

The DVS 1623 technical bulletin has been created with the objectives of making it easier for the user of the standard which has been applicable to the welding of rail vehicles and rail vehicle parts at the national level until now (DIN 6700-1 to DIN 6700-6) to make the transition to the new European standard (DIN EN 15085-1 to DIN EN 15085-5) and of making recommendations for the handling of existing documents.

The technical bulletin applies to users of the DIN EN 15085 series of standards.

The customer and the contractor can reach a contractual agreement with regard to the application of the technical bulletin.

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1 Purposes

The purposes of this technical bulletin are to make it easier for the user who has worked with the standard which has been applicable to the welding of rail vehicles and rail vehicle parts at the national level until now (DIN 6700-1 to DIN 6700-6) to make the transition to the new European standard (DIN EN 15085-1 to DIN EN 15085-5) and to make recommendations for the handling of existing documents.

This publication has been drawn up by a group of experienced specialists working in an honorary capacity and its consideration as an important source of information is recommended. The user should always check to what extent the contents are applicable to his particular case and whether the version on hand is still valid. No liability can be accepted by the Deutscher Verband für Schweißen und verwandte Verfahren e.V., and those participating in the drawing up of the document.

Corresponding to the national foreword to DIN EN 15085-3, the technical bulletin includes:

- Explanations and details for the changeover of existing design drawings.
- A comparison of the quality requirements according to DIN EN 15085-3 with the old sets of rules of the former DB and DR as well as with DIN 6700.

Furthermore, the technical bulletin includes:

- Transitional arrangements from the DIN 6700 series of standards to DIN EN 15085.
- An assignment of the welding filler materials to the base materials.
- An assignment of the materials customary in rail vehicle construction to the material groups according to the DIN expert report CEN ISO/TR 15608.
- A representation of permissible irregularities on the basis of DIN EN 15085-3, for fusion-welded joints.

2 Comparison of the terms from the DIN 6700 series of standards and from the DIN EN 15085 series of standards

In the following sections, the essential terms from the DIN 6700 series of standards are compared with the terms and arrangements in the DIN EN 15085 series of standards.

2.1 Term in DIN 6700 Weld quality class Term in DIN EN 15085 Weld quality class

The weld quality class is defined not only in DIN 6700-3, Table 1, but also in DIN EN 15085-3, Table 2, in each case depending on the stress condition and the need for safety.

Description of the abbreviations of the weld quality classes according to DIN EN 15085:

Example: **CP C1**

CP stands for the English term "Class of weld performance".

C stands for the assessment group of the irregularities according to the international standards (DIN EN ISO 5817, DIN EN ISO 10042, DIN EN ISO 13919-1 and DIN EN ISO 13919-2).

1 stands for a different scope of testing (only in the case of CP C).

Remark: In the case of CP A, "1" stands for a special quality defined in DIN EN 15085-3.

Table 4 in DIN EN 15085-3 relates the relationship between the stress condition, the need for safety, the weld quality classes, the quality group for irregularities, the weld testing classes and the scope of testing. However, it must be pointed out that details which are stipulated in other parts of DIN EN 15085, e.g. the footnotes of Table 4 in DIN EN 15085-5, are missing here.

Table 1 according to DIN 6700-3 and Table 2 according to DIN EN 15085-3 are compared below.