DEUTSCHE NORM

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Railway applications – Welding of railway vehicles and components – Part 3: Design requirements English version of DIN EN 15085-3:2010-01

Bahnanwendungen –
Schweißen von Schienenfahrzeugen und -fahrzeugteilen –
Teil 3: Konstruktionsvorgaben
Englische Fassung DIN EN 15085-3:2010-01

Document comprises 53 pages

National foreword

This standard has been prepared by Technical Committee CEN/TC 256 “Railway applications” (Secretariat: DIN, Germany) in collaboration with Technical Committee CEN/TC 121 “Welding and allied processes”.

The responsible German body involved in its preparation was the *Normenausschuss Fahrweg und Schienenfahrzeuge* (Railway Standards Committee), Working Committee NA 087-00-12 AA *Werkstoffe, Füge- und Verbindungstechnik.*

The EN 15085-1 to EN 15085-5 series of European Standards replaces the DIN 6700-1 to DIN 6700-6 series of German national standards, with European Standard EN 15085-3 replacing the German national standards DIN 6700-3, DIN 6700-5 and parts of DIN 6700-6; however, the European Standard does not describe the evaluation or determination of the stress factor.

Safety categories

The safety categories defined in 4.5 are in accordance with DIN 6700-1. In Germany these categories are determined taking the information in Annex G of the present standard into consideration if no other classification is required by the national railway authority or by the customer.

Weld performance classes

The new classification into weld performance classes and their correlation with the new weld inspection classes involve modifications to DIN 6700.

Use of existing design drawings and weld planning documents

Because classification into weld performance classes is still based on stress factors and safety categories, design drawings and weld planning documents drawn up in accordance with DIN 6700 can be converted using cross-reference and/or recoding tables developed by the welding manufacturer.

Existing design drawings or weld planning documents may continue to be used if so agreed with the customer and the national railway authority. Reference shall be made to the cross-reference and/or recoding tables used.

Further explanatory notes and details regarding the conversion of existing design drawings are given in the technical bulletin DVS 1623. This document also compares the quality requirements specified in DIN EN 15085-3 with those given in previous technical rules issued by the German national railway (DB, or *Deutsche Bahn*), the state-owned railway of the former German Democratic Republic (DR, or *Deutsche Reichsbahn*) and the DIN 6700 series.

Welding coordination

At his discretion, the responsible welding coordinator may delegate tasks to a deputy coordinator designated by him, in which case the specifications of Annex B of DIN EN 15085-2:2008 are to be taken into account.

Annex H “Welding of 6000 series aluminium alloy extrusions – Recommendations from the Aljoin project for improved crashworthiness”

This Annex may only be used in conjunction with the recommendations of the Aljoin research project, see [5] and [6].

The DIN Standard corresponding to the International Standard referred to in clause 2 is as follows:

ISO 10447	DIN EN ISO 10447

Amendments

This standard differs from DIN 6700-3:2003-02, DIN 6700-5:2002-05 and DIN 6700-6:2000-08 as follows:

a) The content has been updated to reflect the current state of technology and harmonized with European and international standardization.

b) The classification into weld performance classes has been changed. The classes are now designated as CP A, CP B, CP C1, CP C2, CP C3 and CP D.

c) The weld performance classes CP B to CP D correspond to the equivalent quality levels for imperfections as specified in the relevant EN ISO Standards. Weld performance class CP A is an additional quality level.

d) The weld performance classes are correlated with weld inspection classes which indicate the type and scope of weld testing, see DIN EN 15085-5.

Compared with DIN EN 15085-5-3:2008-01, the following corrections have been made to the German version only and therefore do not affect the English text:

e) The table for converting DIN 6700 weld performance classes into EN 15085 classes given in the National Annex NA has been deleted because it led to problems of interpretation as regards the correlation of the classes.

f) The explanatory notes on weld performance classes in the National foreword now make reference to the technical bulletin DVS 1623.

Previous editions

DIN 6700-3: 2003-02
DIN 6700-5: 2002-05
DIN 6700-6: 2000-08
DIN EN 15085-3: 2008-01

National Annex NA
(informative)

Bibliography

DIN EN ISO 10447, *Resistance welding — Peel and chisel testing of resistance spot and projection welds*

DVS 1623, *Welding of railway vehicles — Notes on implementing EN 15085 — Comparison with DIN 6700*

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English Version

Railway applications - Welding of railway vehicles and components - Part 3: Design requirements

Applications ferroviaires - Soudage des véhicules ferroviaires et des pièces - Partie 3 : Exigences de conception

Bahnanwendungen - Schweißen von Schienenfahrzeugen und -fahrzeugteilen - Teil 3: Konstruktionsvorgaben

This European Standard was approved by CEN on 26 August 2007.

EUROPEAN COMMITTEE FOR STANDARDIZATION
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