
Earth-moving machinery — Rubber-tyred machines — Steering requirements

*Engins de terrassement — Engins équipés de pneumatiques —
Systèmes de direction*



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Published in Switzerland

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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.

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 5010 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety requirements and human factors*.

This third edition cancels and replaces the second edition (ISO 5010:1992), which has been technically revised.

Earth-moving machinery — Rubber-tyred machines — Steering requirements

1 Scope

This International Standard specifies steering system tests and performance criteria for evaluating the steering capability of rubber-tyred self-propelled earth-moving machines having a machine speed, determined in accordance with ISO 6014, greater than 20 km/h.

It is applicable to dozers, loaders, back-hoe loaders, excavators, dumpers, scrapers and graders equipped with either manual steering, power-assisted steering or fully powered steering systems as defined in ISO 6165.

It is not applicable to rollers, compactors or pipelayers.

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

ISO 6014, *Earth-moving machinery — Determination of ground speed*

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

ISO 7457, *Earth-moving machinery — Determination of turning dimensions of wheeled machines*

ISO 10968, *Earth-moving machinery — Operator's controls*

ISO 13849 (all parts), *Safety of machinery — Safety-related parts of control systems*

ISO 15998,¹⁾ *Earth-moving machinery — Machine-control systems (MCS) using electronic components — Performance criteria and tests for functional safety*

IEC 62061, *Safety of machinery — Functional safety of safety-related electrical, electronic and programmable electronic control systems*

1) Under preparation.