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Earth-moving machinery, and tractors and machinery for agriculture and forestry — Seat index point

AS ISO 5353:2020

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Earth-moving machinery, and tractors and machinery for agriculture and forestry — Seat index point

First published as AS ISO 5353:2020.

Preface

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

The objective of this document is to specify a method and the device for use in determining the position of the seat index point (SIP) for any kind of seat designed for earth-moving machinery as defined in ISO 6165, and tractors and machinery for agriculture and forestry as defined in ISO 3339-0.

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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 5353 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery,* Subcommittee SC 2, *Safety requirements and human factors.*

This second edition cancels and replaces the first edition (ISO 5353:1978), of which it constitutes a technical revision.

Australian Standard®

Earth-moving machinery, and tractors and machinery for agriculture and forestry — Seat index point

1 Scope

This International Standard specifies a method and the device for use in determining the position of the seat index point (SIP) for any kind of seat designed for earth-moving machinery as defined in ISO 6165, and tractors and machinery for agriculture and forestry as defined in ISO 3339-0.

This provides a uniform method for defining the location of the SIP in relation to a fixing point on the seat. The SIP may be determined on a seat by itself or with the seat located in its operating environment on the machine. The SIP is a characteristic of the seat; therefore, it may be specified by the seat manufacturer.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were 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 editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3339-0:1986, *Tractors and machinery for agriculture and forestry — Classification and terminology — Part 0: Classification system and classification.*

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

3 Definitions

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

3.1
seat index point
SIP
Point on the central vertical plane of the seat as determined by the device shown in figure 1, when installed in the seat as specified in 5.3.

Note 1 to entry: The SIP is fixed with respect to the machine and does not move with the seat through its adjustment and/or oscillation range.

Note 2 to entry: The SIP as established and defined by this International Standard may be considered, for operator workplace design purposes, to be equivalent to the intersection on the central vertical plane through the seat centreline of the theoretical pivot axis between a human torso and thighs.

3.2
fixing point
Point specified by the manufacturer to which the SIP is referenced.
See figures 2 and 3 for examples.

4 Multiple machine function seats

Some seats are designed to locate and fix an operator to perform more than one function with a given machine. Where a second position of the seat is provided because the machine or tractor has a second set of controls, the SIP of the seat has two locations relative to the machine or tractor, one for each position, as if there were two seats in the machine or tractor. The first location of the SIP shall be used for those International Standards appropriate to the first location and set of controls and the second