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Australian STANDARD®

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Earth-moving machinery — Definitions of dimensions and codes

Part 1: Base machine



AS ISO 6746.1:2021

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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 define certain dimensions of earth-moving base-machines as well as the codes identifying those dimensions. At the same time, it specifies a reference system for defining, and a coding system for identifying, additional, similar dimensions in terminology standards and commercial specifications.

It applies to the basic types of earth-moving machinery as defined in ISO 6165.

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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.

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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 6746-1 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 4, *Commercial nomenclature, classification and rating*.

This third edition cancels and replaces the second edition (ISO 6746-1:1987), which has been technically revised.

ISO 6746 consists of the following parts, under the general title *Earth-moving machinery — Definitions of dimensions and codes*:

— *Part 1: Base machine*

— *Part 2: Equipment and attachments*

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Earth-moving machinery — Definitions of dimensions and codes

Part 1: Base machine

1 Scope

This part of ISO 6746 defines certain dimensions of earth-moving base-machines as well as the codes identifying those dimensions. At the same time, it specifies a reference system for defining, and a coding system for identifying, additional, similar dimensions in terminology standards and commercial specifications.

It is applicable to the basic types of earth-moving machinery as defined in ISO 6165.

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 6165, *Earth-moving machinery — Basic types — Vocabulary*

3 Terms and definitions

For the purposes of this part of ISO 6746, the terms and definitions given in ISO 6165 and the following apply.

3.1
three-dimensional reference system
system used to determine dimensions of earth-moving machines
SEE:

3.1.1
zero Y plane
vertical plane which passes through the longitudinal centreline of the machine

3.1.2
X plane
any vertical plane perpendicular to the Y plane

3.1.3
Z plane
any horizontal plane perpendicular to the X and Y planes

3.1.4
positive coordinate
positive direction, forward from the zero X plane, right from the zero Y plane and above the zero Z plane

Note 1 to entry: The intersection of the X, Y, Z axes (zero planes) is normally located at a well-defined base point: i.e. SIP for a seat as defined in ISO 5353; crankshaft centreline for an engine; sprocket or rear axle centreline for a tractor-dozer; ground line for machine measurements.

Note 2 to entry: If only components (e.g. engine, seat) are shown, the location and positive direction of the axis from the intersection of the X, Y, Z axes (zero planes) assume the normally expected orientation of the component to a machine, i.e. number one cylinder of engine to the front of the machine, seat facing to the front.

Note 3 to entry: If the machine or its equipment or attachment or all these are illustrated, a machine driving from right to left is shown.

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