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

GB/T 10179-2009

Replacing GB/T 10179-1988

**Servo-hydraulic test equipment for generating vibration --
Method of describing characteristics**

液压伺服振动试验设备 特性的描述方法

(English Translation)

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Table of Contents

Preface	
Introduction	
1 Scope	
2 Normative references	
3 Symbol	
Unit 2	
5 3 Terms and definitions	
6 Describes characteristics of each maker correspondence provided by Level	
7 Hydraulic vibration generator	
7.1 General Characteristics	
7.2 19 moving parts	
7.3 Auxiliary equipment	
7.4 Installation Requirements	
7.5 Environmental and operating conditions	
7.6 Technical Document	
8 Control system	
8.1 Servo valve control device	
8.2 Control and protection panel	
8.3 Auxiliary equipment	
8.4 Installation Requirements	
8.5 Environmental and operating conditions	
8.6 Technical Document	
9 Hydraulic drive system	
9.1 General Characteristics	
9.2 Device features	
9.3 Auxiliary equipment	
9.4 Installation Requirements	
9.5 Environmental and operating conditions	
9.6 Technical Document	
10 Hydraulic vibration generator system	
10.1 General characteristics	
10.2 31 moving parts	

Foreword

This standard is equivalent to using ISO 8626. 1989 "describes a method of hydraulic servo vibration test equipment characteristics" (in English).

This standard is equivalent translation ISO 8626. 1989, the standard consistent with the structure and technical content.

This standard and ISO 8626. 1989 compared to editorial changes as follows.

--- Remove the ISO 8626. 1989 Foreword.

--- Remove the introduction of the note.

--- Use the "standard" word instead of "this International Standard."

--- Use the decimal symbol. "" Symbols instead of English as a decimal point "."

--- Added Note 3 5.2.

--- With ISO 5344:2004 definition of the term "3.10 test mass" in place of the definition of the term "5.4 Test mass" of 5.4.6 5.4.1 to delete the terms and definitions.

--- Added content in the definition 5.5.11 The term "noise" in.

--- In Appendix A in Figure 6, Figure 7 and Figure 8 are modified to Figure A. 1, Figure A. 2 and Figure A. 3; 6 to change the tables in Appendix C

Table C. 1, Fig. 9 to Fig. C. 1; Figure in Appendix D to 10 D. FIG. 1.

This standard is GB/T 10179-1988 amendment, compared with the GB/T 10179-1988 main modifications are as follows.

--- Increasing the foreword (see preface to this edition).

--- In accordance with ISO 8626. 1989 structure, separated from the introduction of the original standard out in Chapter 1, placed before the text.

--- Deleted 1.1 Note; the "A-level description" to "Level 1 Description", the "B-level description" to "Level 2 Description" (1988 edition 1.1; 0 Excerpts of Chapters 1).

--- Remove the original standard adds references GB/T 1301 "surface roughness parameters and their values"; as equivalent to international standards, the direct use of ISO 8626. 1989 international standard reference instead of their corresponding national standards referenced in the original standard (1988 Version of Chapter 2; Chapter 2 of this edition).

--- 5.2 in the original Notes 2 and 3 were adjusted to Note 1 and Note 2, Note 1 is adjusted to the original Note 3 (1988 Version 5.2; Excerpts 5.2).

--- The definition of the term "5.4 Test mass" has been modified, and deleted the term

Article number 5.4.1 to 5.4.6 and their definitions (1988 Version 5.4; 5.4 edition).

Since the implementation of this standard replaces GB/T 10179-1988.

The Standard Appendix A, Appendix B, Appendix C and Appendix D are normative appendix.

This standard by the national mechanical vibration, shock and condition monitoring Standardization Technical Committee (SAC/TC53) and focal points.

Introduction

This standard specifies the hydraulic servo vibration test equipment to produce linear vibration characteristics, and such equipment as a selection guide.

Note: This standard is facilitate the description, the "hydraulic servo vibration test equipment" hereinafter referred to as "hydraulic test equipment." the term "hydraulic" meaning usually refers to. a hydraulic drive system for electric and hydraulic control means for conveying hydraulic fluid was variable flow Body, and a single or a plurality of control loops so that acting on the actuator to generate the vibratory motion.

Hydraulic test equipment and hydraulic linear vibration generator schematic diagram shown in Figure A. 1 and A. Fig. In the hydraulic test equipment Following parts.

- Complete hydraulic vibration generator system [one (or more) of hydraulic vibration generator, one (or more) servo valve control device, Hydraulic drive system];
- Controller;
- Auxiliary station (see ISO 6070);
- Other external devices.

If the user chooses to obtain elements from multiple sources (for example, the manufacturer) and the composition of the system, Chapter 6, Chapter 7, Chapters 8 and 9 Characteristics chapter describes the provisions for which the various elements separately hydraulic servo vibration testing system.

If the user chooses to obtain complete hydraulic servo vibration test systems from one source, you should refer to Chapter 6, 9, and Chapter 10.

GB/T 10179-2009/ISO 8626. 1989 Hydraulic servo vibration test equipment Method of describing characteristics

1 Scope

Hydraulic test equipment for generating vibration has a wide range of properties, these properties can be assessed in different ways.

In order to be able to different sources of hydraulic test equipment to compare the standards of.

- a) at a glance;
- b) the standard method for obtaining certain characteristics.

This standard provides the following description of two levels, used to describe the hydraulic test equipment.

- a) Level 1 is described;
- b) Level 2 is described.

Describe a level can be selected by the user and manufacturer of consultation, this standard is given by the manufacturer, in its characteristic described tenders List of technical documents and provided with the device. The manufacturer's technical file must contain at least the Level 1 describes the corresponding feature.

This standard applies to the following devices.

- Hydraulic vibration generator [all or part of the actuators, servo valves, position control means, if desired, also has a static force compensation Means (see Chapter 5, Chapter 6 and Chapter 7)];
- The servo valve control device (see Chapter 5, Chapter 6, and Chapter 8);
- Hydraulic drive system (see Chapter 5, Chapter 6 and Chapter 9);
- Complete hydraulic vibration generator system (see Chapter 5, Chapter 6, and Chapter 10).

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, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

ISO 2041 vibration and shock vocabulary Determination of ISO 3746 acoustic noise source sound power levels Simple Method ISO 4406 Hydraulic fluid level of contamination by solid particles General rules ISO 4413 hydraulic transmission equipment and transmission control system applications ISO 6070 vibration generator auxiliary devices Method of describing characteristics