INTERNATIONAL STANDARD

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Portable chain-saws — Chain brake performance

Scies à chaîne portatives — Performance du frein de chaîne

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Foreword

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 17, *Manually portable forest machinery*.

This fourth edition cancels and replaces the third edition (ISO 6535:2008), which has been technically revised.

Portable chain-saws — Chain brake performance

1 Scope

This International Standard specifies methods for measuring the braking time and release force of manually operated chain brakes on portable hand-held chain-saws.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6531, *Machinery for forestry — Portable chain-saws — Vocabulary*

ISO 6533:2012, *Forestry machinery —Portable chain-saw front hand-guard —Dimensions and clearances*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6531 and the following apply.

3.1
braking time
interval from the instant the pendulum hits the guard to when the saw chain is considered to have stopped

4 Test objects

The measurements shall be carried out on three different new production saws of the same model, equipped with guide bar and saw chain with the largest diameter drive sprocket as recommended by the manufacturer.

5 Apparatus

5.1 **Rotational speed indicator**, with a rotating speed reading accuracy of ±2,5 % of the indicated value.

5.2 **Time recording device**, including pick-ups, having an accuracy of ±2,5 ms.

5.3 **Pick-up device**, for registering the brake arm activation.

5.4 **Pick-up device**, for registering the saw chain motion.

5.5 **Force gauge**, having an accuracy of ±1 N.

5.6 **Pendulum**, having a head with a flat strike face of 50 mm ± 1 mm diameter and an arm with a length giving 700 mm ± 5 mm distance between the swivel point and the centre of the head (see Figure 1). The arm shall be as light as possible. The pendulum shall cause an impact energy of 1,4 J ± 0,2 J from a drop height (see Figure 1) of 200 mm ± 5 mm. Sharp edges on the pendulum shall be chamfered.