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

GB/T 14794-2025

Replacing GB/T 14794-2016

Steam reciprocating pump

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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 for standardization documents" Drafting. This document replaces GB/T 14794-2016 Steam Reciprocating Pumps. Compared with GB/T 14794-2016, except for structural adjustments and editorial changes, the main technical differences are as follows:

a) The scope of application of the standard has been changed (see Chapter 1, Chapter 1 of the 2016 edition);

b) Added the power driving gas form (see 5.1.2);

c) The requirement for outer diameter has been deleted (see 4.1.6 of the 2016 edition);

d) The standards that pump flange connection dimensions should comply with have been changed (see 5.1.10, 4.1.10 of the 2016 edition);

e) Added thermal insulation requirements for cylinders and liquid cylinders (see 5.1.13);

f) The life indicators of key pump components have been changed (see 5.4,

4.3 of the 2016 edition). Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the China Machinery Industry Federation. This document is under the jurisdiction of the National Technical Committee for Standardization of Pumps (SAC/TC211). This document was drafted by: Baoji Aerospace Power Pump Industry Co., Ltd., Dongying Shengchang Petroleum Machinery Co., Ltd., Weijia Intelligent Equipment (Chongqing) Limited Liability Company, Puyang Tianlong Industrial Co., Ltd., Weifang Shengli Petrochemical Machinery Co., Ltd., Hefei General Machinery Research Institute Co., Ltd., Zhoushan COSCO Shipping Heavy Industry Co., Ltd., Wuxi East Asia Pump Industry Co., Ltd., Benxi Pump Co., Ltd., Zhejiang University City College, Nantong University Zhejiang Sci-Tech University, Wuhan University, General Machinery Key Core Basic Parts Innovation Center (Anhui) Co., Ltd., Jiangsu Boji Spray System Co., Ltd. Co., Ltd. and China National Machinery Industry Corporation. The main drafters of this document are. Wang Chao, Yang Yuanzhe, Liu Jun, Tian Junhui, Qu Li, Zhang Di, Zhu Yulei, Weng Hailong, Feng Changwei, Feng Feina, Cheng Xiaomin, Li Xiaojun, Cao Yupeng, Li Jiangyun, Zou Likai, Liu Guangbing, Liu Haishan, Guan Le. The previous versions of this document and the documents it replaces are as follows:

---First issued in 1988 as GB/T 9235-1988, first revised in 1993 as GB/T 14794-1993, Second revision, third revision in 2016;

---This is the fourth revision. Steam reciprocating pump

1 Scope

GB/T 14794-2025 is the Chinese national standard on steam reciprocating pump, 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 1 August 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 November 2025. Classification: ICS 23.080, CCS J 71. 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 document specifies the types and basic parameters, technical requirements, test methods and inspection rules, nameplates and packaging of steam reciprocating pumps. This document is applicable to the transportation of clean water with a temperature not exceeding 130°C and petroleum products with a kinematic viscosity not exceeding 850mm²/s and chemical General steam reciprocating pumps for other liquids of similar quality, and steam reciprocating hot oil pumps for petroleum products with a temperature not exceeding 500°C Liquefied gas pumps with a delivery temperature not lower than -40°C shall be implemented as a reference.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 6414 Dimensional tolerances, geometrical tolerances and machining allowances for castings

GB/T 7784 Test methods for motor-driven reciprocating pumps

GB/T 7785 Classification and terminology of reciprocating pumps

GB/T 9069 Engineering method for determination of sound power level of reciprocating pumps

GB/T 9124.1 Steel pipe flanges Part 1: PN series

GB/T 9124.2 Steel pipe flanges Part

3 Terms and Definitions

The terms and definitions defined in GB/T 7785 apply to this document.

4 Types and basic parameters

4.1 Type Steam reciprocating pumps (hereinafter referred to as pumps) are divided into horizontal pumps and vertical pumps according to the placement type.

4.2 Basic Parameters For the basic parameters of the pump, please refer to Appendix A. For the basic parameters of general steam reciprocating pumps, please refer to Table A.1. For the basic parameters of steam reciprocating hot oil pumps, please refer to Table A.2.