

**Raudteealased rakendused. Rattapaarid ja veermikud.
Rattad. Tootenõuded KONSOLIDEERITUD TEKST**

Railway applications - Wheelsets and bogies - Wheels -
Product requirements CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13262:2004+A2:2011 sisaldab Euroopa standardi EN 13262:2004+A2:2011 ingliskeelset teksti.

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English Version

Railway applications - Wheelsets and bogies - Wheels - Product requirements

Applications ferroviaires - Essieux montés et bogies -
Roues - Prescriptions pour le produit

Bahnanwendungen - Radsätze und Drehgestelle - Räder -
Produktanforderungen

This European Standard was approved by CEN on 18 March 2003 and includes Amendment 1 approved by CEN on 23 September 2008 and Amendment 2 approved by CEN on 24 January 2011.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 13262:2004+A1:2008) 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of an identical text or by endorsement, at the latest by 30 September 2011 and conflicting national standards shall be withdrawn at the latest by 30 September 2011.

This document includes Amendment 1 approved by CEN on 2008-09-23.

This document supersedes EN 13262:2004.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

A2 This document has been created under a mandate granted to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association and supports the essential requirements of Directive 2008/57/EC. **A2**

A2 For the relationship with Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document. **A2**

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

Introduction

Normative documents which have been used until now in Europe for the wheel delivery (UIC leaflets, national standards) had for the main purpose, a complete definition of the delivery procedures and the wheel characteristics that were to be measured.

Product qualification was sometimes mentioned, but the procedures and the characteristics that had to be verified for the qualification were not given.

This standard addresses these requirements by:

- a) definition of all the wheel characteristics. These are either verified during the qualification or delivery of the product (see clause 3);
- b) definition of the qualification procedures (see informative annex E);
- c) definition of the delivery conditions (see informative annex F). Here, a choice is given to the supplier of either:
 - a traditional delivery procedure with a control by batch sampling as in existing documents (see F.4), or
 - a delivery procedure using quality assurance concepts (see F.5).

The standard defines the wheel product qualification, the technical approval procedure is not within the scope of this standard.

1 Scope

This European Standard specifies the characteristics of railway wheels for use on European networks.

A1 Four steel grades, ER6, ER7, ER8 and ER9 are defined in this standard; for European freight wagon interoperability purposes only grades ER6, ER7 and ER8 are applicable.

NOTE 1 Grade ER6 is not normally fit for the duty of application to freight wagons; it is normally applied in low axleload situations. **A1**

A1 Certain characteristics are defined according to a category 1 or a category 2. Category 1 is generally chosen when the train speed is higher than 200 km/h. Freight vehicles running at speeds lower than 200 km/h generally use wheels of Category 2. **A1**

These categories can sometimes be subdivided, depending upon the characteristics.

This standard is applicable to solid forged and rolled wheels which are made from vacuum degassed steel and have a chilled rim. They are to have already been used in commercial conditions on a European network in a significant quantity, or to have satisfied a technical approval procedure according to EN 13979-1 for their design.

A1 NOTE 2 **A1** The definition of other wheels may be found in other documents, such as UIC leaflets or ISO standards.

A1 NOTE 3 **A1** The technical approval procedure is not within the scope of this standard.

A1 NOTE 4 **A1** Rim-chilled" describes heat treatment of the rim, the aim of which is to harden the rim and to create compressive residual stresses in the rim.

2 Normative references

The following referenced documents are indispensable for the application 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 10002-1, *Metallic materials - Tensile testing - Part 1: Method of test at ambient temperature*

EN 10045-1, *Metallic materials - Charpy impact test - Part 1: Test method*

EN ISO 6506-1,  *Metallic materials - Brinell hardness test - Part 1: Test method (ISO 6506-1:2005)* 

 Deleted text 

ISO 1101,  *Geometrical Product Specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out* 

ISO 4967:1998, *Steel - Determination of content of non-metallic inclusions - Micrographic method using standard diagrams*

ISO 5948:1994, *Railway rolling stock material - Ultrasonic acceptance testing*

ISO 6933:1986, *Railway rolling stock material - Magnetic particle acceptance testing*

ISO/TR 9769¹⁾, *Steel and iron - Review of available methods of analysis*

ISO 14284:1996,  *Steel and iron - Sampling and preparation of samples for the determination of chemical composition* 

 ASTM E399.90:1997 , *Standard test method for plane-strain fracture toughness of metallic materials*

1) See also CR 10261:1995