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Railway applications - Infrastructure - Demountable machines, trailers and associated equipment - Part 2: General safety requirements

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This standard includes the English version of the European Standard.

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English Version

**Railway applications - Infrastructure - Demountable
machines, trailers and associated equipment - Part 2:
General safety requirements**

Applications ferroviaires - Infrastructure - Machines
déraillables, remorques et éléments associés - Partie 2 :
Prescriptions générales pour la sécurité

Bahnanwendungen - Infrastruktur - Ausgleisbare
Maschinen, Anhänger und zugehörige Ausstattung -Teil
2: Allgemeine Sicherheitsanforderungen

This European Standard was approved by CEN on 7 March 2025.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 15955-2:2025) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by November 2025, and conflicting national standards shall be withdrawn at the latest by November 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 15954-2:2013 and EN 15955-2:2013.

Principal amended clauses compared to EN 15954-2:2013 and EN 15955-2:2013:

- General: all references updated to latest issue;
- 4.3: attachments with rail wheels clarified to be a trailer;
- Clause 5: all of Part 5 renumbered and each clause revised;
- 6.4: additional clause added for machines that profile rails;
- Clause 7: requirements for machine marking revised (was previously 8.3 and 8.4);
- Clause 8: documentation requirements completely revised (was previously called ‘Information for Use’);
- Annex A: revised to suit new format and numbering;
- Annex B: revised to suit new format and numbering;
- Annex C: revised and updated;
- Annex: new Annexes D to H added.

EN 15955, *Railway applications — Infrastructure — Demountable machines, trailers and associated equipment*, is currently composed with the following parts:

- *Part 1: Technical requirements for travelling and working;*
- *Part 2: General safety requirements.*

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

This document is the second of a series of two parts of the European standard: *Railway applications — Track — Demountable machines, trailers and associated equipment*, dealing with railway specific risks of the demountable machines and trailers when travelling and working on railway infrastructures:

- Part 1 covers the safety and technical requirements for the machines in travelling and working modes, and is applicable for all machines, including those in operation on urban rail;
- Part 2 covers the safety requirements for the machines in travelling and working modes; this is a document harmonized with the European Machinery Directive 2006/42/EC.

Part 1 specifies requirements for approval of the machine for use on the railway. Depending on the decision of the Infrastructure Manager, Urban Rail Manager or the requirements in National rules the assessment of conformance could be undertaken by the Infrastructure/Urban Rail Manager concerned, by a third party assessor or by the manufacturer as a declaration of conformity.

Part 2 specifies requirements for the machine to be declared conformant by the manufacturer, except in the case of machines classified under Annex 4 of the Machinery Directive, which require a conformity check in conjunction with a notified body.

This document was prepared to meet the basic requirements of EU Directives to facilitate an open market for goods and services.

This document deals with railway specific risks of the demountable machines and trailers as defined in 3.1, 3.2 and 3.3 when travelling and working on railway infrastructures.

This document is a type C standard as defined in EN ISO 12100:2010.

When provisions of this type C standard are different from those which are stated in type B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built in accordance with the provisions of this type C standard.

The hazards which exist in all mechanical, electrical, hydraulic, pneumatic and other components of machines and which are dealt with in the relevant European standards are not within the scope of this document. Where necessary, references are made to appropriate standards of this type.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

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The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

1 Scope

This document specifies the general safety requirements for demountable machines and trailers, including road-rail trailers – henceforward referred to as ‘machines’, for use when travelling and working on railway track.

NOTE 1 Trailers, including road-rail trailers, are considered as machines because they are moved along the track by powered machines.

This document specifies the requirements to deal with the common hazards presented by their use on the railway during transport, assembly and installation, commissioning, travelling and working on track, use including setting, programming, and process changeover, operation, cleaning, fault finding, maintenance and de-commissioning of the machines and associated equipment when they are used as intended and under conditions of misuse which are reasonably foreseeable.

These machines will not run on railway lines open to normal traffic.

NOTE 2 Other rail mounted railway maintenance and infrastructure inspection machines are dealt with in other European standards, see Technical Report CEN/TR 17498:2020.

This document is also applicable to machines and associated equipment that in working mode are partly supported on the ballast or the formation.

The requirements in this document are based on the assumption that the machines are used, operated and maintained by skilled person(s).

This document does not include requirements for:

- quality of the work or performance of the machine;
- use of separate equipment temporarily mounted on machines;
- machines that utilize external power supplies such as the overhead contact line system for traction purposes or as a power source;
- hazards due to air pressure caused by the passing of high-speed trains at more than 200 km/h;
- operation subject to special rules, e.g. potentially explosive atmospheres;
- hazards due to natural causes, e.g. earthquake, lightning, flooding;
- working methods;
- operation in severe working conditions requiring special measures, e.g. corrosive environments, contaminating environments, strong magnetic fields;
- hazards occurring when used to handle suspended loads which may swing freely.

EN 15955-2:2025 (E)**2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 2:1992,¹ *Classification of fires*

EN 3-7:2004+A1:2007, *Portable fire extinguishers - Part 7: Characteristics, performance requirements and test methods*

EN 280-1:2022, *Mobile elevating work platforms - Part 1: Design calculations - Stability criteria - Construction - Safety - Examinations and tests*

EN 280-2:2022, *Mobile elevating work platforms - Part 2: Additional safety requirements for load lifting appliances on the extending lifting structure and work platform*

EN 402:2003, *Respiratory protective devices - Lung governed demand self-contained open-circuit compressed air breathing apparatus with full face mask or mouthpiece assembly for escape - Requirements, testing, marking*

EN 403:2004, *Respiratory protective devices for self-rescue - Filtering devices with hood for escape from fire - Requirements, testing, marking*

EN 474-1:2022, *Earth-moving machinery - Safety - Part 1: General requirements*

EN 547-1:1996+A1:2008, *Safety of machinery - Human body measurements - Part 1: Principles for determining the dimensions required for openings for whole body access into machinery*

EN 547-2:1996+A1:2008, *Safety of machinery - Human body measurements - Part 2: Principles for determining the dimensions required for access openings*

EN 547-3:1996+A1:2008, *Safety of machinery - Human body measurements - Part 3: Anthropometric data*

EN 614-1:2006+A1:2009, *Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles*

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EN 618:2002+A1:2010, *Continuous handling equipment and systems - Safety and EMC requirements for equipment for mechanical handling of bulk materials except fixed belt conveyors*

EN 619:2022, *Continuous handling equipment and systems - Safety requirements for equipment for mechanical handling of unit loads*

EN 620:2021, *Continuous handling equipment and systems - Safety requirements for fixed belt conveyors for bulk materials*

¹ As impacted by EN 2:1992/A1:2004.

EN 894-1:1997+A1:2008, *Safety of machinery - Ergonomics requirements for the design of displays and control actuators - Part 1: General principles for human interactions with displays and control actuators*

EN 894-2:1997+A1:2008, *Safety of machinery - Ergonomics requirements for the design of displays and control actuators - Part 2: Displays*

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EN 894-4:2010, *Safety of machinery - Ergonomics requirements for the design of displays and control actuators - Part 4: Location and arrangement of displays and control actuators*

EN 981:1996+A1:2008, *Safety of machinery - System of auditory and visual danger and information signals*

EN 1032:2003+A1:2008, *Mechanical vibration - Testing of mobile machinery in order to determine the vibration emission value*

EN 1837:2020, *Safety of machinery - Integral lighting of machines*

EN 12077-2:2024, *Cranes safety - Requirements for health and safety - Part 2: Limiting and indicating devices*

EN 12663-1:2010+A2:2023, *Railway applications - Structural requirements of railway vehicle bodies - Part 1: Locomotives and passenger rolling stock (and alternative method for freight wagons)*

EN 12999:2020, *Cranes - Loader cranes*

EN 13000:2010+A1:2014, *Cranes - Mobile cranes*

EN 13001-1:2015, *Cranes - General design - Part 1: General principles and requirements*

EN 13135:2013+A1:2018, *Cranes - Safety - Design - Requirements for equipment*

EN 14033-1:2017, *Railway applications - Track - Railbound construction and maintenance machines - Part 1: Technical requirements for running*

EN 14033-2:2017, *Railway applications - Track - Railbound construction and maintenance machines - Part 2: Technical requirements for travelling and working*

EN 14363:2016+A2:2022, *Railway applications - Testing and Simulation for the acceptance of running characteristics of railway vehicles - Running Behaviour and stationary tests*

EN 15566:2022, *Railway applications - Railway rolling stock - Draw gear and screw coupling*

EN 15746-1:2020, *Railway applications - Track - Road-rail machines and associated equipment - Part 1: Technical requirements for travelling and working*

EN 15877-1:2024, *Railway applications - Markings of railway vehicles - Part 1: Freight wagons*

EN 15955-1:2025, *Railway applications - Infrastructure - Demountable machines, trailers and associated equipment — Part 1: Technical requirements for travelling and working*

EN 45545-2:2020+A1:2023, *Railway applications - Fire protection on railway vehicles - Part 2: Requirements for fire behaviour of materials and components*

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EN 50121-3-1:2017,² *Railway applications - Electromagnetic compatibility - Part 3-1: Rolling stock - Train and complete vehicle*

EN 50121-3-2:2016,³ *Railway applications - Electromagnetic compatibility - Part 3-2: Rolling stock - Apparatus*

EN 50153:2014,⁴ *Railway applications - Rolling stock - Protective provisions relating to electrical hazards*

EN 50155:2021, *Railway applications - Rolling stock - Electronic equipment*

EN 50206-1:2010, *Railway applications - Rolling stock - Pantographs: Characteristics and tests - Part 1: Pantographs for main line vehicles*

EN 50206-2:2010, *Railway applications - Rolling stock - Pantographs: Characteristics and tests - Part 2: Pantographs for metros and light rail vehicles*

EN 50317:2012,⁵ *Railway applications - Current collection systems - Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line*

EN 50318:2018,⁶ *Railway applications - Current collection systems - Validation of simulation of the dynamic interaction between pantograph and overhead contact line*

EN 50367:2020,⁷ *Railway applications - Fixed installations and rolling stock - Criteria to achieve technical compatibility between pantographs and overhead contact line*

EN 50405:2015,⁸ *Railway applications - Current collection systems - Pantographs, testing methods for contact strips*

EN 60529:1991,⁹ *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

EN 60204-1:2018, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1:2016, modified)*

EN 60204-32:2008, *Safety of machinery - Electrical equipment of machines - Part 32: Requirements for hoisting machines (IEC 60204-32:2008)*

² As impacted by EN 50121-3-1:2017/A1:2019.

³ As impacted by EN 50121-3-2:2016/A1:2019.

⁴ As impacted by EN 50153:2014/A1:2017 and EN 50153:2014/A2:2020.

⁵ As impacted by EN 50317:2012/A1:2022.

⁶ As impacted by EN 50318:2018/A1:2022.

⁷ As impacted by EN 50367:2020/A1:2022.

⁸ As impacted by EN 50405:2015/A1:2016.

⁹ As impacted by EN 60529:1992/corrigendum May 1993, EN 60529:1992/A1:2000, EN 60529:1992/A2:2013, EN 60529:1992/A2:2013/AC:2019-02 and EN 60529:1992/AC:2016-02.

EN 60825-1:2014,¹⁰ *Safety of laser products - Part 1: Equipment classification and requirements (IEC 60825-1:2014)*

EN 61310-1:2008, *Safety of machinery - Indication, marking and actuation - Part 1: Requirements for visual, acoustic and tactile signals (IEC 61310-1:2007)*

EN 61310-2:2008, *Safety of machinery - Indication, marking and actuation - Part 2: Requirements for marking (IEC 61310-2:2007)*

EN 61310-3:2008, *Safety of machinery - Indication, marking and actuation - Part 3: Requirements for the location and operation of actuators (IEC 61310-3:2007)*

EN 61508-3:2010, *Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 3: Software requirements (IEC 61508-3:2010)*

EN IEC 61496-1:2020, *Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests (IEC 61496-1:2020)*

EN ISO 2860:2008, *Earth-moving machinery - Minimum access dimensions (ISO 2860:1992)*

EN ISO 2867:2011, *Earth-moving machinery - Access systems (ISO 2867:2011)*

EN ISO 3411:2007, *Earth-moving machinery - Physical dimensions of operators and minimum operator space envelope (ISO 3411:2007)*

EN ISO 3449:2008, *Earth-moving machinery - Falling-object protective structures - Laboratory tests and performance requirements (ISO 3449:2005)*

EN ISO 3471:2008, *Earth-moving machinery - Roll-over protective structures - Laboratory tests and performance requirements (ISO 3471:2008)*

EN ISO 3744:2010, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane (ISO 3744:2010)*

EN ISO 4413:2010, *Hydraulic fluid power - General rules and safety requirements for systems and their components (ISO 4413:2010)*

EN ISO 4414:2010, *Pneumatic fluid power - General rules and safety requirements for systems and their components (ISO 4414:2010)*

EN ISO 4871:2009, *Acoustics - Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*

EN ISO 5353:1998, *Earth-moving machinery, and tractors and machinery for agriculture and forestry - Seat index point (ISO 5353:1995)*

¹⁰ As impacted by EN 60825-1:2014/A11:2021, EN 60825-1:2014/A11:2021/AC:2022-03 and EN 60825-1:2014/AC:2017-06.

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EN ISO 6682:2008, *Earth-moving machinery - Zones of comfort and reach for controls (ISO 6682:1986, including Amd 1:1989)*

EN ISO 6683:2008, *Earth-moving machinery - Seat belts and seat belt anchorages - Performance requirements and tests (ISO 6683:2005)*

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¹¹ As impacted by EN ISO 20643:2008/A1:2012.

¹² As impacted by ISO 4305:2014/AMD 1:2016.

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koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹³ As impacted by ISO 11112:1995/AMD 1:2001.

¹⁴ As impacted by ISO 12117-2:2008/COR 1:2010 and ISO 12117-2:2008/AMD 1:2016.