

INTERNATIONAL STANDARD

ISO
11112

First edition
1995-12-15

Earth-moving machinery — Operator's seat — Dimensions and requirements

*Engins de terrassement — Siège de l'opérateur — Dimensions et
exigences*



Reference number
ISO 11112:1995(E)

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 11112 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety requirements and human factors*.

Earth-moving machinery — Operator's seat — Dimensions and requirements

1 Scope

This International Standard specifies the dimensions, requirements and adjustment ranges for operator seats on earth-moving machinery as defined in ISO 6165. Additionally, it provides dimensions for armrests when fitted on these machines.

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 3411:—¹⁾, *Earth-moving machinery — Human physical dimensions of operators and minimum operator space envelope*.

ISO 5353:1995, *Earth-moving machinery, and tractors and machinery for agriculture and forestry — Seat index point*.

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

3 Seat requirements

3.1 Nominal values of dimensions regarding seat features, their mutual locations and adjustments are established on the basis of ergonomic requirements

taking into consideration operator sizes, according to ISO 3411, from the 5th percentile through the 95th percentile.

3.2 The dimensions for the operator's seat and related adjustments are given in table 1 and figure 1. These include essential dimensions and optional requirements.

Seat dimensions and adjustments, if provided, are referenced to the seat index point (SIP) determined in accordance with ISO 5353. Dimensions and adjustments other than those specified in this International Standard may be used only if they provide better accommodation for the operator.

3.3 On those machines where a higher SIP is desirable, a reduced seat-back to seat cushion angle should be considered. See ISO 5353.

3.4 To ensure unimpeded ingress and egress of the operator at the seat, one or both of the armrests shall, where necessary, be movable. In such circumstances the armrest shall provide a firm support during operation of the machine.

3.5 Operator seats may be provided with a swivel or tilt. It may pivot to improve both the operator work position and the means of ingress and egress. A means of securing the work positions of the seat (swivel or tilt) shall be provided to prevent inadvertent seat movement during operation of the machine.

1) To be published. (Revision of ISO 3411:1982)