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

GB/T 26548.13-2025

**Hand-held portable power tools - Test methods for evaluation of
vibration emission - Part 13: Fastener driving tools**
(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents" Drafting.

This document is Part 13 of GB/T 26548 "Hand-held portable power tools vibration test method". GB/T 26548 has been published.

The following parts are published.

- Part 1: Angle and face grinding machines;
- Part 2: Air triggers, nutrunners and screwdrivers;
- Part 3: Polishing machines, rotary, sliding and compound grinders;
- Part 4: Straight shank grinding machines;
- Part 5: Drills and impact drills;
- Part 6: Compactors;
- Part 7: Punching machines and shears;
- Part 8: Reciprocating saws, polishers and files and pendulum or rotary saws;
- Part 9: Descaling hammers and needle descaling devices;
- Part 10: Percussive rock drills, hammers and breakers;
- Part 11: Stone hammer;
- Part 12: Mould grinding machines;
- Part 13: Fastener driving tools.

This document is equivalent to ISO 28927-13:2022 "Hand-held portable power tools - Vibration test methods - Part 13: Fastener drive Power Tools".

The following editorial changes have been made to this document.

- Convert "bar" in international standards into "MPa" (1bar=0.1MPa).

Introduction

To standardize the vibration measurement method for handheld portable power tools, the International Organization for Standardization has published ISO 28927, a document with 13 parts.

my country intends to adopt the 13 parts of ISO 28927 as equivalents and formulate the corresponding parts of GB/T 26548.

GB/T 26548 is proposed to be structured as follows.

- Part 1: Angle and face grinders. Covers angle electric grinders, angle pneumatic grinders, and face pneumatic grinders.
- Part 2: Air triggers, nut runners and screwdrivers. Covers pistol-grip impact air triggers, ring-grip impact air triggers, ratchet air wrenches screwdrivers, angle nut drivers, straight screwdrivers, and pistol-grip screwdrivers.
- Part 3: Polishing machines, rotary, sliding and compound grinders. Covering angle grinders/polisher, end grinders/polisher Polishing machine, compound grinder, slide plate grinder.
- Part 4: Straight shank grinding machines. Covers straight shank grinding machines using flat grinding wheels, straight shank grinding wheels using cored grinding heads Machine, use an extended straight shank grinding wheel machine with a core grinding head.
- Part 5: Drills and impact drills. Covers pistol-grip drills, angle drills and impact drills.
- Part 6: Compactors. Covers compactors for ground compaction and compactors for workbenches.
- Part 7: Punching shears and scissors. Covers punching shears, pistol-grip scissors, circular cutting scissors, and straight-handled scissors.
- Part 8: Reciprocating saws, polishers and files and pendulum or rotary saws. Covers straight handle pendulum saws, small circular saws, circular saws Handle reciprocating saw, gun handle reciprocating saw, straight handle reciprocating saw, fine saw, straight handle reciprocating polishing/filing machine, straight handle horizontal polishing machine Polishing/filing machines, angular reciprocating polishing/filing machines, oscillating knives.
- Part 9: Descaling hammers and needle descaling devices. Covers engraving pens, needle descaling devices and descaling hammers.
- Part 10: Percussive rock drills, hammers and breakers. Covers rock breakers/rock drills, rotary hammers, air shovels, small blasthole drills, picks, chisels Hammer, riveter.
- Part 11: Stone hammers. Covering straight-handled hammers, ring-handled hammers, spear-handled hammers, and chisels with sleeves.
- Part 12: Mould grinding machines. Covers straight shank grinding machine, angle grinding machine and pencil-shaped grinding machine.
- Part 13: Fastener driving tools. Covers pneumatic fastener driving tools, battery-powered fastener driving tools, electric fasteners Fastener driving tools, gunpowder powered (nail bullet) fastener driving tools, gas powered fastener driving tools.

This document is a Type C standard as defined in ISO 12100.

For machines designed and manufactured in accordance with the requirements of Class C standards, when the requirements of Class C standards differ from those in Class A or Class B standards, when the requirements of type C standards are met, they shall prevail over those of other types of standards.

GB/T 25631 provides the general technical conditions for the measurement of vibration radiation of handheld and hand-guided machinery. GB/T 26548 (all parts) Based on this standard, the vibration test method for handheld portable machines is given, and the operation of the machine under type inspection conditions and the vibration test of the type are specified.

The standard structure and chapter numbering are consistent with GB/T 25631 for other requirements for performance testing.

This document uses the basic positioning method of sensors first adopted in the European series of standards EN60745 (all parts).

The sensor is preferably placed in the area between the thumb and index finger of the hand because this position interferes least with the operator's grip on the machine.

The values obtained are type test values and are intended to represent the average of the upper quartile of typical vibration levels of the machine in actual use.

However, actual values can vary widely depending on many factors, including the operator, the work task, and the tools or consumables inserted.

The maintenance status of the machine itself may also be important. The influence of the operator and operating procedures on low-amplitude vibration is particularly important under real working conditions.

In this case, it is not recommended to use a radiation value lower than 2.5m/s^2 to evaluate the vibration level under actual working conditions.

The vibration magnitude is used to evaluate mechanical vibration.

Vibration test method for hand-held portable power tools Part 13: Fastener driving tools

1 Scope

This document describes a test method for measuring hand-transmitted vibration in the handle of fastener driving tools.

Type inspection procedure for the vibration level of the handle grip.

This document applies to tools for driving fasteners using nails, staples or pins, driven by compressed air or other means.

This document applies to tools with single sequential fire, trigger fire, automatic reset trigger fire, or continuous trigger fire (see Figures 1 to 3).