

Safety of earth-moving machinery —

Part 15: Specification for access systems

Committees responsible for this British Standard

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- British Coal Corporation
- Construction Plant-Hire Association
- Federation of Civil Engineering Contractors
- Federation of Manufacturers of Construction Equipment and Cranes
- Health and Safety Executive
- Institution of Civil Engineers
- Silsoe Research Institute

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National foreword

This Part of BS 6912 has been prepared by Subcommittee B/513/1 and is identical with ISO 2867:1994 *Earth-moving machinery — Access systems*, published by the International Organization for Standardization (ISO).

The fifth edition of ISO 2867 represents a technical revision of ISO 2867:1989 and was prepared by Subcommittee 2, Safety requirements and human factors, of ISO Technical Committee 127, Earth-moving machinery, with the active participation and approval of the UK.

Cross-references

International standard	Corresponding British Standard
ISO 3411:1982	BS 5538:1983 <i>Specification for minimum operator space envelope for earth-moving machinery</i> (Identical)
ISO 6165:1987	BS 6914 <i>Terminology (including definitions of dimensions and symbols) for earth-moving machinery</i> Part 1:1988 <i>Glossary of terms for basic types of earth-moving machinery</i> (Identical)

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This International Standard specifies criteria for access systems — steps, ladders, walkways, platforms, grab rails (handrails), grab handles, guardrails and enclosure entrance and exit openings — as they relate to aiding the operator and servicemen in performing their functions on the machinery.

It applies to access systems to the operator's station and to service points on earth-moving machinery as defined in ISO 6165 while the machinery is parked in accordance with manufacturer's instructions.

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 3411:1982, *Earth-moving machinery — Human physical dimensions of operators and minimum operator space envelope*.

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

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1

access system

system provided on a machine for entrance to and exit from an operator, inspection or maintenance platform from and to the ground

the primary access system is the access system normally used, while the alternative access system is the access route used during anticipated emergency situations when the primary access system cannot be used

3.2

basic dimension

dimensional value which takes into account human factors criteria. The actual value may vary within the specified range

3.3 enclosure opening

opening leading to or from an access system and large enough for a person to pass through.

3.3.1

primary opening

opening normally used for access

3.3.2

alternative opening

opening for use during emergencies when the primary opening is not usable

3.3.3

service opening

opening for use during maintenance, service or inspection

3.4

guardrail

device along the open sides of walk-ways or platforms to protect a person from falling

3.5 handrail and handhold

Parts of an access system that may be grasped by the hand as an aid to body support and balance.

3.5.1

handrail

device which permits hand movement to a different location without removing the hand from the device

3.5.2

handhold

device for single hand placement

3.6

slip-resistant surface

access system surface having qualities which improve the traction obtained by the foot

3.7 ladder

3.7.1

inclined ladder

ladder whose angle of inclination from the horizontal is greater than 50° but not more than 75°

3.7.2

vertical ladder

ladder whose angle of inclination from the horizontal is greater than 75°, but not more than 90°

3.7.3

ladder fall-limiting device

any device which minimizes or limits the length of fall from a ladder system

3.8

stairway

access system or part of an access system inclined from the horizontal at an angle greater than 20° but not more than 50° and consisting of four or more steps