

ICS 23.080

CCS J71



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

GB/T 13364-2008

Replacing GB/T 13364-1992

Measurement of mechanical vibration for reciprocating pump

往复泵机械振动测试方法

Issued on: July 1, 2008

Implemented on: February 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions Installation and Operating Requirements	2
5 Test equipment 2 6 direction of the selected test	3
4 Appendix A (informative) Mechanical Vibration Test Report	5

Foreword

This standard is GB/T 13364-1992 "reciprocating pump mechanical vibration test method" amendments. Compared with GB/T 13364-1992, the main changes are as follows:

- Original installation standards and requirements of the various operating conditions of the pump, according to GB/T 7784 standards;
- Increased Chapter 7 measuring point selection. Since the implementation of this standard replaces GB/T 13364-1992. Appendix A of this standard is an informative annex. The standard proposed by China Machinery Industry Federation. This standard by the National Standardization Technical Committee pump (SAC/TC211) centralized. This standard was drafted. Hefei General Machinery Research Institute. The main drafters of this standard. Horse Youth. This standard replaces the standards previously issued as follows:
- GB/T 13364-1992. Reciprocating pump mechanical vibration test method

1 Scope

GB/T 13364-2008 is the Chinese national standard on measurement of mechanical vibration for 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 July 2008 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 February 2009. 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 test methods reciprocating pump (hereinafter referred to as

"pump") mechanical vibration. This standard applies to the vibration from the pump body surface measured, the frequency range of 2Hz ~ 1000Hz. This standard does not apply to a manual pump.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard. However, according to research encourages the parties to the agreement Study whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 7784-2006 Test Method for reciprocating pump motor

GB/T 7785-1987 reciprocating pump classification and terminology

3 Terms and Definitions

GB/T 7785 and established the following terms and definitions apply to this standard.

3.1 Rms vibration velocity refers vibration velocity changes with time. Using equation (1). $V_{p\text{rms}} = \frac{1}{T} \int_0^T V_p dt$ Where.

--- V_p RMS value of vibration velocity in millimeters per second (mm/s); T

--- vibration period in seconds (s). Application of spectrum analysis technology, using Equation (2) to determine the vibration velocity RMS value. $V_{p\text{rms}} =$