

# A-Z – Guideline

## of the Working Group Adhesive Bonding DIN 6701

### Foreword

The A-Z Guideline is a compendium of the decisions of the “Working Group Adhesive Bonding DIN 6701”. It complements the procedure for acquiring a certificate for carrying out adhesive bonding work on rail vehicles and parts of rail vehicles in accordance with DIN 6701-2 and contains supplementary definitions, temporary regulations, restrictions and interpretations relating to the DIN 6701 series of standards.

When Certification Bodies certify user-companies in accordance with DIN 6701-2, it is mandatory to use the A-Z-Guideline.

The A-Z-Guideline is managed and kept up to date by the working group. Applications for inclusion of items must be sent in written form to the secretary of the working group. (via the Certification Bodies or via email to 'eingabe@din6701.de').

The coexistence of DIN 6701 and EN 17460 ends at the end of September 2025. Accordingly, the rules of the A-Z guideline of the ECARV - European Committee for Adhesive Bonding of Railway Vehicles - apply in addition to EN 17460.

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### Revision

**No. 57 (dated 2024-11-07)**

## Revisions

Changes since the last version are underlined. The dates the decisions were made and all changes are shown via the version numbers. The version numbers correspond to the working group meetings.

Revision	Meeting	Date	Revision	Meeting	Date
1	1 <sup>st</sup> Meeting	23.05.2006	30	30 <sup>th</sup> Meeting	27.11.2014
2	2 <sup>nd</sup> Meeting	26.07.2006	31	31 <sup>st</sup> Meeting	10.03.2015
3	3 <sup>rd</sup> Meeting	10.08.2006	32	32 <sup>nd</sup> Meeting	16.06.2015
4	4 <sup>th</sup> Meeting	12.09.2006	33	33 <sup>rd</sup> Meeting	10.12.2015
5	5 <sup>th</sup> Meeting	13.10.2006	34	34 <sup>th</sup> Meeting	01.03.2016
6	6 <sup>th</sup> Meeting	20.12.2006	35	35 <sup>th</sup> Meeting	13.06.2016
7	7 <sup>th</sup> Meeting	07.02.2007	36	36 <sup>th</sup> Meeting	02.12.2016
8	8 <sup>th</sup> Meeting	14.06.2007	37	37 <sup>th</sup> Meeting	23.03.2017
9	9 <sup>th</sup> Meeting	10.12.2007	38	38 <sup>th</sup> Meeting	07.06.2017
10	10 <sup>th</sup> Meeting	14.11.2008	39	39 <sup>th</sup> Meeting	28.11.2017
11	11 <sup>th</sup> Meeting	09.03.2009	40	40 <sup>th</sup> Meeting	14.03.2018
12	12 <sup>th</sup> Meeting	08.06.2009	41	41 <sup>st</sup> Meeting	13.06.2018
13	13 <sup>th</sup> Meeting	10.09.2009	42	42 <sup>nd</sup> Meeting	22.11.2018
14	14 <sup>th</sup> Meeting	14.12.2009	43	43 <sup>rd</sup> Meeting	07.03.2019
15	15 <sup>th</sup> Meeting	15.03.2010	44	44 <sup>th</sup> Meeting	12.06.2019
16	16 <sup>th</sup> Meeting	12.07.2010	-	45 <sup>th</sup> Meeting	no revision
17	17 <sup>th</sup> Meeting	20.09.2010	-	46 <sup>th</sup> Meeting	no revision
18	18 <sup>th</sup> Meeting	13.12.2010	47	47 <sup>th</sup> Meeting	10.11.2020
19	19 <sup>th</sup> Meeting	28.03.2011	48	48 <sup>th</sup> Meeting	no revision
20	20 <sup>th</sup> Meeting	19.09.2011	49	49 <sup>th</sup> Meeting	28.06.2021
--	21 <sup>st</sup> Meeting	no revision	50	50 <sup>th</sup> Meeting	09.11.2021
22	22 <sup>nd</sup> Meeting	16.04.2012	51	51 <sup>st</sup> Meeting	03.03.2022
23	23 <sup>rd</sup> Meeting	10.09.2012	52	52 <sup>nd</sup> Meeting	14.06.2022
24	24 <sup>th</sup> Meeting	03.12.2012	53	53 <sup>rd</sup> Meeting	15.11.2022
--	25 <sup>th</sup> Meeting	no revision	54	54 <sup>th</sup> Meeting	27.04.2023
26	26 <sup>th</sup> Meeting	03.09.2013	55	55 <sup>th</sup> Meeting	12.10.2023
27	27 <sup>th</sup> Meeting	03.12.2013	56	56 <sup>th</sup> Meeting	25.04.2024
28	28 <sup>th</sup> Meeting	06.03.2014	<u>57</u>	<u>57<sup>th</sup> Meeting</u>	<u>07.11.2024</u>
29	29 <sup>th</sup> Meeting	11.09.2014			

## Abbreviations

EBA	German Federal Railway Authority
SAB	Supervisor Adhesive Bonding
SiC	Supervisor Adhesive Bonding in Charge
WG	Working Group Adhesive Bonding DIN 6701

# 1. Applications

## 1.1. Classification of safety pictograms

DIN 6701 applies. The SiC specifies a possible classification.

(Revision: 15)

## 1.2. Laminated safety glass

The production of laminated safety glass (by lamination) is not scope of DIN 6701. Other bonded joints and seals involving laminated safety glass are subject to the standard.

(Revision: 10, 11, 27, 30, 37, 55)

## 1.3. FRP

DIN 6701 does not apply when a bonded part is wrapped by the laminate and all the forces are taken up by the laminate itself. If the laminate cannot take up all the forces by itself DIN6701 will apply.

(Revision 28, 37)

## 1.4. Bonded parts in pressure vessels area

Bonded parts at pressure vessels are subject to the standard DIN 6701.

(Revision: 40)

# 2. Work specimens

2.1 This remark was deleted

(Deleted in Revision 55)

## 2.2. Work specimens for repair work

These work specimens are required. The nature and number of the work specimens are determined by the SiC.

The SiC decides where the specimen should cure/harden.

(Revision 14, 17, 37, 43)

## 2.3 Bead peel test

DIN 54457 has been withdrawn and replaced by DIN ISO 21194.

(Revision 52)

## **3. Repairs/Maintenance**

### **3.1. Maintenance**

Maintenance in the sense of DIN6701 refers to components which have suffered damage in use. According to the ECM guideline, this applies outside the warranty.

(Revision 36)

### **3.2. Repair carried out by the manufacturer after expiration of warranty**

When carrying out repair work according to class A1 and A2, a bonding supervisor of at least level 2 is required on site.

(Revision 23, 28, 37)

### **3.3. Commissioning of third parties**

For this scope, the bonding supervisor may supervise several sites.

The Safety Directive 2016/798 / EU stipulates the responsibility for the maintenance of the ECM (the responsible maintenance body). The vehicle must be held by means of a maintenance system in a safe condition, that is, the ECM must ensure by methods and processes that the requirements of DIN670 are complied with.

The competences and responsibilities in the contractual relationship between the commissioning party (purchaser) and the commissioned third party must be clearly defined.

(Revision 7, 9, 37, 50)

### **3.4. Repair carried out by the manufacturer for warranty**

When carrying out repair work according to class A1 and A2, a bonding supervisor of at least level 2 is required on site.

(Revision 7, 9, 16, 28, 37)

### **3.5. Transfer of a rail vehicle**

Apart from the certified company, repair work to bonded joints is permissible to allow temporary operability and ensure safe transfer of a rail vehicle to a certified site.

(Revision 22)

### **3.6. Change of adhesive system for repair compared to that indicated in the repair manual**

The proof of equal safety must be provided in accordance with § 2 EBO. The operator/manufacturer of the vehicle is responsible. Relevant proof (calculations, drawings, work instructions, etc.) must be presented on request.

(Revision 14)

### **3.7. Third parties contracted to undertake bonding work**

Commissioned third parties who carry out repair work require SAB with qualification levels according to the new production. Only in particular cases, repair work can also be carried out in company workplaces which are not certified in accordance with DIN 6701. In this case, the SiC of the commissioned third party must ensure that all conditions for undertaking the adhesive bonding work are met.

The personnel used to carry out the repair work must be qualified to at least level 3.

(Revision 7, 12, 20, 33, 37)

## **4. Supervision of bonding work**

### **4.1. Change of SAB staff**

If the personnel requirements of DIN 6701 for the bonding supervision are no longer fulfilled, the certification body must be informed immediately. The certification body then checks to what extent the certificate is adapted, suspended or withdrawn.

(Revision 13, 43, 54)

### **4.2. Appointment of SAB in their qualification phase**

For a transition period, persons who are undertaking EAE/EAS training can also be appointed as SAB if the training already has started by the time of the company audit.

If the training has not started by the time of the company audit and only a registration for EAE/EAS training was signed, the SAB must at least be qualified to level 2 (for requirement SAB level 1) or level 3 (for SAB level 2).

In this case, the period of validity of the certificate must be limited to this transition period, until the SAB is fully qualified.

(Revision 13, 15, 37, 54)

### **4.3. Appointment of company owners, managing directors and production managers**

Company owners, managing directors and production managers can be appointed as SiC in the areas of design, process planning, purchasing, trade and assembly as well as commissioning of third parties for class A1.

The scope of repair is considered like production. In this case the restrictions apply for small-scale bonding work.

(Revision 39)

### **4.4. Overview of the bonding supervisory personnel**

The companies must keep up-to-date documentation of the SAB with name, adhesive bonding qualification and area of responsibility. The requirements of DVS 3311 remain unaffected.

(Revision 56)

## 5. Classification

### 5.1. Bonded joints without safety requirements (class Z)

Bonded joints without safety requirements (class Z) are to be classified in a comprehensible way; there are no further requirements on the part of the standard or the certification procedure.

(Revision 7, 10, 22, 37, 54)

## 6. Personnel Qualification

6.1. This remark was deleted

(Deleted in Version 54)

### 6.2. Supply of temporary workers (Employee leasing)

Temporary workers for bonding work (temporary employment) are subject to the same qualification requirements as permanent staff. Temporary employment is involved if the employee is subject to the hirer's right to issue instructions. Product liability in this case remains with the hirer. As soon as the product liability is taken over by an external company for which the employee works, it is a matter of commissioning a third party in accordance with DIN 6701-2.

(Revision 12, 47)

6.3. This remark was deleted

(Deleted in Version 54)

### 6.4. Specific knowledge according DIN 6701-2:2015 table 3

The footnote "d" of table 3 of DIN 6701-2:2015 (or proof of specific knowledge) is specified by: "or comparable specific *technical* knowledge" (corresponds to qualification level 2 according table 1 of DIN 6701-2:2015).

For the area of application 4 (purchasing, trading and assembly) following is valid for the Deputy of SiC for class A1 and A2: if constant availability of SiC is required, otherwise a non-equal authorized Deputy without adhesive bonding related qualification level is possible, which ensures that no bonding decisions are made during the absence of the SiC.

(Revision 36, 54)

### 6.5. Qualification of the Deputy SiC in case of commissioning of third parties

A deputy without adhesive bonding qualification can be appointed in the scope of commissioning of third parties if it is ensured that the SiC is involved in the commissioning and the SiC is present at the execution.

(Revision 41, 42)

## **6.6 Acceptance of the DVS Adhesive Bonding Technologist as SAB Level 1**

A DVS bonding technologist according to DVS 3304 is considered as a comparable qualification for a SAB level 1, but without the competence in the process step of design for bonded components of class A1.

(Revision 51)

## **7. Miscellaneous**

### **7.1. Design and production documentation**

Design and production documents (e. g. drawings, parts list, working instructions) for the parts / railvehicles in the production must comply with DIN 6701.

(Revision 19)

### **7.2. Handling materials containing silicone**

In areas where classified adhesive joints are made, only pasty silicone adhesives, lubricants and sealants as well as cured silicone materials are permitted if it can be ensured that there is no risk of carry-over.

(Revision 20)

### **7.3. Silicone-free release agents**

Silicone-free release agents, such as PTFE-spray (Teflon), are only permitted if a risk of carry-over into the bonding area can be excluded.

(Revision 22)

### **7.4. Release procedure concerning adhesive bonding**

A class assignment on the drawing is sufficient. The release must be recorded (for example electronically). It must be ensured that subsequent releasers (e.g. design department) confirm the decision.

(Revision 19)

### **7.5. Certification of adhesive manufacturers**

A certification within the scope of design is necessary for adhesive manufacturers who design the bonded joint for a user-company and carry out the approval of the joint dimensions.

(Revision 17, 37)

### **7.6. Contract Review**

In the case that it is not evident if DIN 6701 must be fulfilled, the contractual partners have to determine whether this is the case or not. This only applies if the company does not in principle apply EN 17460 in accordance with the currently valid certificate for all bonding activities.

(Revision 30, 54)

## 7.7. Test laboratories

Companies or laboratories who offer services for testing bonded joints, design validation, processing properties and process monitoring must demonstrate their suitability for these tasks (e.g. a certificate of competence like an accreditation EN ISO/IEC 17025).

If no official certificate of competence is available, the company must check the following criteria when commissioning a test laboratory to test bonded joints of classes A1 and A2:

- Personnel (organization structure / responsibilities of those undertaking the testing work / certification of personnel operating testing equipment, certification in the area of adhesive bonding (e.g. own specimen preparation))
- Testing equipment (regular monitoring, testing using own and other guidelines, report preparation, traceability of the data)
- Workplace conditions (cleanliness, climate, limitations on access)
- Management of samples and products that are provided.
- Management and traceability of reports

Alternative to an audit by the company it is possible for a test lab to be assessed by a certification body regarding these points, which then issues a corresponding certificate of competence.

(Revision 22, 54, 55)

## 7.8. Standard correction DIN 6701-3

The title of Chapter A 3.4 of DIN 6701-3:2015 reads correctly: "Compression test for Determination of the adhesive behavior under compressive stress". The current heading is incorrect and identical to the heading of Chapter A 3.5.

(Revision 44)

## 7.9. Further training of the bonding personnel

As a guideline for continuous further training, the personnel carrying out the bonding process should be able to prove that they have completed 4 h to 8 h and supervisory personnel 8 h to 16 h. The complexity of the tasks, the responsibilities of the personnel in the bonding process and the scope of application should to be considered. Webinars are allowed if it is guaranteed to identify the participants.

The date, duration, content and instructor must be verified.

(Revision 50, 57)

## 7.10. Traceability

Traceability for adhesively bonded parts class A1 and A2 must be ensured. The type and handling of traceability shall be plausibly reasoned and specified.

(Revision 55)

## 7.11) Test speed for tensile shear tests

A shear rate of  $0.1 \text{ s}^{-1}$  is recommended for tensile shear tests of high modulus adhesive bonded specimens (see DIN 6701-3:2015, Annex A.4.2)

(Revision 56)



## **8. Company audits / certification**

### **8.1. Version of standard used for certification**

The standards series DIN 6701-2, -3, -4 in the version 12/2015 applies.

(Revision: 34, 35, 37, 47)

### **8.2. Application for issue of a certificate**

For the homologation and surveillance an application as shown in Annex 1 (changed) is needed, together with a business description.

The certification body has to check that the application complies with the requirements of DIN 6701.

(Revision: 8, 20, 27, 29, 31, 33, 34, 35, 37, 52)

### **8.3. Example of a bonded joint**

During company audits in the areas of production and repair, companies must manufacture or repair at least one bonded joint of the applied class. This shall be agreed with the certification body in advance. When commissioning third parties, sample bonding may be waived at the discretion of the certification body.

(Revision: 26, 31, 32, 37, 42)

### **8.4. Scope of the company audit**

For company audits, the quality requirements on user-companies must be reviewed using Table "Tasks" of DIN 6701-2.

Company audits will be carried out randomly on selected applications or processes.

The scope of a company audit may include:

- Details on the application for certification and company description
- Knowledge and understanding of generally accepted engineering practice (DIN 6701, other standards, guidelines, and technical bulletins);
- Company organization, authorities, responsibilities, rules for deputizing;
- Technical discussions with SAB (technical discussions must be held with the SiC and deputies with equal rights. If deputies with equal rights are not appointed, at least the technical discussion must be held with the normatively required deputy; technical discussions are held with other SAB on a random basis)
- qualifications of the employees, further training;
- Specifications, list of requirements, purchasing, sales, contracting third parties;
- Classification, design, sizing, project planning, planning documentation and verification;
- Production, repairs/maintenance;
- Production conditions, workspace;
- Storage and logistics, incoming goods inspection;
- Production documents, work instructions;

- Quality assurance, testing, work specimens;
- Traceability;
- Measuring equipment monitoring.

(Revision: 5, 15, 26, 33, 37, 56)

### **8.5. Surveillance**

During the term of validity of the certificate the certification body supervises the company.

During the term of validity of the certificate, a minimum of one surveillance audit by the certification body is obligatory. In some cases, additional monitoring may be undertaken.

(Revision: 6, 31)

### **8.6. Surveillance audit**

The execution of a surveillance audit has the same quality standards as the certification audit, although it usually takes only half the time.

The company bears the costs of the monitoring audit in accordance with the relevant fees of the certification body.

(Revision: 7)

### **8.7. Reports**

The certification body is obliged to forward the audit reports to the company and the EBA. The forwarding of partial or incomplete reports is not permitted, neither is the passing of reports to non-authorized third parties.

(Revision: 7)

### **8.8. Details on the certificate**

The details on the certificate must correspond to those given on the sample certificate in Annex 2 (changed).

(Revision: 8, 15, 20, 22, 26, 31, 32, 33, 36, 37)

### **8.9. Validity of the certificate**

The certificate is valid for the site of the user-company, the scope (class and code), specified supervisors and is bound by any restrictions on the certification.

The certificate is valid for a maximum of three years but may also be issued for a shorter period if justified. (See also 8.15).

In reasoned cases, the certification body can make the validity of the certificate subject to different requirements (e. g. use of other SAB, other testing, use of other personnel to undertake the bonding work, additional quality assurance tests, production monitored by the certification body).

(Revision: 26, 49, 56)

### **8.10. Scope of validity**

Within the certified classes (A1, A2, A3), unless otherwise indicated on the certificate, the scope of validity is not restricted to certain assemblies or parts.

The specification of the scope of validity must be entered in accordance with the code table(see Annex 3).

(Revision: 8, 15, 37)

### **8.11. Changes during the period of validity**

The certification body must be informed immediately if there is a change to the company address, class of certificate, SAB and deliberate change or addition to the “main function of the bonded joint”. After the certification body checks the situation, the certificate is changed accordingly.

In the event of changes to the SAB staff, this information must at least be provided on changes to the SiC and the deputies with equal rights; if no deputy with equal rights has been appointed, then at least on the first deputy required by the standard. See also 4.4.

The certification body must be informed if there is a change or addition to any of the areas for which the certificate is valid: “pre-treatment methods”, “production processes”, “test methods”, “degree of mechanization” and if there are changes to main processes. The certification body decides whether to check the changes on-site and whether it is necessary to change the certificate.

(Revision: 8, 22, 56)

### **8.12. Revoking certificates**

The certification body can revoke a certificate if:

- there are serious shortcomings, which are not immediately rectified, in the execution of the adhesive bonding work that falls under the DIN 6701 series of standards;
- there are serious shortcomings with the supervision of the adhesive bonding work that falls under DIN 6701;
- an appointed SiC is no longer present/available;
- there is no valid proof of the qualifications of the personnel carrying out the adhesive bonding work as specified in DIN 6701;
- other requirements laid down in the DIN 6701 are no longer fulfilled;
- the period of validity has expired;
- the user-company resigns the certificate.

(Revision: 26)

### **8.13. Short form of the certificate (deed)**

If desired a short form of the certificate will be issued to the company. This is only valid in conjunction with the certificate.

(Revision: 8, 20)

### **8.14. Internet register**

The certification bodies are obliged to keep details of the issued certificates in an online register (<https://www.din6701.de>). The certificates are automatically no longer displayed 90 days after the expiry date (but are not deleted).

(Revision: 13, 37)

### **8.15. Audit adjournment**

In principle, it is not possible to extend the validity of a certificate. In exceptional cases, if timely agreement of an audit date is not possible, a certificate can be extended for a maximum of 3 months without a company audit. The company is informed of this in writing. The new expiry date of the certificate must be entered in the online database. The validity of the new certificate shall be reduced by the amount of time overrun.

If, in the case of recertification, a new certificate is issued a maximum of three months before the end of the previous certificate, this new certificate can be issued accordingly with a term of up to three months longer than the usual three years.

However, the term of two consecutive certificates is six years in any case.

(Revision: 13, 24, 49, 53)

### **8.16. Waiting period**

The issuer of this certificate can refuse to reissue a "certificate for bonding rail vehicles and parts of rail vehicles" to an applicant for a period of 2 – 5 years if:

1. The certification body, in relation to a company keeping an existing certificate or acquiring a new certificate, is deceived with false facts or with the distortion/concealment of real facts in order to suggest that the conditions for keeping or acquiring a certificate are satisfied by that company.
2. This is particularly the case if:
  - a. a qualified SiC is no longer present;
  - b. no valid proof of the qualifications of the people carrying out the adhesive bonding work, in accordance with this standard, is available;
  - c. this is not reported, so breaching the obligation to notify the certification body.
3. The length of the waiting period is subject in some cases to the decision of the EBA and the WG

The imposition of a waiting period is reported in writing to the applicant.

(Revision: 16, 28, 37)

### **8.17. Approved bonding areas**

There must be a list of the bonding areas approved by the vKAP. The designation of the adhesive areas in the certificate is reserved to the recognized body.

(Revision: 37)

### **8.18. Number of auditors**

For the following scope of combinations two auditors are mandatory for testing at initial certification, recertification audits and extension audits:

- Production + construction, at class A1
- Repair + construction, for class A1

For all other combinations for bonding class A1, as well as for all scopes and their combinations of classes A2 and A3 one auditor is intended. For audits of companies with small-scale bonding work also one auditor is intended, regardless of the scope and class. In surveillance audits one auditor is provided in each case.

(Revision: 39)

### **8.19. Escalation in the event of failure to remedy deviations by the deadline**

In the case of first certification and recertifications, certificates can be issued for a limited period of time to enable companies to obtain a certificate despite non-critical deviations. These non-critical deviations must then be implemented by the defined date; the certificate can then be extended for the full term if the recheck of non-critical nonconformities is positive.

In the case of surveillance audit, the non-critical nonconformities must also be implemented by the company accordingly. If the defined time to remedy these deviations is exceeded, the Certification Body is entitled to suspend the certificate or to shorten the duration of the certificate.

(Revision 47)

### **8.20 Submissions**

Submissions on certifications or certification procedures (e.g. objections or complaints) as well as on the decisions of the A-Z-Guideline can be sent to the working group at the P.O.Box 'eingabe@din6701.de'.

(Revision 49)

### **8.21. Commissioning of third parties with services of the process steps design and process planning**

The procurement of design services and process planning is assigned to the process step commissioning of third parties. The required specification for the commissioning of third parties is to be released by a SAB of the commissioning party. If further bonding-related services are subcontracted, the responsibilities are to be clearly regulated.

The adhesive bonding competence must also be demonstrated in accordance with the requirements of the standard if manufacturing or repair work is commissioned and the commissioning party having no own workshop or no own personnel capacities.

Adhesive bonding competence must also be demonstrated in accordance with the requirements of the standard if manufacturing or repair work is commissioned and the commissioning party does not have its own workshop or personnel capacities.

(Revision 51)

### **8.22. Certification according to EN 17460**

With the publication of EN 17460, there will be a 3-year transition period of coexistence of DIN 6701 and EN 17460. For the coexistence phase, the certificates according to DIN 6701 and EN 17460 are considered equivalent. The DIN 6701 series of standards will be withdrawn in September 2025.

The Certification Bodies are requested to obtain accreditation according to EN 17460 at the next regular assessment by the respective accreditation body. Until then, the Certification Bodies can certify in the non-accredited area according to EN 17460, the annexes A and B of the standard EN 17460 have to be implemented obligatorily by the companies. EWF diplomas (EWF 662, EWF 515) are accepted as proof of bonding competence. These certificates are to be published in the online register "EN 17460" provided for this purpose.

The Certification Bodies and their auditors must also be appointed by ECARV. The decisions (A-Z-Guideline ECARV) of the ECARV apply.

Auditors recognized by ECARV are also recognized by this WG.

(Revision 52, 54, 56)

### **8.23) Validity of certificates in accordance with DIN 6701**

Irrespective of the application for certification and the certificate issued, the certificates in accordance with DIN 6701 are only valid for as long as DIN 6701 exists.

(Revision 56)

### **8.24) Changes to certification conditions**

If certification conditions change (e.g. this A-Z-Guideline), these must also be implemented by the companies during the period of validity of a certificate.

(Revision 56)

### **8.25) Entry of SAB in the online register and on the certificate**

In addition to the SiC, all SAB with equal rights, but at least the SAB required by the standard, are published in the online register and on the certificate.

(Revision 56)

## Appendix 1 – Application form

### **Application**

for the issuance of a certificate for adhesive bonding of rail vehicles and parts in accordance with DIN 6701

For the attention of: *[Certification body]*

company:

street, no.:

ZIP code, town,

http://

contact:

phone:

fax.:

E-mail:

The application is being made for the production facility:

(only specify if different from above) street, no.:

ZIP code, town,

<b>Application for certification for the following areas:</b>		<b>class</b>
	Design of bonding	
	Process planning of bonding	
	Production of bonding	
	Repairworks of bonding	
	Purchasing, trading and assembly of work pieces with classified bonding joints	
	Third party contracting for bonding	

#### **Application:**

- First application
- Follow-up application (Recertification), expiry of current certificate on:
- Due to change of the following requirements:

Have you already been certified in accordance with DIN 6701 by another certification body?

- Yes (please state the certification body):
- No

**Supervisor in charge of adhesive bonding work (SiC):**

First name, name:

Date of birth:

E-Mail address and phone no. of SiC:

Qualification level of adhesive bonding:

- European adhesive engineer (EAE)
  - European adhesive specialist (EAS)
  - European adhesive bonder (EAB)
  - none / under education / application for education is available
  - \_ the SiC is an „external“ person
- If the SiC is external: he is also supervisor in following companies/sites:

**Deputy of the supervisor in charge of adhesive bonding work (First Deputy):**

First name, name:

Date of birth:

E-Mail address and phone number of deputy:

- the deputy of the supervisor in charge of adhesive bonding has equal rights (otherwise „no equal rights“)

Qualification level of adhesive bonding:

- European adhesive engineer (EAE)
  - European adhesive specialist (EAS)
  - European adhesive bonder (EAB)
  - none / under education / application for education is available
  - \_ the person supervising the adhesive bonding an „external“ person
- If the deputy is external: he is also supervisor in following companies/sites:

The company

- declares to observe the standard series DIN 6701 and the applicable technological standards,
- agrees that details will be published in the online register DIN 6701 (company, scope of application, code, remarks).
- Consents to the processing of KAP details (name, date of birth, qualification) in the online register -but these details will not be published-
- accepts the rules of the working group bonding DIN 6701 (A-Z-Guideline),
- accepts the necessary surveillance by the certification body for the period of validity,

**Binding declaration of the applicant**

By submitting the fully signed and stamped application form to the Certification Body, the applicant declares that his declaration is binding on the Certification Body.  
 After examination of the application, the Certification Body declares acceptance if all necessary requirements are met, which leads to the effective conclusion of the contract with the applicant.  
 From this point onwards, the applicant is deemed to have commissioned the Certification Body to carry out all steps and processes required to issue a certificate according to DIN 6701.

\_\_\_\_\_  
**(Place, date)**

\_\_\_\_\_  
**(Stamp, name and signature of applicant)**

Please enclose:

- General description of the company
- Organisational scheme (with identification of SiC’s position in the company)
- Description of adhesive bonding work (including assembly and classes)
- List of further supervisors for adhesive bonding technology (including their tasks and responsibilities)



## Appendix 2 – Certificate form

<b>Certification</b> in accordance with DIN 6701 to demonstrate the suitability of the user-company for manufacturing adhesive bonds on rail vehicles and parts of rail vehicles	<b>Logo</b>  <b>Certification body</b> <b>in accordance with DIN 6701</b>
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The production facility at **XXXX**  
of the company **XXXXXX**  
has been certified to carry out adhesive bonding work for  
**Class A(X)**

in accordance with **DIN 6701-2, -3, -4:2015**

### Area of validity

#### Main function of the bonded joints:

**Pre-treatment methods\*:** - *Not applicable*  
**Production methods\*:** XXX  
**Test methods\*:** XXX  
**Degree of mechanization\*:** XXX

\* From the code table in Annex 3 to the A-Z compendium

**Supervisor in Charge (SiC):** XXXX

**Equally authorized deputy supervisor:** XXXX

**Other deputy supervisor:** XXXX

**Remarks:** - *s. reverse*

**Certification no.:** *Certification body/6701/class/N,F/year/no*

**Issued on:** *dd/mm/yyyy*

**Change on:** *dd/mm/yyyy*

**Valid until:** *dd/mm/yyyy*

This document is only valid in combination with the actual registration of the certificate in the Online-Register

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(Head of certification body, name, signature and stamp)

## Remarks

# General Regulations

The new application has to be submitted to the certification body at least **two months** before the certificate expires if the suitability of the user-company shall be certificated furthermore.

## Changes within the time of validity of the certificate

If the address of the user-company or company site, the class of the certificate, supervisors or the area of validity change, the certification body must be informed immediately. The certification body decides about the necessity of an inspection on the site and change of the certificate.

The certification body must be informed if there are changes or additions to main processes or to any of the areas for which the certificate is valid under "pretreatment methods", "production processes", "test methods" and "degree of mechanisation". The certification body decides whether to check the changes on-site and whether it is necessary to change the certificate.

## Withdrawal of the certification

Authority or the certification body can withdraw certification if:

- 1) There is a serious shortcoming in the execution of the adhesive bonding work as required by this standard;
- 2) There is a serious shortcoming in the supervision of the adhesive bonding work (except for part class A3) as required by this standard;
- 3) There is no authorised supervision of the adhesive bonding work;
- 4) The employees carrying out the adhesive bonding work at the practical level do not have valid qualification certificates as required by this standard;
- 5) Other conditions required by this standard are no longer fulfilled;
- 6) The period of validity has expired;
- 7) The user-company does not have certification.

The user company must confirm attention of the withdrawal in written form towards the certification body. The certification body has to inform the German railway authority EBA.

## Distribution

1. Submitter (original)
2. EBA, German railway authority (copy)
3. Folder (copy)

## Appendix 3 – Code table

Group	Description	Code
Main function	Force transfer using high-modulus adhesives	F
	Balancing of substrate deformation using low-modulus	D
	Sealing	S
	Bonding large areas (lamination)	L
	Others (please describe):	
Surface pre-treatment	Blasting	BL
	Etching, Anodisation	ET
	Plasma treatment (LP plasma, AP plasma, corona, flame)	PL
	Laser treatment	LS
	Others (please describe):	
Production methods	Processing of solvent or water based systems (primers,	SO
	Processing of 2-C adhesives	TK
	Processing of 1-C moisture/humidity activated systems	HU
	Processing of heat-curing adhesives	HE
	Processing of hotmelt adhesives	HM
	Processing of radiation-curing adhesives	RA
	Processing of anaerobically curing adhesives	AN
	Lamination or processing of pressure sensitive adhesives	LA
	Others (please describe):	
Test methods	Destructive test methods	DT
	Non-destructive test methods	NDT
	Visible inspection (with test instructions)	VIS
	Application monitoring with electronic data processing	DC
	Tests with dynamic mechanic loads (fatigue)	CY
	Crash/impact tests	IM
	PhySiCal-chemical ageing tests (e. g. climate test, UV, salt,..)	PC
	Rheology measurements	RH
	Spectroscopic analyses (e. g. IR, UV-VIS, ...)	RS
	Thermal analysis methods (DSC, DMA, TGA, etc.)	TA
	Wetting tests	WT
	Others (please describe):	
Mechanisation level	Fully mechanised/automated	VM
	Partly mechanised	TM
	Manual	M