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

GB/T 46787-2025

**Self-propelled machinery for forestry - Operator protective
structures (OPS) - Laboratory tests and performance
requirements**

自行式林业机械 驾驶员保护结构 (OPS) 实验室试验和性能要求
(English Translation)

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Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and Definitions

Foreword

This document conforms to GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting is scheduled.

This document is equivalent to ISO 8084:2003 "Laboratory testing and performance requirements for protective structures for drivers of forestry machinery".

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

--To harmonize with existing standards, the standard name has been changed to "Robot Protective Structure (OPS) for Self-Propelled Forestry Machinery - Laboratory Testing".

"Test and Performance Requirements";

--Incorporates content from ISO 8084:2003/Amd.1.2015, with the relevant clauses highlighted in a vertical double line on the outer margin.

(||) was marked;

--To aid understanding, supplementary explanations of actual DLV operation have been added (see 3.4).

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/TC 61).

1 Scope

This document specifies the laboratory test methods and performance requirements for the operator protection structure (OPS) of self-propelled forestry machinery. It applies to...

Mobile forestry machinery as defined in ISO 6814, used for tasks such as logging, combined operations, collection and transportation, and timber harvesting. The OPS is designed for the operator...

Provides reasonable protection, enabling drivers to avoid penetrating objects such as saplings, branches, and broken winch cables during forestry operations.

Protection against objects and the risk of puncture wounds, but not against small projectiles such as chain teeth. An OPS that meets the performance specifications in this document does not necessarily...

The goal is to absolutely protect the operator's safety in all possible circumstances, but the aim is to minimize the risk to the operator under normal operating conditions.

The damage.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below.

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.

ISO 3164 Specifications for the laboratory determination of the flexural limits of protective structures for earthmoving machinery (Earth-moving machinery-Laboratory evaluations of protective structures-Specifications for deflection-limiting volume) Note. GB/T 17772-2018 Specifications for the laboratory qualification of protective structures for earthmoving machinery (ISO 3164:2013, IDT) ISO 3411 Body dimensions and minimum operating space for earthmoving machinery operators (Earth-moving machinery-Physical) cal dimensions of operators and minimum operator space envelope) Note. GB/T 8420-2011 Body dimensions and minimum operating space of earthmoving machinery operators (ISO 3411:2007, IDT) ISO 6814 Forestry machinery - Mobile and self-propelled machinery - Terms, definitions and classifications and self-propelled machinery-Terms, definitions and classification) Note. GB/T 19365-2012 Forestry machinery - Mobile and self-propelled forestry machinery - Terminology, definitions and classification (ISO 6814:2009, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document.

Operator protective structure (OPS) this is used to reduce the possibility of injury to the driver from penetrating objects (such as swaying saplings, branches, and broken winch cables).

The lowest structural component.

Rollover protective structure; ROPS it is a structural component primarily used to reduce the likelihood of a driver wearing a seatbelt being crushed when the machine rolls over.

Note: These structural components include all subframes, supports, brackets, sleeves, bolts, pins, suspension devices, or flexible reduction mechanisms used to secure this structural component to the main frame.

Vibration device, but excluding mounting components integrated with the main frame.