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

GB/T 14790.2-2014

**Mechanical vibration -- Measurement and evaluation of human
exposure to hand-transmitted vibration -- Part 2: Practical
guidance for measurement at the workplace**

机械振动 人体暴露于手传振动的测量与评价 第2部分：工作场所测量实用指南
(English Translation)

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Foreword

GB/T 14790 "Mechanical vibration of human exposure to hand-transmitted vibration measurement and evaluation" is divided into two parts.

--- Part 1. General requirements;

--- Part 2. A Practical Guide to Workplace measurements.

This section GB/T 14790 Part 2.

This section drafted in accordance with the rules of GB/T 1.1-2009 and GB/T 20000.2-2009 given.

This section uses the translation method identical with the international standard ISO 5349-2:2001 Vibration Measurement "mechanical vibration and human exposure to hand-transmitted Evaluation Part 2. A Practical Guide to Workplace Measurement "(in English).

Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB/T 2298-2010 Mechanical vibration, shock and condition monitoring of vocabulary (ISO 2041:2009, IDT)

--- GB/T 15619-2005 human exposure mechanical vibration and shock Vocabulary (ISO

5805:1997, IDT)

--- GB/T 23716-2009 body vibration response measurement instruments (ISO 8041:2005, IDT)

--- GB/T 8910 (all parts) held portable power tools - Measurement of vibrations at the handle [ISO 8662 (all parts)] this part of the National mechanical vibration, shock and condition monitoring Standardization Technical Committee (SAC/TC53) and focal points.

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Introduction

Operating machinery can affect workers' exposure to possible comfort, efficiency and the impact of health and safety, in some cases hand - Machinery Vibration environments. General requirements for the measurement and evaluation of hand-transmitted vibration in GB/T 14790.1 in. To be able to follow GB/T 14790.1 correct measurements, this section provides practical guidelines and were given hand-transmitted vibration measurements in the workplace Efficiency strategy.

This section describes the policy will be applied in practice daily vibration exposure of the operator's workplace and the associated uncertainty.

Vibration exposure assessment can be divided into several distinct steps.

- Allowing an operator to identify a series of operations in the normal operating mode;
- Select the operation to be measured;
- Measured for each of the selected operating acceleration root mean square (rms);
- Evaluation of each of the identified actions typical daily exposure time;
- 8h calculated energy such as vibration total value (daily vibration exposure).

GB/T 14790.1 described vibration exposure assessment is based on the handle or grip portion of the vibration amplitude measurement and exposure time between. Other factors, such as grip and propulsion force applied by the operator, the arm position, the direction of vibration and environmental conditions, not be taken into consider. As part of the GB/T 14790.1 application does not provide for these other factors evaluation guidelines. However, in general, the report of the whole Ministry of the related information is important for the proposed improved method for evaluating the risk of vibration.

Mechanical vibration Human exposure to hand-transmitted vibration measurement and evaluation Part 2. A Practical Guide to Workplace measurements

1 Scope

This section according to GB/T 14790.1 specified in the workplace hand transmitted vibration measurement and evaluation provides guidance.

This section GB/T 14790 describes the calculation 8h energy such as vibration total value (daily vibration exposure) conducted a representative vibration measurements Measures to determine the amount of each operating day and time of exposure should be taken. This section provides methods for determining relevant in the evaluation of vibration exposure should consider the method of operation.

This section applies to human exposure to (bear) mounted hand-held or hand-guided machinery, vibration of the workpiece, a mobile or stationary machines controlled by Set to pass all occasions arm system vibration.

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.

GB/T 14790.1-2009 Mechanical vibration of human exposure to hand-transmitted vibration measurement and evaluation - Part 1. General requirements (ISO 5349-1:2001, IDT) ISO 2041 Mechanical vibration, shock and condition monitoring of vocabulary (Mechanicalvibration, shockandconditionmonito-ring-Vocabulary) ISO 5805 Mechanical vibration and shock human exposure vocabulary (Mechanicalvibrationandshock-Humanexpo-sure-Vocabulary) ISO 8041 body vibration response of measuring instruments (Humanresponsetovibration-Measuringinstrumen-tation) ISO 8662 (all parts) held portable power tools - Measurement of vibrations at the handle (Hand-heldportablepowertools-Measurementofvibrationsathandle)

3.1 Terms and Definitions

ISO 2041 and ISO 5805 as defined in the following terms and definitions apply to this document.

3.1.1

Hand feed mechanical hand-fedmachine the operator of the workpiece to the work and partly mechanical, hand-held machine the workpiece is subjected to vibration exposure.

Examples. band saw, stationary grinding machines.

3.1.2

Hand-guided mechanical hand-guided machine Operator manually guided through the handle, steering wheel or rudder machinery is subjected to vibration exposure.