

Earth-moving machinery — Safety —

Part 3: Requirements for loaders

The European Standard EN 474-3:1996 has the status of a
British Standard

ICS 53.100

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee B/513, Construction equipment and plant, and site safety, to Subcommittee B/513/1, Earth-moving machinery, upon which the following bodies were represented:

- 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 British Standard has been prepared by Subcommittee B/513/1 and is the English language version of EN 474-3:1996 *Earth-moving machinery — Safety — Part 3: Requirements for loaders*, published by the European Committee for Standardization (CEN). It is one of a number of British Standards implementing European Standards on machinery safety matters, in the development of which the United Kingdom has played an active part.

This British Standard covers the essential safety requirements in the Machinery Directive (89/392/EEC) and the Amending Directive (91/368/EEC).

Cross-references

Publication referred to	Corresponding British Standard
	BS EN 292 <i>Safety of machinery — Basic concepts, general principles for design</i>
EN 292-1:1991	Part 1:1991 <i>Basic terminology, methodology</i>
EN 292-2:1991	Part 2:1991 <i>Technical principles and specifications</i>
EN 294:1992	BS EN 294:1992 <i>Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs</i>
EN 474-1:1995	BS EN 474 <i>Earth-moving machinery — Safety</i> Part 1:1995 <i>General requirements</i>
ENV 1070:1993	DD ENV 1070:1993 <i>Safety of machinery — Terminology</i>
EN 23411:1988	BS 5538:1983 <i>Specification for minimum operator space envelope for earth-moving machinery</i>
EN 25353:1988	BS 5631:1978 <i>Specification for earth-moving machinery and tractors and machinery for agriculture and forestry — Seat index point</i>
EN 60204-1:1992	BS EN 60204 <i>Safety of machinery — Electrical equipment of machines</i> Part 1:1993 <i>Specification for general requirements</i>
ISO 2330:1995	BS 5639 <i>Fork arms for fork lift trucks</i> Part 4:1978 <i>Specification for technical characteristics and testing</i>
ISO 2867:1994	BS 6912 <i>Safety of earth-moving machinery</i> Part 15:1995 <i>Specification for access systems</i>
ISO 3164:1992	Part 7:1992 <i>Specification for laboratory evaluations or roll-over and falling object protective structures: the deflection-limiting volume for earth-moving machinery</i>
ISO 3449:1992	Part 6:1992 <i>Specification for falling object protective structures on earth-moving machinery: laboratory tests</i>
ISO 3457:1986	BS EN ISO 3457:1995 <i>Earth-moving machinery — Guards and shields — Definitions and specifications</i>
ISO 3471:1994	BS 6912 <i>Safety of earth-moving machinery</i> Part 14:1995 <i>Specification for laboratory tests and performance requirements of roll-over protective structures</i>
ISO 4250-2:1991	BS AU 50 <i>Tyres and wheels</i> Part 1: <i>Tyres</i> Section 3: <i>Off-the-road tyres</i> Subsection 3.2a:1991 <i>Specification for narrow and wide base tyre loads and inflation pressures</i>
ISO 5006-1:1991	BS 6911 <i>Testing earth-moving machinery</i> Part 5:1992 <i>Determination of operator's field of view</i>
ISO 5998:1986	BS 6912 <i>Safety of earth-moving machinery</i> Part 2:1989 <i>Specification for rated operating load for crawler and wheel loaders</i>

ISO 6014:1986	BS 5982:1987 <i>Method for determination of ground speed of earth-moving machinery</i>
ISO 6016:1982	BS 6300:1982 <i>Methods of measuring the masses of whole machines, their equipment and components of earth-moving machinery</i>
ISO 6393:1985	BS 6812 <i>Airborne noise emitted by earth-moving machinery</i> Part 1:1987 <i>Method of measurement of exterior noise in a stationary test condition</i>
ISO 6682:1986	BS EN ISO 6682:1995 <i>Earth-moving machinery — Zones of comfort and reach for control</i>
ISO 6683:1981	BS 6218:1981 <i>Specification for performance requirements for seat belts and seat belt anchorages for earth-moving machinery fitted with roll-over protective structures</i>
ISO 7096:1994	BS 6912 <i>Safety of earth-moving machinery</i> Part 17:1995 <i>Specification for laboratory evaluation of operator seat vibration</i>
ISO 7131:1984	BS 6685:1986 <i>Glossary of terms for loaders used for earth-moving</i>
ISO 7546:1983	BS 6422:1983 <i>Method for volumetric rating of loader and front loading excavator buckets used for earth-moving</i>
ISO 8313:1989	BS 6911 <i>Testing earth-moving machinery</i> Part 2:1990 <i>Measurement of tool forces and tipping loads of loaders</i>
ISO 10533:1993	BS 6912 <i>Safety of earth-moving machinery</i> Part 11:1993 <i>Requirements for lift arm support devices</i>

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, the EN title page, pages 2 to 18, 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.

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Descriptors: Earth-moving equipment, loaders, safety of machine, accident prevention, safety requirements, specifications

English version

Earth-moving machinery — Part 3: Requirements for loaders

Engins de terrassement — Sécurité —
Partie 3: Exigences applicables aux chargeuses

Erdbaumaschinen — Sicherheit —
Teil 3: Anforderungen für Lader

This European Standard was approved by CEN on 1995-11-03. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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Foreword

This European Standard has been prepared by CEN/TC 151, Construction equipment and building material machines — Safety, of which the secretariat is held by DIN.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of EU Directive(s).

The Annex A is normative and contains “List of hazards” and the Annex B is informative and contains “Illustrations”.

EN 474 *Earth-moving machinery — Safety* comprises the following Parts.

- *Part 1: General requirements;*
- *Part 2: Requirements for tractor-dozers;*
- *Part 3: Requirements for loaders;*
- *Part 4: Requirements for backhoe loaders;*
- *Part 5: Requirements for hydraulic excavators;*
- *Part 6: Requirements for dumpers;*
- *Part 7: Requirements for tractor-scrapers;*
- *Part 8: Requirements for graders;*
- *Part 9: Requirements for pipelayers;*
- *Part 10: Requirements for trenchers;*
- *Part 11: Requirements for earth and landfill compactors;*
- *Part 12: Requirements for rope excavators.*

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 1996, and conflicting national standards shall be withdrawn at the latest by August 1996.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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