

RAUDTEEALASED RAKENDUSED. RAUDTEEEVEEREMI JA  
VEEREMIDETAILIDE KEEVITAMINE. OSA 1:  
ÜLDNÕUDED

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 15085-1:2023 sisaldab Euroopa standardi EN 15085-1:2023 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 07.06.2023.</p> <p>Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 15085-1:2023 consists of the English text of the European standard EN 15085-1:2023.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 07.06.2023.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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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 10 April 2023.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

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## European foreword

This document (EN 15085-1:2023) 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of an identical text or by endorsement, at the latest by December 2023, and conflicting national standards shall be withdrawn at the latest by December 2023.

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 has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association.

This document supersedes EN 15085-1:2007+A1:2013.

This document includes the following significant technical changes with respect to EN 15085-1:2007+A1:2013:

- a) The Foreword has been updated ;
- b) The Introduction has been revised;
- c) The Scope has been updated;
- d) Terms and definitions have been revised;
- e) Clause 4 “General requirements”: change of “company certification” to “manufacturer classification”;
- f) New Clause 5 “Other applicable regulations” added;
- g) New Annex A “Welding on tank wagons” added.

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.

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

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

It describes the control for the welding process for railway vehicles and their components for new manufacture and maintenance.

With respect to the railway environment, this series of standards defines the quality requirements for the welding manufacturer to undertake new building and repair work.

Components, parts and subassemblies are assigned a classification level, based on their safety relevance. According to these levels, qualifications for welding personnel of the manufacturer are specified.

This series provides an essential link between the weld performance class defined during design, the quality of the weld, and the demonstration of the required quality by inspection.

This series of standards does not deal with product qualification.

**NOTE** This series of standards can also be used by internal and external parties, including certification bodies, to assess the organization's ability to meet customer, regulatory and the organization's own requirements.

## 1 Scope

This document defines terms in the field of welding on railway vehicles and associated components. This document is applicable 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.

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

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

EN ISO 17659, *Welding - Multilingual terms for welded joints with illustrations (ISO 17659)*

## 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### **classification level**

level to classify the welded railway vehicle or the welded component depending on the safety relevance

Note 1 to entry The classification level is abbreviated by “CL”.

### 3.2

#### **safety relevance**

classification based on the severity of the consequences of a failure of a welded component with respect to the effects on persons, facilities and the environment

Note 1 to entry For more detailed information on safety relevance low, medium, high: see EN 15085-2:2020, Clause 4.1.

### 3.3

#### **weld performance class**

performance requirements of the welded joint as defined by the stress category and the safety category of the welded joint

Note 1 to entry The weld performance class is abbreviated by “CP” (class of performance).

### 3.4

#### **weld inspection class**

classification that describes the inspection requirements for a given weld

Note 1 to entry The weld inspection class is abbreviated by “CT” (class of testing).