PD ISO/TS 19858:2015

BSI Standards Publication

Forestry machines — Portable chainsaws — Test method for evaluating saw chain oil lubricity

bsi.

...making excellence a habit.™

National foreword

This Published Document is the UK implementation of ISO/TS 19858:2015.

The UK participation in its preparation was entrusted to Technical Committee AGE/29, Forestry machinery.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

ISBN 978 0 580 89251 6

ICS 65.060.80

Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 September 2015.

Amendments issued since publication

Date	Text affected

PD ISO/TS 19858:2015

TECHNICAL SPECIFICATION

ISO/TS 19858

First edition
2015-08-15

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

Machines forestières — Tronçonneuses portables — Méthode d'essai pour l'évaluation de la lubrication à l'huile de la chaîne de la scie

Reference number
ISO/TS 19858:2015(E)

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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*.

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

1 Scope

This Technical Specification defines test procedures for classifying the lubrication ability of saw chain lubrication oils when using guide bar and saw chain.

These test procedures 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 lubrication oils 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 lubrication oils.

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 2049, *Petroleum products — Determination of colour (ASTM scale)*

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
saw chain without teeth
saw chain where the cutting links are replaced by links without tooth or bumpers

3.2
loading wheel
rubber coated wheel that applies the contact force to the saw chain from below

Note 1 to entry: See Figure 1.

4 Test rig

4.1 General

The test rig is designed so that the saw chain is driven by the rim sprocket. The saw chain speed is adjusted by controlling the output speed of the motor driving the sprocket. See Figure 1.