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

GB/T 10886-2019

Replacing GB/T 10886-2002

Three screw pumps

三螺杆泵

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8 Complete sets, signs, packaging, transportation, storage

8.1 Complete set

8.2 Mark

8.3 Packing

8.4 Transportation

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13 Reference

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 10886-2002 "Three-screw pump". Compared with GB/T 10886-2002, the main technical changes of this standard are as follows:

- Increased general requirements for pump product design and use (see 5.1);
- Increase the efficiency index reference table of the pump rated operating point (see Table 1);
- Modified the composition and mechanical properties of the main and driven screw materials (see Table 2, Table 3, Table 4, Table 2, Table 3, Table of the.2002 edition) 4);
- Remove the screw, bushing, pump body material using QT450-2 regulations (see Table 5, Table 6 of the.2002 edition), using national standard materials QT450-10 replacement (see Table 2);
- Increased the requirement that the user should indicate any corrosive factors (quantitative) that appear in the process medium and the environment in the contract. (see 5.4.3);
- Bearing rated working condition, under normal continuous running conditions, the design calculation life $\geq 17500h$ is modified to $\geq 25000h$ (see 5.7.4, 4.9.3 of the.2002 edition);
- Increase the specific amount of mechanical seal leakage at the shaft seal (see 5.8.1);
- Increased the pump body should be able to withstand certain pipe loads and thermal expansion caused by external forces and external torque (see 5.10.5, Table 5);
- Increased requirements for intelligent control, alarm, and shutdown systems (see 5.15);
- Added the basic data sheet format of the three-screw pump (see Appendix A). This standard was proposed by the China Machinery Industry Federation. This standard is under the jurisdiction of the National Pump Standardization Technical Committee (SAC/TC211).

This standard was drafted. Tianjin Pump Industry Machinery Group Co., Ltd., Huangshan Industrial Pump Manufacturing Co., Ltd., Hebei Hengsheng Pump Industry Co., Ltd. Company, Nanjing Industrial Pump Factory, Hangzhou Xinglong Pump Co., Ltd., China Petroleum Pipeline Engineering Co., Ltd. Shenyang Branch. The main drafters of this standard. Ma Shiguang, Gan Zhiqiang, Wang Jinlai, Wang Yang, Wang Xu, Zhu Bin, Zheng Guosheng, Jin China, Zhao Wei. The previous versions of the standards replaced by this standard are.

---GB/T 10886-1989, GB/T 10886-2002;

---GB/T 10887-1989. Three screw pump

1 Scope

GB/T 10886-2019 is the Chinese national standard on three screw pumps, in the field of fluid systems and general-purpose 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 18 October 2019 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2020. Classification: ICS 23.080, CCS J71. 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 type and type of the three-screw pump (hereinafter referred to as the pump), requirements, test methods, inspection rules, sets, signs, packaging, Transportation, storage and guarantees. This standard applies to pumps that do not contain solid particles and have a lubricious liquid.

2 Normative references

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

GB/T 9112 Steel Pipe Flange Types and Parameters

GB/T 13306 signage General technical conditions for

GB/T 13384 mechanical and electrical product packaging

GB/T 17241.1 cast iron pipe flange type

GB/T 29529-2013 Method for measuring and evaluating noise of pumps

GB/T 29531-2013 Pump vibration measurement and evaluation method

JB/T 4297 pump product painting technical conditions

JB/T 6913 Pump Product Cleanliness

JB/T 8091 screw pump test method

JB/T 8687 Pump Product Sampling Inspection

3 Terms and definitions

The terms and definitions defined by JB/T 8091 apply to this document.

4 Type and model

4.1 type According to the provisions of this standard, the pump can be made into the following types.

- Single suction pedestal type;
- Single suction side disc type;
- Single suction vertical suspension;
- Single suction column foot.
- Double suction horizontal base type;
- Double suction column foot.

4.2 Model The model number can be expressed by the following Chinese pinyin letters, numbers and symbols to indicate the pump model, meaning pump type, purpose, medium