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Australian STANDARD®

STANDARDS Australia

Earth-moving machinery — Field of vision of surveillance and rear-view mirrors

Part 2: Performance criteria



AS ISO 14401.2:2021

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Preface

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

The objective of this document is to specify criteria for the field-of-vision performance of surveillance and rear-view mirrors on earth-moving machinery. It is applicable to the ride-on machines of the machine families and sizes listed herein, used both on and off public roads.

This document is identical with, and has been reproduced from, ISO 14401-2:2009, *Earth-moving machinery — Field of vision of surveillance and rear-view mirrors — Part 2: Performance criteria*.

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Contents

Preface ii
Foreword iv
Introduction v
1 Scope 1
2 Normative references 1
3 Terms and definitions 1
4 Classification of fields of vision 1
5 Requirements 2
5.1 General 2
5.2 Mirror positions 2
5.3 Adjustment 7
5.4 Fields of vision 7
5.4.1 General 7
5.4.2 Class A 7
5.4.3 Class B 7
5.4.4 Class C 7
5.4.5 Class D — Dumpers 7
5.4.6 Number of mirrors 8
6 Visibility information in operator's instructions 8
Annex A (normative) **Surveillance and rear-view mirrors — Field of vision** 9

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 14401-2 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 1, *Test methods relating to safety and machine performance*.

This second edition cancels and replaces the first edition (ISO 14401-2:2004), which has been technically revised.

ISO 14401 consists of the following parts, under the general title *Earth-moving machinery — Field of vision of surveillance and rear-view mirrors*:

— *Part 1: Test methods*

— *Part 2: Performance criteria*

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Introduction

This part of ISO 14401 gives performance criteria for surveillance and rear-view mirrors fitted to certain earth-moving machinery. The field of vision described is intended to define the minimum visibility area behind the machine in order to provide adequate visibility for the operator when working around other moving machines — during operation in a forward/reverse mode or during transport on roadways with other traffic.

As specified in ISO 5006, mirrors may also be fitted on earth-moving equipment to help meet the visibility performance requirements of ISO 5006 when those requirements cannot be met by direct visibility alone. The testing procedures for mirrors in ISO 14401-1 and in ISO 5006 have been aligned to allow a mirror to fulfil the requirements of both ISO 5006 and this part of ISO 14401.

Mirrors can also be fitted for the purpose of compliance with national or local regulations, e.g. on-road requirements.

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NOTES

Australian Standard®

Earth-moving machinery — Field of vision of surveillance and rear-view mirrors

Part 2: Performance criteria

1 Scope

This part of ISO 14401 specifies criteria for the field-of-vision performance of surveillance and rear-view mirrors on earth-moving machinery. It is applicable to the ride-on machines of the machine families and sizes listed herein (see Annex A), used both on and off public roads.

NOTE 1 For machines not listed in Annex A, the criteria of similar machine types and/or sizes can be used as guidance for the fitting of optional mirrors to these machines.

NOTE 2 Additional national road regulations can apply for machines travelling on public roads.

2 Normative references

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

ISO 3411, *Earth-moving machinery — Physical dimensions of operators and minimum operator space envelope*

ISO 5006:2006, *Earth-moving machinery — Operator's field of view — Test method and performance criteria*

ISO 6016, *Earth-moving machinery — Methods of measuring the masses of whole machines, their equipment and components*

ISO 6165, *Earth-moving machinery — Basic types — Identification and terms and definitions*

ISO 14401-1, *Earth-moving machinery — Field of vision of surveillance and rear-view mirrors — Part 1: Test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14401-1 apply.

4 Classification of fields of vision

The fields of vision are classified as follows.

Class A: field of vision as specified in 5.4.2 and shown in Figure 1.

Class B: field of vision as specified in 5.4.3 and shown in Figure 2.

Class C: field of vision as specified in 5.4.4 and shown in Figure 3.

Class D: field of vision as specified in 5.4.5 and shown in Figure 4.

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