

**Raudteelased rakendused. Raudteeveeremi ja veeremidetailide keevitamine. Osa 1: Üldine**

**Railway applications - Welding of railway vehicles and components - Part 1: General**

<b>EESTI STANDARDI EESSÕNA</b>	<b>NATIONAL FOREWORD</b>
See Eesti standard EVS-EN 15085-1:2007+A1:2013 sisaldab Euroopa standardi EN 15085-1:2007+A1:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 15085-1:2007+A1:2013 consists of the English text of the European standard EN 15085-1:2007+A1:2013.
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Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 22.05.2013.	Date of Availability of the European standard is 22.05.2013.
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English Version

## Railway applications - Welding of railway vehicles and components - Part 1: General

Applications ferroviaires - Soudage des véhicules et des composants ferroviaires - Partie 1: Généralités

Bahnanwendungen - Schweißen von Schienenfahrzeugen und -fahrzeugteilen - Teil 1: Allgemeines

This European Standard was approved by CEN on 26 August 2007 and includes Amendment 1 approved by CEN on 18 April 2013.

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## Foreword

This document (EN 15085-1:2007+A1:2013) 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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

This document supersedes EN 1585-1:2007.

This document includes Amendment 1 approved by CEN on 2013-04-18.

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

This series of European Standards EN 15085 "Railway applications – Welding of railway vehicles and components" consists of the following parts:

- Part 1: General
- Part 2: Quality requirements and certification of welding manufacturer
- Part 3: Design requirements
- Part 4: Production requirements
- Part 5: Inspection, testing and documentation

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.

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## Introduction

Welding is a special process in the manufacture of railway vehicles and their parts. The required provisions for this process are laid down in the standards series EN ISO 3834. The basis of these provisions is the basic technical welding standards with respect to the special requirements for the construction of railway vehicles.

This standard is aimed at defining the terms of enforcement applicable to European Standards. It will not be construed as a substitute for these standards.

This standard can also be used by internal and external parties, including certification bodies, to assess the organisation's ability to meet customer, regulatory and the organisation's own requirements.

## 1 Scope

This series of standards applies to welding of metallic materials in the manufacture and maintenance of railway vehicles and their parts.

With respect to the railway environment, this series of standards defines the certification and quality requirements for the welding manufacturer to undertake new building and repair work. It then provides an essential link between performance requirements defined during design, and achieves appropriate quality welds during production and the demonstration of the required quality by inspection.

This link is achieved by defining a weld performance class during design, which is based on safety and stress factors relevant to railway operation. Quality levels of imperfections are assigned to weld performance classes to ensure a certain level of performance intended during design. Based on these weld performance classes, certification levels for production as well as inspection and testing and qualifications for welding personnel of the manufacturer are specified.

This standard deals with welding steel and aluminium alloys including castings.

NOTE The principle of this standard may also be applied for welding of other parent materials (e.g. Cu, Mg).

This part of the series provides general recommendations and definitions for welding railway vehicles and associated components. Except for specific provisions which are laid down contractually, this standard applies to all assemblies, sub-assemblies or parts welded by any welding process, either manual, partly mechanized, fully mechanized or automatic welding as defined in EN ISO 4063.

This series of standards does not deal with product qualification.

Items of equipment subject to specific regulations are not relevant to the scope of this series of standards, e.g. air reservoirs according to EN 286-3 and EN 286-4.

## 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 45020:2006, *Standardization and related activities - General vocabulary (ISO/IEC Guide 2:2004)*

CEN/TR 14599:2005, *Terms and definitions for welding purposes in relation with EN 1792*

EN ISO 17659:2004, *Welding – Multilingual terms for welded joints with illustrations (ISO 17659:2002)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in CEN/TR 14599:2005, EN ISO 17659:2004 and EN 45020:2006 and the following apply.

**A1** *deleted text* **A1**

### **A1** 3.1 **A1** certification level

level to classify the welded railway vehicle or the welded component depending on the weld performance class (CP)