AS ISO 10266:2021
ISO 10266:1992

Australian STANDARD®

STANDARDS Australia

Earth-moving machinery — Determination of slope limits for machine fluid systems operation — Static test method



AS ISO 10266:2021

This Australian Standard ® was prepared by ME-063, ME-063 Earthmoving Equipment. It was approved on behalf of the Council of Standards Australia on 24 March 2021.

This Standard was published on 9 April 2021.

The following are represented on Committee ME-063:

Australian Industry Group
Better Regulation Division — SafeWork NSW
Construction and Mining Equipment Industry Group
Department of Natural Resources, Mines and Energy, Qld
Department of Regional NSW
Engineers Australia
Institute of Instrumentation, Control & Automation Australia
Minerals Council of Australia
Mining Electrical and Mining Mechanical Engineering Society
University of Queensland

This Standard was issued in draft form for comment as DR AS ISO 10266:2020.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:
www.standards.org.au

ISBN 978 1 76113 281 0

AS ISO 10266:2021
ISO 10266:1992

Earth-moving machinery — Determination of slope limits for machine fluid systems operation — Static test method

First published as AS ISO 10266:2021.

COPYRIGHT

© ISO 2021 — All rights reserved
© Standards Australia Limited 2021

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

Preface

This Standard was prepared by the Standards Australia Committee ME-063, Earthmoving Equipment.

The objective of this document is to specify laboratory test procedures to establish the static slope capability of fluid system(s) operation of earth-moving machines (engine, power train, fuel system, oil system, etc.). This document evaluates the performance parameters that limit the static slope capability of machine system(s) operation.

This document is identical with, and has been reproduced from, ISO 10266:1992, *Earth-moving machinery — Determination of slope limits for machine fluid systems operation — Static test method*.

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text "this International Standard" should read "this document".

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

© Standards Australia Limited 2021

Contents

Preface ii
Foreword iv
1 Scope 1
2 Normative reference 1
3 Definitions 1
4 Test equipment 2
5 Measuring equipment and accuracy 2
6 Machine preparation 2
7 Slope capability 2
8 Criteria 3
9 Recording of test results 3
Annex A (normative) **Model test report** 4

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10266 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery,* Sub-Committee SC 1, *Test methodsrelating to machine performance.*

Annex A forms an integral part of this International Standard.

© Standards Australia Limited 2021

Australian Standard®

Earth-moving machinery — Determination of slope limits for machine fluid systems operation — Static test method

1 Scope

This International Standard specifies laboratory test procedures to establish the static slope capability of fluid system(s) operation of earth-moving machines (engine, power train, fuel system, oil system, etc.). It evaluates the performance parameters that limit the static slope capability of machine system(s) operation.

The preferred static slope capability test method is with the machine on a tilt platform or on a prepared slope. An acceptable alternative method is the testing of complete fluid systems on a test bench. In either method, precautions are necessary to ensure safety.

This International Standard applies to earth-moving machines as given in ISO 6165, with combinations of standard mounted attachments.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6165:1987, *Earth-moving machinery — Basic types — Vocabulary.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1
machine orientation
Position of the longitudinal axis of the machine (expressed in degrees) on the slope. The 0° position is when the front of the machine is upslope. All positions are measured clockwise from the 0° position.

3.2
stabilized operating temperature
Fluid temperature showing no more than 2 °C change per minute during operation.

3.3
fluid system(s)
Any system(s) that use(s) oil or water solutions for cooling, lubrication actuation and power transmission together with the fuel system.

3.4
(machine) static slope capability
Maximum slope, expressed in degrees, that the machine fluid system(s) can operate on without malfunction or damage to any fluid system, at all the machine orientations specified in 3.5 and 3.6.

3.5
(machine) longitudinal static slope capability
Maximum slope, expressed in degrees, that the machine can achieve longitudinally (i.e. oriented at 0° and 180°) during the static slope evaluation without exceeding performance parameters.

© Standards Australia Limited 2021