

Raudteealased rakendused. Raudteeveeremi ja veeremidetailide keevitamine. Osa 2: Kvaliteedinõuded keevitusettevõttele ja keevitusettevõtte sertifitseerimine

Railway applications - Welding of railway vehicles and components - Part 2: Quality requirements and certification of welding manufacturer

EESTI STANDARDI EESSÕNA

See Eesti standard EVS-EN 15085-2:2007 sisaldab Euroopa standardi EN 15085-2:2007 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 24.10.2007.

Standard on kättesaadav Eesti Standardikeskusest.

NATIONAL FOREWORD

This Estonian standard EVS-EN 15085-2:2007 consists of the English text of the European standard EN 15085-2:2007.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.

Date of Availability of the European standard is 24.10.2007.

The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 25.160.10, 45.060.01

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

ICS 25.160.10; 45.060.01

English Version

**Railway applications - Welding of railway vehicles and
components - Part 2: Quality requirements and certification of
welding manufacturer**

Applications ferroviaires - Soudage des véhicules et des
composants ferroviaires - Partie 2: Exigences de qualité et
certification du constructeur

Bahnanwendungen - Schweißen von Schienenfahrzeugen
und -fahrzeugteilen - Teil 2: Qualitätsanforderungen und
Zertifizierung von Schweißbetrieben

This European Standard was approved by CEN on 18 August 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Certification of welding manufacturers	6
5 Quality requirements for the welding manufacturer	8
5.1 Staff requirements	8
5.2 Technical requirements	10
5.3 Welding coordination organization.....	11
5.4 Welding procedure specification	11
5.5 Assignment of the requirements to certification level.....	11
6 Certification procedure	11
6.1 Audit for the certification	11
6.2 Certificate	12
7 Validity	12
Annex A (informative) Possible allocation of parts and subassemblies of rail vehicles to the certification levels	14
Annex B (normative) Tasks and areas of competence of the welding coordinator	16
Annex C (normative) Requirements for the welding manufacturer	19
Annex D (informative) Welding of railway vehicles and components according to EN 15085-2	21
Bibliography	22

Foreword

This document (EN 15085-2:2007) 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 April 2008, and conflicting national standards shall be withdrawn at the latest by April 2008.

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.

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 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 are the basic technical welding standards in respect of the special requirements for the construction of railway vehicles.

This standard is aimed at defining the terms of enforcement applicable to European Standards, it should not be construed as a substitute to 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.

This part of the series defines the certification levels as well as the requirements for welding manufacturers and describes the procedure for the recognition of welding manufacturers.

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 287-1, *Qualification test of welders – Fusion welding – Part 1: Steels*

EN 473, *Non destructive testing – Qualification and certification of NDT personnel – General principles*

EN 1418, *Welding personnel – Approval testing of welding operators for fusion welding and resistance weld setters for fully mechanized and automatic welding of metallic materials*

EN 15085-1:2007, *Railway applications - Welding of railway vehicles and components - Part 1: General*

EN 15085-3:2007, *Railway applications – Welding of railway vehicles and components – Part 3: Design requirements*

EN 15085-4:2007, *Railway applications – Welding of railway vehicles and components – Part 4: Production requirements*

EN ISO 3834 (all parts), *Quality requirements for fusion welding of metallic materials*

EN ISO 9606-2, *Qualification test of welders - Fusion welding - Part 2: Aluminium and aluminium alloys (ISO 9606-2:2004)*

EN ISO 14555, *Welding - Arc stud welding of metallic materials (ISO 14555:2006)*

EN ISO 14731:2006, *Welding coordination - Tasks and responsibilities (ISO 14731:2006)*

EN ISO 15607, *Specification and qualification of welding procedures for metallic materials - General rules (ISO 15607:2003)*

EN ISO 15609 (all parts), *Specification and qualification of welding procedures for metallic materials – Welding procedure specification*

EN ISO 15610 *Specification and qualification of welding procedures for metallic materials - Qualification based on tested welding consumables (ISO 15610:2003)*

EN ISO 15611, *Specification and qualification of welding procedures for metallic materials - Qualification based on previous welding experience (ISO 15611:2003)*

EN ISO 15612, *Specification and qualification of welding procedures for metallic materials - Qualification by adoption of a standard welding procedure (ISO 15612:2004)*

EN ISO 15613, *Specification and qualification of welding procedures for metallic materials - Qualification based on pre-production welding test (ISO 15613:2004)*

EN ISO 15614 (all parts)¹⁾ *Specification and qualification of welding procedures for metallic materials – Welding procedure test*

EN ISO 15620, *Welding - Friction welding of metallic materials (ISO 15620:2000)*

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:2005)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15085-1:2007 apply.

4 Certification of welding manufacturers

The quality requirements for welding manufacturers, which carry out welding work on rail vehicles, components and sub-assemblies, are specified by the standard series EN ISO 3834. Dependant on the certification level, the requirements of EN ISO 3834-2, EN ISO 3834-3 or EN ISO 3834-4 shall be fulfilled in principle (see Annex A).

Welding manufacturers, which carry out welding work on railway vehicles, components and sub-assemblies, shall be certified according to this standard, if specified.

Compliance with the requirements shall be checked and certified by a recognised manufacturer certification body (see Clause 6).

Four certification levels (CL) are laid down for the certification of welding manufacturers (Level 1 to Level 4). Level 1 to Level 3 depends on the weld performance classes CP A to CP D of the welded joints specified in EN 15085-3:2007, Table 2.

Table 1 contains a description of the certification level and the allocation in the weld performance classes.

The required certification level depends on the following two items:

- 1) Table 1;
- 2) safety relevance of the components or sub-assemblies where the welded part is integral (see list beneath Table 1).

1) For railway applications, only EN ISO 15614-1, EN ISO 15614-2, prEN ISO 15614-3, EN ISO 15614-4, EN ISO 15614-7, EN ISO 15614-11, EN ISO 15614-12 and EN ISO 15614-13 are relevant.