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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 26548.7-2020

Hand-held portable power tools - Test methods for evaluation of vibration emission - Part 7: Nibblers and shears

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Foreword

GB/T 26548 "Handheld portable power tools vibration test method" is divided into the following parts.

---Part 1.Angle and face grinders;

---Part 2.Gas trigger, nut wrench and screwdriver;

---Part 3.Polishing machines, rotary, sliding and double polishing machines;

---Part 4.Straight shank grinder;

---Part 5.Drills and impact drills;

---Part 6.Compaction machine;

---Part 7.Punching machine and scissors;

---Part 8.Reciprocating saws, polishing machines and files, and pendulum or rotary saws;

---Part 9.Derusting hammer and needle beam derusting device;

--- Part 10.Impact rock drills, hammers and breakers;

---Part 11.Stone Hammer;

---Part 12.Mold grinder;

---Part 13.Fastener drive tools.

This part is Part 7 of GB/T 26548.

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

The translation method used in this part is equivalent to ISO 28927-7.2009 "Hand-held portable power tool vibration test method Part 7.

Punching machine and scissors.

The Chinese documents that have a consistent correspondence with the international documents cited in this section are as follows.

---GB/T 5621-2008 Rock drilling machinery and pneumatic tools performance test method (ISO 2787.1984, MOD)

---GB/T 6247.1-2013 Terminology for rock drilling machinery and portable power tools Part 1.Rock drilling machinery, pneumatic tools and

Pneumatic machinery (ISO 5391.2003, MOD)

This section has made the following editorial changes.

--- Convert the "bar" in the international standard to "MPa" (1bar=0.1MPa).

This part was proposed by China Machinery Industry Federation.

This part is under the jurisdiction of the National Standardization Technical Committee for Rock Drilling Machinery and Pneumatic Tools (SAC/TC173).

Drafting organizations of this section. Dongguan Institute of Technology, Tianshui Rock Drilling Machinery Pneumatic Tool Research Institute, Taitian Group Co., Ltd., National Pneumatic Products

Quality Supervision and Inspection Center, Shaoyang College.

Introduction

This document is a Type C standard specified in ISO 12100.

For machines designed and manufactured in accordance with the requirements of Type C standards, when the requirements of Type C standards are different from those in Type A or Type B standards

At the time, the requirements in the C standard are better than other standards.

GB/T 25631-2010 gives general technical conditions for handheld and hand-guided mechanical vibration measurement, GB/T 26548 (all parts

(Point) Based on this standard, the vibration test method of hand-held portable machines is given, and the operating conditions of the machine under the type test conditions are specified.

Parts and other requirements for type test performance. The standard structure and chapter numbering are consistent with GB/T 25631-2010.

This part of GB/T 26548 adopts the sensor reference positioning method first adopted in the European series of standards EN60745.

The reason for continuity is inconsistent with GB/T 25631-2010 in description. The sensor is preferably placed near the area between the thumb and index finger of the hand

Domain, because this position has the least interference to the operator holding the machine.

Usually, the vibration produced by the punching machine and the scissors is very different. This difference in vibration characteristics is caused by the machine

The characteristics of the material and the difference in supporting materials.

In order to provide a method to produce good measurement reproducibility, this part of GB/T 26548 uses the processing of cutting metal sheets.

The main reason is that the thin metal plate has good support performance to ensure the good use of the punch and the scissors blade. Assessment of vibration exposure in the workplace

Adopt GB/T 14790 (all parts) procedures.

The value obtained is the type test value, which is used to represent the average value of the upper quartile of the typical vibration of the machine in actual use. however,

Actual values sometimes vary greatly, depending on many factors, including the operator, work tasks, and insertion tools or consumables. The machine itself

The maintenance status may also be important. In real working conditions, the impact of operators and operating procedures on low-amplitude vibration is particularly serious. because

Therefore, the vibration radiation value below 2.5m/s2 is not recommended for evaluation under real working conditions. In this case, it is recommended to use 2.5m/s2 vibration

Momentum value to directly evaluate the vibration of the machine.

If precise values are required for a specific workplace, it is necessary to perform the calculation in accordance with GB/T 14790 (all parts) under this working condition.

Line measurement. The measured vibration value under actual working conditions may be higher or lower than the value obtained with this section.

In actual working conditions, improper support of processing materials or wear of punches and scissors blades are prone to high vibration.

Vibration test method for handheld portable power tools

Part 7.Punching machine and scissors

1 Scope

This part of GB/T 26548 specifies the test method for hand-transmitted vibration measurement of hand-held power-driven punching and shearing machine and scissors handle.

The type inspection procedure for the vibration magnitude of the handle grip part when operating the machine under the specified test conditions is determined. The measured results are used to compare

Compared with the vibration level of different models of the same model.

This section applies to compressed air or other means to drive, used to cut metal plates or composite material plates punching shears and scissors (see Chapter 5).

Note. In order to avoid confusion between "power tools" and "insertion tools", "machines" are used instead of "power tools" throughout this section.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 6247.2-2013 Rock Drilling Machinery and Portable Power Tools Terminology Part 2.Hydraulic Tools (ISO 17066.2007, IDT)

GB/T 14790.1-2009 Mechanical vibration Measurement and evaluation of human exposure to hand-borne vibration Part 1.General requirements (ISO 5349-1.2001, IDT)

GB/T 14790.2-2014 Mechanical vibration Measurement and evaluation of human exposure to hand-borne vibration Part 2.Workplace measurement

Practical Guide (ISO 5349-2.2001, IDT)

GB/T 25631-2010 Mechanical vibration Hand-held and hand-guided mechanical vibration evaluation rules (ISO 20643.2005, IDT)

ISO 2787.1984 Rotary and impact pneumatic tools performance test

ISO 5391.2003 Pneumatic Tools and Machinery Vocabulary