

ICS 65.060.80

CCS B 95



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

GB/T 20456-2023

Replacing GB/T 20456-2012

**Portable chain-saws - Non-manually actuated chain brake
performance**

Issued on: May 23, 2023

Implemented on: December 1, 2023

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

- foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 performance requirements

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 replaces GB/T 20456-2012 "Forestry Machinery Portable Chain Saw Passive Saw Chain Brake Performance Requirements and Test Methods"

Compared with GB/T 20456-2012, except for structural adjustment and editorial changes, the main technical changes are as follows:

- a) Electric chain saws are added to "Scope" (see Chapter 1, Chapter 1 of the:2012 edition);
- b) Changed the content of "Performance Requirements" (see Chapter 4, Chapter 4 of the:2012 edition);
- c) The provisions for electric chain saws have been added in Figure 1 (see Chapter 4);
- d) Changed the content of "acceleration test equipment" (see 6:1, 6:1 of the:2012 edition);
- e) Changed the content of "test device" (see 6:2, 6:2 of the:2012 edition);
- f) Changed the content of "test preparation" (see Chapter 7, Chapter 7 of the:2012 edition);
- g) Changed the contents of the low-pass filter in Appendix A (see Appendix A, Appendix A of the:2012 edition):

This document is equivalent to ISO 13772:2018 "Forestry Machinery Portable Chain Saw Non-Manual Trigger Saw Chain Brake Performance":

The following minimal editorial changes have been made to this document:

- In order to coordinate with existing standards, change the name of the standard to "Performance of Non-Manual Trigger Saw Chain Brake for Portable Chain Saws";
- Incorporated the amendments of ISO 13772:2018/Amd:1:2020, the outer margins of the

terms involved are vertical

Double lines (||) are marked:

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

1 Scope

This document specifies the performance requirements and requirements for non-manually triggered chain brakes for hand-held portable chainsaws powered by electric or gasoline engines and

experiment method:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document:

ulary)

Note: GB/T 18960-2023 Portable Chainsaw Vocabulary (ISO 6531:2017, IDT)

3 Terms and Definitions

The terms and definitions defined in ISO 6531 apply to this document:

ISO and IEC maintain terminology databases for standardization at the following addresses:

---ISO online browsing platform: <https://www.iso.org/obp>;

4 performance requirements

The performance of non-manually triggered saw chain brakes shall be tested on a new chain saw in normal production, equipped with the cutting tool specified in the instruction manual:

The shortest and longest guide plates with a cutting length not greater than 500mm: If the specified guide plate cutting length is not less than 500mm, only use

Test with the shortest guide bar specified: Battery-operated chainsaws with several

recommended battery pack options should be ordered with the lightest battery pack and shortest

The largest guide plate, the heaviest battery pack and the longest guide plate configuration are tested:

When testing in accordance with the provisions of Clause 8, the horizontal acceleration (a_x) and vertical acceleration (a_y) of each triggering action of the saw chain brake

When the intersection points of the coordinates are all below the critical lines of different chain saw types and sizes listed in a), b) or c) in Figure 1, it is determined that the non-manual trigger saw

The performance of the chain brake is acceptable: