# INTERNATIONAL STANDARD

ISO 10968

Second edition 2004-10-15

## Earth-moving machinery — Operator's controls

Engins de terrassement — Commandes de l'opérateur



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Contents	Page
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Normative references	Forew	ordı
Terms and definitions  Control location  Movement of controls  Control-actuating forces	1	Scope
4 Control location	2	Normative references
5 Movement of controls	3	Terms and definitions
6 Control-actuating forces	4	Control location
	5	Movement of controls
Annex A (normative) Earth-moving machinery — Primary common controls for base machine	_	
Annex B (normative) Earth-moving machinery — Primary equipment controls	Annex	A (normative) Earth-moving machinery — Primary common controls for base machine
	Annex	B (normative) Earth-moving machinery — Primary equipment controls

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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 Maison 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 10968 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 10968:1995), which has been technically revised.

### Earth-moving machinery — Operator's controls

#### 1 Scope

This International Glandard specifies requirements and guidelines for the operator's primary controls on earth-moving machinery (as defined in ISO 6165) in as far as those controls relate to the ride-on operator (for remote operator-controlled machines, see ISO 15817). Its provisions for finger-, hand- and foot-operated controls are not intended to prevent usage of other types of controls, control locations or control movements. Nevertheless, it does recommend that the general requirements and principles of arrangement be followed for those others, taking into account operator safety and ergonomics.

#### 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 — Human physical dimensions of operators and minimum operator space envelope

ISO 3450, Earth-moving machinery — Braking systems of rubber-tyred machines — Systems and performance requirements and test procedures

ISO 5010, Earth-moving machinery — Rubber-tyred machines — Steering requirements

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

ISO 6405-1, Earth-moving machinery — Symbols for operator copinols and other displays — Part 1: Common symbols

ISO 6405-2, Earth-moving machinery — Symbols for operator controls and other displays — Part 2: Specific symbols for machines, equipment and accessories

ISO 6682, Earth-moving machinery — Zones of comfort and reach for controls

ISO 10264, Earth-moving machinery — Key-locked starting systems

ISO 10265, Earth-moving machinery — Crawler machines — Performance requirements and test procedures for braking systems

ISO 13766, Earth-moving machinery — Electromagnetic compatibility

ISO 15817, Earth-moving machinery — Safety requirements for remote operator control<sup>1)</sup>

ISO 15998, Earth-moving machinery — Machine-control systems (MCS) using electronic components — Performance criteria and tests<sup>1)</sup>

1) To be published.

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