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LY

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

LY/T 1166-1995

Replacing LY/T 1166-2011

**Forestry machinery. Portable chain-saw hand-guards.
Mechanical strength
(English Translation)**

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Foreword

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

This standard replaces LY/T 1166-2011 "Forest Machinery Portable Chainsaw Hand Protector Mechanical Strength", and LY/T 1166-2011 Compared to the main technical changes are as follows.

--- Added the content of the introduction;

--- Modified the schematic diagram of the impact test of the rear hand guard [see Figure 2a), 2011 version 3a)].

This standard uses the translation method equivalent to the international standard ISO 6534:2007 "Forest machinery portable chain saw hand guard mechanical strength Degree, also included in ISO 6534:2007/Amd.1.2012.

The documents of our country that have a consistent correspondence with the normative references to international documents in this standard are as follows.

GB/T 18960-2012 Forestry machinery portable chainsaw vocabulary (ISO 6531:2008, IDT) this standard has been edited as follows.

--- In accordance with the rules of GB/T 1.1-2009, adjust the order of the map, adjust the original international standard Figure 1 to Figure 3, the original

Figure 2 is adjusted to Figure 1, the original Figure 3 is adjusted to Figure 2;

--- Revised Figure 1, Figure 2 and Figure 3 to make it conform to China's drawing principles.

Introduction

Some chainsaws are designed so that the back handle is far (biased) away from the centerline of the guide, and the pendulum can only hit the part of the rear hand guard, so the minimum distance from the impact point to the edge of the hand guard.

This standard also clarifies the point of impact of the durability test.

In order to achieve the correct impact on the rear hand guard with the damping system chain saw, the direction of the pendulum is changed towards the saw body in this standard.

Not away from the saw body.

Forestry machinery portable chain saw hand guard Mechanical strength

1 Scope

This standard specifies the mechanical strength requirements and test of front and rear hand guards for internal combustion engines powered by internal combustion engines, which are mainly used in forestry.

Test method.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

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

LY/T 1167-2014 Forestry machinery portable chain saw front hand guard size and clearance (ISO 6533:2012, IDT) ISO 6531 Forestry Machinery Portable Chainsaw Vocabulary (Machineryforforestry-Portablechain-saws-Vocab-Uryy)

3 Terms and definitions

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

4 Requirements

When tested in accordance with the requirements of Chapter 5, the front and rear hand guards shall not rupture and produce deformation that causes the pendulum to pass over the hand guard.

Before and after the test, the size of the front hand guard should meet the requirements of LY/T 1167-2014.

5.1 General

When performing the front hand guard test, the chain saw should be securely fastened as shown in Figure 1. When performing the rear hand guard test, the chain saw should be inverted it is firmly fixed by the guide (see Figure 2).

If the front hand guard doubles as a chain brake, it should be in the braking state.

Impact test with a single pendulum with a steel pendulum (see Figure 3) at one end, the distance from the pivot point to the center of the hammer $700\text{mm} \pm 5\text{mm}$, the swing arm should be as light as possible. When falling from a height a of 400 mm, the pendulum system should produce $10\text{J} \pm 0.3\text{J}$ Impact energy; when falling from a height a of 200 mm, the pendulum system should be capable of generating $5\text{J} \pm 0.2\text{J}$ of impact energy.

5.2.1 Test conditions

The tests in 5.2.2 and 5.2.3 shall be carried out once at $40\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ and $-25\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$, and the temperature measurement point shall be before Hand guard and its installation location.