Irish Standard
I.S. EN 15955-2:2013

Railway applications - Track - Demountable machines and associated equipment - Part 2: General safety requirements

I.S. EN 15955-2:2013

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Railway applications - Track - Demountable machines and associated equipment - Part 2: General safety requirements

Applications ferroviaires - Voie - Machines déraillables et éléments associés - Partie 2 : Prescriptions générales de sécurité

Bahnanwendungen - Oberbau - Ausgleisbare Maschinen und zugehörige Ausstattung - Teil 2: Allgemeine Sicherheitsanforderungen

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN 15955-2:2013) 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of an identical text or by endorsement, at the latest by October 2013, and conflicting national standards shall be withdrawn at the latest by October 2013.

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

This document 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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

EN 15955, *Railway applications — Track — Demountable machines and associated equipment,* consists of the following parts:

— *Part 1: Technical requirements for running and working*;

— *Part 2: General safety requirements* (the present document).

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard is a type C standard as stated in EN ISO 12100.

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

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 according to the provisions of this type C standard.

1 Scope

This European Standard specifies the technical requirements to deal with the significant hazards, hazardous situations and events, common to demountable machines, as defined in EN 15955-1:2013, intended for construction, maintenance inspection of the railway infrastructure, shunting and emergency rescue vehicles.

This European Standard specifies the technical requirements to deal with the common hazards during transport, assembly and installation, commissioning, running on track, use including setting, programming, and process changeover, operation, cleaning, fault finding, maintenance and de-commissioning of the machines when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer; see Clause 4.

NOTE Specific measures for exceptional circumstances are not dealt with in this European Standard. They can be the subject of negotiation between manufacturer and the machine operator.

The common hazards dealt with include the general hazards presented by the machines, as well as the hazards presented by the following specific machine functions:

— excavation;

— ballast tamping, ballast cleaning, ballast regulating, ballast consolidating;

— track renewal;

— rail maintenance;

— craning;

— catenary renewal / maintenance;

— maintenance of the components of the infrastructure;

— inspection and measurement of the components of the infrastructure;

— tunnel inspection / ventilation;

— shunting;

— emergency rescue and recovery;

during commissioning, use, maintenance and servicing.

This European Standard applies to self-propelled machines that are not intended to operate signalling and control systems. Other similar machines are dealt with in other European Standards; see Annex D.

It is assumed that a finished standard automotive chassis used as a host for a demountable machine will offer an acceptable safety level for its designed functions before conversion. This specific aspect is not dealt with in this European Standard.

This European Standard does not deal with:

a) requirements with regard to the quality of work and the performance of the machine;

b) machines that utilise the catenary for traction purposes;

c) specific requirements established by a railway infrastructure manager;

d) negotiations between the manufacturer and the machine operator for additional or alternative requirements;

e) hazards due to air pressure caused by the passing of high-speed trains at more than 200 km/h;

f) requirements which could be necessary in case of use in extreme conditions, such as:

1) extreme ambient temperatures (below − 20 °C or above + 40 °C);

2) highly corrosive or contaminating environment, e.g. due to the presence of chemicals;

3) potentially explosive atmospheres.

This European Standard applies to all machines that are ordered one year after the publication date by CEN of this standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 280, *Mobile elevating work platforms — Design calculations — Stability criteria — Construction — Safety — Examinations and tests*

EN 349, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

EN 474-1:2006+A1:2009, *Earth-moving machinery — Safety — Part 1: General requirements*

EN 547-1, *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, *Safety of machinery — Human body measurements — Part 2: Principles for determining the dimensions required for access openings*

EN 547-3, *Safety of machinery — Human body measurements — Part 3: Anthropometric data*

EN 614-1, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles*

EN 614-2, *Safety of machinery — Ergonomic design principles — Part 2: Interactions between the design of machinery and work tasks*

EN 618, *Continuous handling equipment and systems — Safety and EMC requirements for equipment for mechanical handling of bulk materials except fixed belt conveyors*

EN 619, *Continuous handling equipment and systems — Safety and EMC requirements for equipment for mechanical handling of unit loads*

EN 620, *Continuous handling equipment and systems — Safety and EMC requirements for fixed belt conveyors for bulk materials*

EN 842, *Safety of machinery — Visual danger signals — General requirements, design and testing*

EN 894-1, *Safety of machinery — Ergonomic requirements for the design of displays and control actuators — Part 1: General principles for human interactions with displays and control actuators*

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