the index circle of the sprocket. As the hinge, the connection and the transition chain plate with the different manufacturers, so this standard is not standardized Set these parts.

3.2 chain general structure 9.525mm and above the chain chain chain width to reach more than 2 times the length of the chain with the inner guide; chain width of less than 2 times the length of the chain can be To use the external guide, can also be used within the guide; should not use the chain width of more than 16 times the length of the chain. 4.762mm pitch chain according to the provisions of Table 3 can be used outside the guide or internal guide, the maximum chain width should not be greater than 8 times the chain pitch.

3.3 Chain number 9.525mm and above Pitch chain The chain number consists of the letter SC and the number representing the chain pitch and the nominal width of the chain. 1 or the first two by 3.175mm (1/8in) for the chain pitch value, the last 2 or 3 digits multiplied by 6.35mm (1/4in) for the tooth chain The nominal chain width. For example, SC302 represents a tooth chain with a pitch of

9.525 mm and a nominal chain width of

12.70 mm. The 4.762mm pitch chain chain consists of the letter SC and the number representing the chain pitch and the nominal width of the chain. The number multiplied by 1.5875mm (1/16in) for the chain pitch value, the last one or two digits multiplied by 0.79375mm (1/32in) for the tooth chain The nominal chain width. For example, SC0309 represents a tooth chain with a pitch of

4.762 mm and a nominal chain width of

7.14 mm. 4.762mm pitch teeth The chain plate has a nominal thickness of 0.76mm, so the width value in the chain number is the number of chain plates in the chain width direction.