ICS 23.140
CCS J 72

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 20322-2023

Replacing GB/T 20322-2006

Petroleum and natural gas industries - Reciprocating compressors

Issued on: May 23, 2023 **Implemented on: December 1, 2023**

Issued by: State Administration for Market Regulation, China National Standardization Administration

Table of Contents

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 20322-2006 "Reciprocating Compressors for the Oil and Gas Industry", and is consistent with GB/T 20322-2006

In addition to structural adjustments and editorial changes, the main technical changes are as follows:

---Changed the scope, deleted the "oil-lubricated or non-oil-lubricated cylinder", "used in key facilities" and "assembled high-speed detachable engine drive

"This standard is not applicable to gas engines and steam turbine drives and" and other content (see Chapter 1,:2006 edition

Chapter 1);

--- Changed the normative references (see Chapter 2, Chapter 2 of the:2006 edition);

---Changed and added some terms and definitions (see Chapter 3, Chapter 3 of the:2006 edition);

--- Added the requirement for the seller to provide the maximum sound pressure and sound power data for each octave band (see 5:1:2);

--- Added the minimum inlet water temperature requirement for entering the water-cooled bearing seat (see 5:1:3);

---Changed the crankshaft interval angle for the calculation of integrated rod load and gas load (see 5:4:3, 5:4:3 of the:2006 edition);

--- Added the load requirements that the compressor should bear (see 5:4:5);

--- Added requirements for cold radial runout (see 5:6);

--- Changed the requirements for the maximum allowable working pressure setting of the cylinder (see 6:1:1:1, 6:1:1:1 of the:2006 edition);

--- Added the depth requirements for screw holes in pressure equipment (see 6:1:1:5);

---Changed the surface roughness requirements of the working inner diameter of the cylinder (see 6:1:2:5, 6:1:2:5 of the:2006 edition);

---Deleted the spraying requirements for the working chamber of the cylinder, and added the honing requirements for the working chamber of the cylinder with a non-metallic tetrafluoroethylene ring (see

6:1:2:6 of the:2006 edition);

--- Changed the provisions of the bolted connection (see 6:1:2:11, 6:1:2:11 of the:2006 edition);

--- Increased the heating requirements of the self-contained closed water jacket cooling system [see 6:1:3:5d)];

---Changed and added the technical requirements for the interface welded to the cylinder and the short connection pipe (see 6:1:4, 6:1:4 of the:2006 edition);

---Changed the design requirements of the pressure valve cover (see 6:2:8, 6:2:8 of the:2006 edition);

--- Added specific performance index requirements for non-metallic valve plates (see 6:2:10);

---Deleted the hardness requirements for the metal valve seat (see 6:2:11 of the:2006 edition);