Technical Specification

ISO/TS 19858

Second edition
2024-01

Forestry machines — Portable chain-saws — Test method for evaluating saw chain lubricity

Machines forestières — Tronçonneuses portables — Méthode d'essai pour l'évaluation de la capacité de lubrification de la chaîne de la scie

Reference number
ISO/TS 19858:2024(en)

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Published in Switzerland

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Foreword

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This document was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 17, *Manually portable (hand-held) powered lawn and garden equipment and forest machinery*.

This second edition cancels and replaces the first edition (ISO/TS 19858:2015), which has been technically revised.

The main changes are as follows:

— specifying a sampling rate for temperature measurement;

— adaptation of the cutting set to products available on the market;

— adaptation of the measuring distance;

— correction of the standard for viscosity measurement;

— improvement of image quality.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The test procedures given in this document create a reproducible replication of the stress conditions experienced by the saw chain and guide bar during sawing. The test shows the capacity of the lubricant for reducing the wear between friction partners.

This enables the manufacturers of chain-saws to include specifications for recommended saw chain lubricant in the owner's manual.

The test rig is based on a design produced by the Swedish test commission Svensk Maskinprovning (SMP). The test procedures also take into account the long-term practical experience of the Kuratorium für Waldarbeit und Forsttechnik e.V. (KWF) in testing bio-degradable chain lubricant.