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

GB/T 46640-2025

Portable chain-saw hand-guards - Mechanical strength

便携式链锯护手器 机械强度

(English Translation)

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Foreword

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

Drafting.

This document is modified to adopt ISO 6534:2023 "Mechanical strength of hand guards for portable chainsaws used in forestry machinery".

The technical differences between this document and ISO 6534:2023, and the reasons therefor, are as follows.

---The environmental and temperature requirements for the impact tests of the front and rear hand guards have been modified (see 5.2.1) to adapt to my country's national conditions.

The following editorial changes have been made to this document.

---To align with existing standards, the standard name has been changed to "Mechanical Strength of Portable Chainsaw Hand Guards".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the National Forestry and Grassland Administration.

This document is under the jurisdiction of the National Forestry Machinery Standardization Technical Committee (SAC/TC61).

1 Scope

This document specifies the mechanical strength requirements for the front and rear handguards of portable handheld chainsaws primarily used for forestry and pruning, and describes the corresponding requirements.

The experimental method.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 18960-2023 Portable Chainsaw Terminology (ISO 6531:2017, IDT) GB/T 46649-2025 Dimensions and clearances of hand guards for portable chainsaws (ISO 6533:2020, IDT) ulary) Note. GB/T 18960-2023 Portable Chainsaw Terminology (ISO 6531:2017, IDT) Note. GB/T 46649-2025 Dimensions and clearances of hand guards for portable chainsaws (ISO 6533:2020, IDT)

3 Terms and Definitions

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

4 Requirements

When tested according to the requirements of Chapter 5, the front and rear handguards should not break or crack, and the front handguard should not deform to a degree that would cause the pendulum to swing excessively.

The level of hand protection. Secondary impacts should be avoided.

Before and after the test, the dimensions of the front hand guard should conform to the requirements of ISO 6533.

As long as the surface of the handguard facing the operator's hand does not crack, damage to the reinforcing rib at the impact point of the rear handguard is not considered a crack.

If the fuel tank and rear handguard are designed as a single unit, any fuel leakage resulting from the test, when inspected according to 5.4, shall be considered as not...

qualified.

5.1 General Provisions

Newly manufactured chainsaws should be used for testing, and securely fastened via the handle or guide plate mounting bracket. When testing the front handguard, the chainsaw should be...

Fix it in an upright position. When conducting rear handguard tests, the chainsaw should be inverted and securely fixed via the guide plate mounting bracket (see Figures 2 and 3).

If the front hand guard also serves as the triggering device for the saw chain brake, it should be kept in the braking state.