
International Standard 7505

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Forestry machinery — Chain saws — Measurement of hand-transmitted vibration

Machines forestières — Scies à chaîne — Mesurage des vibrations transmises aux mains

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Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7505 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Forestry machinery — Chain saws — Measurement of hand-transmitted vibration

1 Scope and field of application

This International Standard specifies general methods for data acquisition and processing concerning hand-transmitted vibrations induced by portable chain saws. The methods are valid irrespective of how the chain saw is operated during the test, for example, whether it is hand-held or fitted in a stand, and whether it is cutting a log or not.

This International Standard specifies an operator hand-held procedure for acquisition of vibration data from portable chain saws.

NOTES

1 The hand-arm system exerts an influence on the hand-transmitted vibration and different hands and grips exert different influences. Therefore, the development of a standardized stand for holding the saw during the measurement is planned. The development of such stands is in progress.

2 The measurements in the three axes shall be made at, or clearly related to, the surface of the hand where the energy enters the body.

As the hands of the person are in direct contact with the vibrating surface of the hand-grip, the transducer should be fastened to the vibrating structure.

This International Standard is primarily intended for user and manufacturer purposes.

2 References

ISO 5347, *Methods of calibration of vibration and shock pickups.*¹⁾

ISO 5348, *Mechanical vibration and shock — Mechanical mounting of accelerometers.*¹⁾

ISO 5349, *Guidelines for the measurement and the assessment of human exposure to hand-transmitted vibration.*

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

IEC Publication 651, *Sound level meters.*

1) At present at the stage of draft.