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Earth-moving machinery — Guards — Definitions and requirements

Engins de terrassement — Protecteurs — Définitions et exigences



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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 3457 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety requirements and human factors*.

This fourth edition cancels and replaces the third edition (ISO 3457:1986), which has been technically revised.

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Introduction

This International Standard provides performance requirements for guards and other means of protecting personnel from unintentional contact with common mechanical, fluid or thermal hazards on earthmoving machinery during normal machine operation and routine maintenance. Relationships between the distance separating a guard from a hazardous component and the guard opening size based on anthropometric data are included.

Some factors having a significant effect upon personnel protection, such as operator and service personnel training, experience and careful practice, are outside the scope of this International Standard.

Deviations from these requirements to allow technological advances in machine systems and designs are permissible. In complying with this International Standard, the following three safety principles are to be considered, in the order given, based on feasibility:

- a) eliminate potential hazards by machine design;
- b) guard against contact with sources of potential safety hazards if elimination by design is not feasible;
- c) warn of potential safety hazards where neither a) nor b) is feasible.