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

GB/T 14480.1-2015

**Non-destructive testing instruments -- Equipment for eddy
current examination -- Part 1: Instrument characteristics and
verification**

无损检测仪器 涡流检测设备 第1部分：仪器性能和检验

(English Translation)

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Foreword

GB/T 14480 "nondestructive testing eddy current testing equipment" is divided into three sections.

- Part 1. Instrument characteristics and verification;
- Part 2. Probe characteristics and verification;
- Part 3. System characteristics and verification.

This section GB/T 14480 Part 1.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO 15548-1:2008 "NDT eddy current testing equipment - Part 1. Performance and instruments test".

For ease of use, this part of ISO 15548-1:2008 made the following editorial changes.

- Modify the standard name.

The existence of international documents and the consistency of the relationship between this part of the normative references the following documents.

GB/T 30565-2014 General NDT Eddy current testing (ISO 15549:2008, MOD).

This part is proposed by China Machinery Industry Federation.

This part of the National Technical Committee of Standardization Testing Machine (SAC/TC122) centralized.

This section is responsible for drafting units. Changchun Research Institute of Machinery Co., Edson (Xiamen) Electronics Co., Ltd. Ji Ning Luke Detection Equipment Co., Ltd., Liaoning Instrument Research Institute, Shenzhen State Technology Instrument Co., Ltd., Changchun Gold Design Institute.

1 Scope

GB/T 14480 provisions of this part of the common features of the eddy current instrument, measuring and testing methods.

Through the evaluation of these properties so accurately describe and compare the eddy current testing equipment possible.

By careful selection of system performance, you can design a special eddy current testing system to meet the requirements.

The provisions of this section also applies to auxiliary vortex is attached devices.

This section does not specify the performance test specifications, acceptance criteria are not specified, these applications are given in the technical documentation.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

ISO 12718 Non-destructive testing Eddy current testing vocabulary
(Non-destructivetesting-Eddycurrenttesting-Terminology) ISO 15549 Non-destructive testing Eddy current testing basic principles
(Non-destructivetesting-Eddycurrenttesting-Generalprinciples)

3 Terms and Definitions

Terms and definitions defined in ISO 12718 apply to this document.

4.1.1 Instrument Type

Eddy current testing equipment classification according to the following requirements.

a) General eddy current instrument. by the user to establish a link between the measured parameters and display or output of a general-purpose application equipment.

Series probe can be connected to the instrument, the instrument manufacturer shall provide a detailed description of the instrument inside the electrical properties so that the user is provided Meter detection system. Detection system shall meet the requirements of ISO 15549. Users should change the frequency, gain, balance (except from Outside

balancing), phase and filter values, and displays the gain and zero.

b) special eddy current instrument. has a special purpose application of measurement parameters and display or output is clearly defined between, instrument the probe is specific. For this type of instrument can be part of this section apply.

4.1.2 Power

Instrument can be powered by battery or AC power locally. For proper operation, shall be specified nominal voltage, frequency and power loss with it