

Quality assurance agreement

This quality assurance agreement, hereinafter referred to as "QAA", is agreed between

Knorr-Bremse SfS GmbH

Moosacherstrasse 80

80809 Munich

Germany

hereinafter referred to as "**Knorr-Bremse**"

and

[Name supplier + form of company],
[address supplier],

hereinafter referred to as "**Supplier**"

and each referred to below as "**Party**" and together referred to below as "**Parties**" to this agreement.

The following highlighted appendices constitute, together with the text below, the contractual content of this quality assurance agreement. This shall not imply a ranking sequence.

- Appendix Technical Delivery Conditions (TDC) and Quality Management Directive for Purchasing (QMDP)
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PREAMBLE

Knorr-Bremse is the worldwide leading manufacturer of braking systems for railway vehicles. Further product categories include, amongst others, intelligent door systems, air conditioning units, energy supply systems, control components and wipers, platform screen doors, friction material, driver assistance systems and control technology for railway vehicles. Furthermore, Knorr-Bremse provides diving simulators and e-learning systems for optimum train crew training.

The Supplier develops, produces and sells [Supplier's area of business] and has specific capabilities and knowledge in these areas. The Supplier is aware that the products of Knorr-Bremse are used across the world and have to meet the highest quality and safety standards.

In order to achieve a reduction in total costs for the benefit of both Parties, both Parties shall pursue the joint objective of the zero-error principle.

1. General provisions

1.1. Definitions

1.1.1. "Affiliated companies"

Affiliated companies are legally independent companies which are, in relation to each other, majority owners or majority owned, controlling and dependent companies, group companies, cross-shareholding companies or parties to an affiliation agreement.

1.2. Sphere of application

1.2.1 On account of the quality requirements of Knorr-Bremse the "affiliated companies" of Knorr-Bremse and the Supplier have concluded the following QAA. The objective of this QAA is to ensure perfect supplier quality for all products to be supplied by the Supplier or contractual services for Knorr-Bremse. The Supplier further undertakes to obtain a commitment from their affiliated companies to likewise comply with this QAA. In case of a breach of this QAA by one of the Supplier's affiliated companies, the Supplier shall be fully liable to Knorr-Bremse as if the Supplier itself had committed the breach.

1.2.2 The provisions of this QAA shall supplement, in terms of their regulatory content, all other existing and future agreements of the Parties, irrespective of whether they are embodied in a supply framework agreement, supply contract, purchase orders or general terms and conditions of business. The provisions of this QAA merely represent minimum standards for the Supplier. Insofar as nothing, or nothing to the contrary, is regulated in this QAA or in a supply framework agreement, supply contract or purchase orders, the general terms of purchase of Knorr-Bremse shall apply.

1.3 Object of the contract

The object of this QAA is the quality requirements for all products to be supplied and services to be rendered by the Supplier. The Supplier must therefore render all deliveries and services to Knorr-Bremse in compliance with this QAA.

The Supplier takes unrestricted responsibility for freedom from defects of all supplied products and services. The products and services must be free in particular, but not only, from design, manufacturing, material, processing, functional, software or performance errors as well as instruction errors. They must meet the specifications agreed directly between Knorr-Bremse and the Supplier or between the Supplier and customer of Knorr-Bremse and

have any guaranteed or promised quality features. The Supplier shall be required to check the products stated in the specification with regard to obvious errors and concerning their manufacturability. The Supplier must orient the quality of their products to be delivered to Knorr-Bremse, insofar as the agreed specification allows this, to the state-of-the-art technology (except the Technical Delivery Conditions (or possibly the requirement specifications or the specifications) provide otherwise) as well as the applicable legal and safety regulations and also inform Knorr-Bremse on a continuous basis about the possibilities for improvement and technical modification. Notwithstanding this, the Supplier's quality strategy must be oriented to continuous improvement of their processes and performances. Compliance with examination regulations and as well as any authorisations issued by Knorr-Bremse and authorisations issued by customers of Knorr-Bremse shall not exempt the Supplier from their obligation to supply products and services free of defects.

1.4 Contractual bases on quality requirements and order of priority

The QAA can be supplemented by the Quality Management Guidelines for Purchasing (QMGP), Knorr-Bremse in-house standards, technical drawings, orders or other Knorr-Bremse specifications for the products to be delivered. If provisions in the afore mentioned parts of the contract contradict one another, they shall take precedence in the following descending order:

- a) Order (in particular the individual order / delivery schedule call)
- b) Technical drawings
- c) Other technical specifications
- d) Knorr-Bremse in-house standards
- e) Quality Management Guidelines for Purchasing (QMGP) and Technical delivery conditions (TD)
- f) Quality assurance agreement (QAA)
- g) Knorr-Bremse packaging manual for purchased parts
- h) Supplier framework agreement
- i) Statutory regulations

Mandatory statutory regulations remain unaffected.

1.5 Management system of the Supplier

1.5.1. The Supplier shall plan, establish, carry out, monitor and, if necessary, modify/adjust measures in a systematic way in order to ensure the requirements of Knorr-Bremse for the latter's product(s) and to ensure the quality prescribed by Knorr-Bremse. For this purpose, the Supplier shall have and maintain a quality management system (QMS) which must be established in written form.

1.5.2. The Supplier of Knorr-Bremse undertakes to provide evidence of certification in accordance with the minimum standard of the prevailing ISO 9001. Furthermore, Knorr-Bremse expects the Supplier to further develop their QMS in accordance with ISO/TS 16949 or ISO/TS 22163.

Insofar as the Supplier has also set up an environmental management system (EMS) in accordance with the minimum standard of DIN EN ISO 14001, the Supplier shall maintain this. If the Supplier does not have a certified environmental management system in accordance with the minimum standard of DIN EN ISO 14001, the Supplier shall create it within 12 months after signature of this agreement.

Insofar as the Supplier has also set up a work safety management system which is certified in accordance with the minimum standard of DIN ISO 45001, the Supplier shall maintain this.

If the Supplier does not have a certified work safety management system in accordance with the minimum standard of DIN ISO 45001, the Supplier shall create it within 12 months after signature of this agreement.

- 1.5.3.** Depending on the product application, additional railway industry specifications shall be required in the individual case; they shall then count as agreed. If Knorr-Bremse draws the Supplier's attention separately to these additional certifications, they shall likewise count as agreed. Documentary proof of the additional certifications must be submitted to Knorr-Bremse where necessary.
- 1.5.4.** The Supplier shall inform Knorr-Bremse, without the need for a request, about the renewal or withdrawal of the above-mentioned evidence/certificate and send corresponding written evidence accordingly.
- 1.5.5.** Alternatively, the Supplier undertakes to comply with the 10 principles of the UN Global Compact.
Furthermore, the Supplier shall ensure compliance with the 10 principles of the UN Global Compact for their own supply chain.
- 1.5.6** The Supplier undertakes to comply with the Knorr-Bremse Conflict Minerals Policy. Knorr-Bremse provides the current version of this policy at <https://www.knorr-bremse.de/de/purchasing/purchasingpolicy/purchasingpolicy.jsp>.

1.6. Management system of the sub-supplier

If the Supplier procures, for the manufacture or quality assurance of the products which it supplies to Knorr-Bremse, production or testing equipment, software, services, material or other upstream supplies or deliveries, it shall include these suppliers or sub-suppliers in the framework of its QM system on a contractual basis. Otherwise the Supplier shall, itself or on a subcontracting basis, but always under their own responsibility, ensure the quality of these upstream supplies and deliveries on a verifiable basis.

The Supplier shall impose an obligation upon its sub-suppliers to comply with the Supplier's duties arising out of this contract. This applies in particular, but not exclusively, to compliance with statutory environmental protection provisions for all products delivered to Knorr-Bremse and packaging. Knorr-Bremse may demand from the Supplier documentary evidence to substantiate that the Supplier has verified the effectiveness of the QM system at their sub-supplier.

1.7. Audit

- 1.7.1.** Knorr-Bremse reserves the right, irrespective of the relevant certificate, to examine aspects of the management systems in the case of a process and product audit in the Supplier's manufacturing plant if necessary. Knorr-Bremse likewise reserves the right to also carry out an audit with their customers at Supplier or the latter's sub-supplier.

The Supplier shall grant Knorr-Bremse access to its operational facilities and plant during normal operational times. Knorr-Bremse shall advise the Supplier of the visit in advance with a reasonable period.

If variances are ascertained in the audit, the Supplier and, if applicable, the sub-supplier, shall be required immediately to create, implement and effectively monitor a co-ordinated plan of action.

- 1.7.2** Knorr-Bremse reserves the right to engage the services of third parties to review compliance with the Knorr-Bremse Supplier Code of Conduct. The Supplier is obligated to participate,

and upon request by Knorr-Bremse to provide appropriate information and documents to verify compliance with the Knorr-Bremse Supplier Code of Conduct.

Knorr-Bremse works to regularly assess Supplier`s performance in relation to sustainability and responsibility. Knorr-Bremse can use the services of external partners and platforms for this purpose (such as the NQC Self-Assessment Questionnaire for Sustainability of the European Automotive Working Group on Supply Chain Sustainability). If invited to do so, the Supplier shall complete the assessment and share the results with Knorr-Bremse (or submit verification by other validated assessment methods that conform to the suggested platform). Completing the assessment and submitting the results thereof are considered as an integral part of Knorr-Bremse`s purchasing decision-making processes.

2. Product life cycle

2.1. Development, planning, preliminary production, initial supply of serial products

2.1.1. If the order to the Supplier includes development tasks, the requirements shall be established in written form by Knorr-Bremse, e.g. in the form of a specification sheet. For this purpose, the Supplier shall create performance specifications which shall have binding status when approved by Knorr-Bremse. The following required amendments must be incorporated in the specification sheet/performance specifications and likewise require documented authorisation by Knorr-Bremse.

The Supplier undertakes, already in the planning phase for products, processes and other cross-functional responsibilities, to apply a project management and to allow Knorr-Bremse to inspect the project schedule upon request even if it is not specified in the individual contract.

If there is no specification sheet from Knorr-Bremse, this shall not release the Supplier from the requirement to develop the contractual products, processes and services in accordance with the state-of-the art technology in such a way that they are suitable for the designated purpose. If information from Knorr-Bremse for this purpose is missing, the Supplier shall actively obtain it from Knorr-Bremse.

2.1.2. All technical documents necessary to support serial development, e.g. illustrations, material specifications, work standards, terms of supply, CAD data as well as applicable technical terms of supply must be examined by the Supplier upon receipt in terms of completeness and consistency and the designated purpose, whereby Knorr-Bremse must be informed about any identified errors. Knorr-Bremse shall co-operate in ensuring that all necessary documents and data are available to the Supplier timely.

2.1.3. In the development phase, the contracting Parties shall be required to apply suitable advance quality planning methods (e.g. manufacturing feasibility analysis, fault-tree analysis, FMEA, control plans, reliability calculations). Experience from similar projects must be taken into account. Features with particular requirements must be established accordingly in documentation and archiving.

2.1.4. For prototypes and pre-production parts the terms of production and examination must be agreed between Knorr-Bremse and the Supplier and be documented in writing. The objective is to manufacture the parts under conditions close to serial production.

2.1.5. For all features that are relevant to functions and for all special features the Supplier must carry out and document professional analyses (authorised laboratory/company) in respect of the suitability of manufacturing systems. If stipulated capability values are not achieved, the Supplier must either optimise its systems accordingly or carry out suitable examinations of

the manufactured products and be able to prove this at any time in order to prevent defective supplies.

- 2.1.6. The initial sampling in accordance with PPAP and VDA 2 must be carried out in accordance with the latest valid Knorr-Bremse sampling requirement conveyed to the Supplier in accordance with the prevailing technical terms of delivery.
- 2.1.7. The initial sampling examination report must be submitted by the Supplier to Knorr-Bremse without the need for a request and free of charge. Prior to the initial supply of serial parts, the initial sampling must be completed and written authorisation received from Knorr-Bremse. If serial parts have to be supplied before conclusion of the initial sampling, the Supplier must obtain a special authorisation from Knorr-Bremse in this respect. The initial sampling authorisation from Knorr-Bremse shall not release the Supplier from its responsibility for product quality with serial production.
- 2.1.8. Knorr-Bremse reserves the right to examine the results of the initial sampling examination.

2.2. Serial liability, traceability, identification

- 2.2.1. In the event of process failures and quality deviations the causes must be analysed immediately, improvement measures instigated and their effectiveness examined. If products that do not conform to specifications are supplied in exceptional cases, a written special authorisation must be obtained for this in advance from Knorr-Bremse. Knorr-Bremse must also be notified immediately about variances ascertained subsequently and about all corrective measures.
- 2.2.2. The Supplier must comply with the agreed labelling obligations or, if there are no such agreements with Knorr-Bremse, warrant by suitable labelling of products and packaging that when errors are discovered it is possible to ascertain immediately by traceability which supplied products are affected. In addition to production process documentation this includes unbroken quality documentation and, where necessary, continuous batch traceability. It is necessary to ensure that the identification of packaged products is also possible during transport and storage. Deviations from labels and/or agreed labelling obligations shall require a written agreement between the Supplier and Knorr-Bremse.
- 2.2.3. The Supplier undertakes to inform Knorr-Bremse immediately about manufacturing problems that arise or which are anticipated to arise and which could affect the quality of production parts or materials. The Supplier shall inform Knorr-Bremse about measures which the Supplier has taken. Knorr-Bremse shall support the Supplier as far as they can with the measures to be taken, whereby the full responsibility for the product shall remain with the Supplier and all rights and possible claims of Knorr-Bremse shall remain unaffected.

2.3 Packaging/provided products

- 2.3.1. Re-usable packaging must be used for packing where possible. Furthermore, materials that can be recycled and which are not detrimental to the environment must be used. Packaging must meet the requirements of the relevant packaging regulations and the packaging manual of Knorr-Bremse. Reasons must be explained for any deviations from this. Unnecessary packaging must be avoided. Transport security and protection against damage must not be impaired.

The Supplier must ensure that packaging and transport do not impair the quality of the products to be delivered.

2.3.2. The handling of provided products (e.g. load carriers, palettes, raw materials) must be arranged with regard to costs, quality and the environment.

2.4 Incoming goods inspection

The incoming goods inspection by Knorr-Bremse is limited to checking the identity and quantity of products as well as visible transport damage. Such defects shall be notified by Knorr-Bremse immediately. Further defects shall be notified as soon as they are discovered under the circumstances of the normal business process. In this respect, the Supplier waives the right to claim late notification of defects.

2.5. Checks, complaints, measures, modifications

2.5.1. In respect of each delivery lot or delivery batch a works test certificate in accordance with EN 10204-3.1 shall be produced insofar as this is contractually stipulated. This test certificate shall be provided with each delivery or, after agreement with the Supplier, archived and sent within 24 hours upon demand by Knorr-Bremse.

2.5.2. The Supplier shall establish, by agreement with Knorr-Bremse, a testing concept in order to fulfil the agreed objectives, specifications and technical terms of supply.

2.5.3. With the current series, the Supplier must substantiate the process capability over the entire production time for all features relevant to functions by means of suitable procedures (e.g. statistical process control).

If the required process capability Cpk of at least 1.33 is not achieved, the quality must be ensured by suitable checking methods, e.g. 100% feature check. The production process must be optimised accordingly in order to achieve the required capability.

2.5.4. The Supplier may be informed at regular intervals about its delivery performance. In the case of unsatisfactory evaluation or non-achievement of the objectives agreed individually with the Supplier, the Supplier shall create a catalogue of measures which must be co-ordinated with Knorr-Bremse in order to rectify the defects permanently. The weak points must be eliminated within a period established jointly with Knorr-Bremse.

2.5.5. In the case of deviations from agreed objectives, from specifications, from technical terms of supply, in the case of repeated errors for which the Supplier is responsible, serious delivery deviations and disruptions or in the case of repeated incorrect deliveries, Knorr-Bremse may also demand or instigate product, process and system audits with the Supplier. Furthermore, in such cases Knorr-Bremse may, in accordance with the supplier development program established by Knorr-Bremse, instigate the creation of a 100% outgoing goods inspection until it is substantiated that the deviations are no longer to be found over a period of at least 4 weeks. The costs of the above-mentioned measures shall be paid by the Supplier.

2.5.6. Obligations imposed upon the Supplier due to a delivery of faulty products or on the basis of other contractual regulations existing between the parties or legal regulations shall remain unaffected by the above regulations.

2.5.7. In the case of complaints, the Supplier shall instigate corrective measures immediately in order to exclude errors permanently. Immediate measures must be implemented within 24 hours and notified to Knorr-Bremse in the form of a 4 D report.

Furthermore, the Supplier must submit to Knorr-Bremse a written comment in the form of an 8 D report about the causes of the error and corrective measures as quickly as possible and at the latest within 14 days.

Actual remedies for malfunctions, e.g. by subsequent performance works and other legal consequences of malfunctions and claims of Knorr-Bremse resulting from this in accordance with contractual or legal regulations shall remain unaffected.

2.5.8. Knorr-Bremse reserves the right to review compliance with mutually agreed-upon Knorr-Bremse in-house standards and information on hazardous materials in products on a random basis during on-site audits, through samples submitted to external laboratories even if there is no suspected violation, or other methods.

2.5.9. If the Supplier modifies its product manufacturing process, this may result in deviations from the last sample approved by Knorr-Bremse. In this case, the Supplier shall be obligated to inform Knorr-Bremse promptly in writing. It is immaterial whether the modifications in product manufacturing were enacted intentionally or accidentally by the Supplier, whether these are caused by third parties (for instance previous suppliers). These modifications relate in particular, but not exclusively, to the composition of the products to be delivered and/or preliminary products, the production process and/or the production location.

Knorr-Bremse reserves the right to declare previously valid testing certificates, verifications of process capability, testing method and other product approvals for products affected by the modifications to be invalid, and to initiate a new sampling process according to clause 2.5.1 et seqq. Modifications to production processes or material compositions may be dependent on a notification and/or approval requirement from Knorr-Bremse towards its customers and/or official agencies or other authorities.

The Supplier is obligated to pay a contractual penalty of 10,000 EUR to Knorr-Bremse for each culpable violation of this informational obligation. This amount is deemed to serve as compensation for expenses related to the subsequent consideration of modifications not reported in the Supplier's product manufacturing for our value creation process. Paying such a penalty, however, does not release the Supplier from compliance with its obligations under this QAA, and shall not exclude further claims for damages by Knorr-Bremse.

2.6 Take-back/Return and disposal

If necessary, the Supplier is required to take back the products, packaging or parts thereof delivered by it on request by Knorr-Bremse, and to dispose of these in a proper and harmless manner. As part of this obligation, the Supplier shall ensure that materials are disposed of properly and harmlessly according to relevant legal provisions and provide verification of this to Knorr-Bremse on request.

The Supplier can handle the disposal itself, or have disposal handled by a qualified and authorised subcontractor following prior approval by Knorr-Bremse. In this case, disposal shall be carried out by a registered specialist disposal company and in accordance with relevant laws, and verification must be provided to Knorr-Bremse upon request. The Supplier shall handle the disposal at its own cost.

2.7. Energy efficiency, greenhouse gas emissions

The Supplier undertakes to take independent initiative to identify options for increasing energy-efficiency, to implement these in order to reduce its greenhouse gas emissions, in particular its CO₂ emissions. Upon request by Knorr-Bremse, the Supplier is obligated to inform Knorr-Bremse about such measures.

If these measures conflict with requirements agreed upon with Knorr-Bremse, then Knorr-Bremse shall be informed in advance of their implementation. Implementation of such measures shall require written approval from Knorr-Bremse.



3. Liability for defects

3.1. Warranty

The Supplier warrants that the products accord with the agreed specifications and are suitable for the contractually designated purpose and that the products accord with legal provisions and state-of-the-art technology.

3.1.1 Subsequent performance

If a defect occurs the Supplier shall, depending on the choice of Knorr-Bremse, exchange the defective product for a new replacement product or repair the defective product. Knorr-Bremse shall specify a suitable period for the Supplier for this purpose.

3.1.2. Self-remedy

If the Supplier does not commence immediately with rectification of the defect within the period specified by Knorr-Bremse, Knorr-Bremse shall, after prior arrangement with the Supplier, at the cost of the Supplier, carry out rectification themselves or commission such rectification by a third party.

3.1.3. Defects liability period

The warranty shall end 24 months after final commissioning at the end customer, but at the latest 36 months after delivery to Knorr-Bremse.

The Supplier additionally warrants for a period of 48 months after delivery or acceptance by Knorr-Bremse that the delivered object has no serial damage.

3.1.4. Recommencing

In the case of products or parts of products repaired or subsequently supplied within the limitation period, the limitation period shall commence anew when subsequent fulfilment is rendered fully. This shall, however, not apply insofar as repairs and subsequent deliveries are insignificant in terms of scale, duration or costs.

3.2. Claims of Knorr-Bremse against the Supplier in case of zero km complaints

3.2.1 "Zero km complaints"

"Zero km complaints" are justified complaints about faulty products where the defects are discovered at Knorr-Bremse or customers of Knorr-Bremse during production, fitting or end-examination.

3.2.2. Payment of costs

Without prejudice to the other statutory claims the Supplier must at least pay for the following works or expenses in this case:

3.2.2.1. Identification costs (costs incurred in locating the affected products in warehouses, in service, in the manufacturing process, the fitting process or in assembly groups).

3.2.2.2. Replacement with new products, if necessary subsequent rectification, as required by Knorr-Bremse.

3.2.2.3. Processing costs (costs incurred in the processing of defective products and complaint handling, including travel costs).

3.2.2.4. Removal and fitting costs (costs incurred when defective products that are already fitted are removed and new products fitted). The following shall apply for the time to be paid for in the stated sequence:

- a) the pre-specified work value or
- b) an individual agreement or

c) the time taken.

3.2.2.5. Examination costs (including travel costs),

3.2.2.6. Logistic costs (all costs not stated above in connection with the product exchange, in particular transport, storage and packing costs as well as sorting costs).

3.3 Claims of Knorr-Bremse against the Supplier in case of field complaints

3.3.1. "Field complaints"

"Field complaints" are justified complaints by end-customers for products where the Supplier is responsible for their defects.

3.3.2. Payment of costs

Without prejudice to the other statutory claims the Supplier must at least pay for the following works or expenses in this case:

3.3.2.1. Repair, replacement products or new products or replacement of the material value at the new product price

3.3.2.2. Material handling, transport, packaging, storage, disposal and administration

3.3.2.3. Removal and fitting costs

3.3.2.4. Costs for fault diagnosis with complex systems

3.3.2.5. The following shall apply for the time to be paid for in the stated sequence:

a) the pre-specified work value or

b) an individual agreement or

c) the time taken.

3.3.2.6. Costs for complaint handling, including travel costs

3.4. Claims of Knorr-Bremse against the Supplier in case of recall actions

3.4.1 Purpose/objective

Recall actions serve to avoid danger, protect the health and life of persons and to avoid material, financial and environmental damage. Recall actions are intended to protect companies responsible for the product and their employees against much more expensive compensation claims or punitive legal action.

3.4.2 Implementation

Recall actions are carried out after technical clarification at the earliest possible time after consultation with the Supplier. Recalls are carried out within a time plan to be defined.

3.4.3. Secrecy

In the evaluation phase of a possible recall the Supplier undertakes to observe special secrecy in relation to the public. The Supplier shall pay Knorr-Bremse full compensation for any losses resulting from a breach of secrecy by the Supplier's employees.

3.4.4. Reasons

Recalls may be triggered, under the condition of Section 3.4.1 of this agreement by the following factors amongst others:

3.4.4.1. Legal obligation

3.4.4.2. The necessity for carrying out preventive measures to avoid dangers or to prevent environmental damage

- 3.4.4.3. Requirement by customers of Knorr-Bremse insofar as the recall is not unreasonable
- 3.4.4.4. Serial damage due to increased failure rates

3.4.5. Serial damage

Serial damage occurs if Knorr-Bremse and the Supplier ascertain together, on the basis of the pattern of damage and the cause of the damage that has occurred, that such damage may occur in all the supplied products or in a particular quantity of a supplied series (batch).

Irrespective of this, serial damage occurs if the same damage is ascertained during the warranty period in at least 2% of all supplied products or of a particular quantity of the series (batch). In this respect, in order to calculate the damage ratio, all damage of the same type relating to the pattern of damage and/or the cause of the damage which is ascertained within a period of a maximum of 48 month from the occurrence of the same damage is taken into account.

3.4.6. Payment of costs

In the case of a recall, the Supplier must reimburse Knorr-Bremse for all costs incurred in the rectification of the defect. This shall also include in particular the expenses mentioned in Sections 3.2 and 3.3. Insofar as third parties including Knorr-Bremse have contributed to the cause of the recall, the Supplier shall be liable only for reimbursement of costs on a pro-rata basis corresponding to the level of its parts of the cause. Within the framework of a recall, non-defective products shall also be exchanged as a preventive measure at the cost of the Supplier. In addition, Knorr-Bremse shall be entitled to demand from the Supplier reimbursement of all necessary expenses and costs including the burdens suffered by the customer of Knorr-Bremse.

4. Compliance with / observance of statutory environmental standards

The Supplier hereby undertakes to comply with all regulations, guidelines and laws in the target markets of those countries where the Supplier delivers products to Knorr-Bremse, as well as in those countries where Knorr-Bremse indicates that the Supplier shall do so. In cases where less strict requirements apply under local law, the regulations of this QAA and Knorr-Bremse in-house standards shall be considered the primary minimum standard, and the requirements in these documents shall apply.

4.1. REACH regulation and CLP regulation

The Supplier hereby recognizes that it is obligated to comply with the REACH regulation (EC) no. 1907/2006. In addition, the Supplier hereby recognizes that it is obligated to the following:

Before delivery, the Supplier must take the initiative and inform Knorr-Bremse whether there are any materials present that are currently on the candidate list for SVHC (substances of very high concern under the REACH regulation (EC) no. 1907/2006), and must provide Knorr-Bremse with instructions for using these safely. This informational obligation applies in particular

- if a limit of 0.1 percent by mass is exceeded in the respective product, regardless of whether the Supplier has intentionally added these materials, or
- if the Supplier or its sub-suppliers use these materials (intentionally added), regardless of the concentration of these materials contained in the products or their packaging (in addition to the provisions of the Knorr-Bremse packaging manual) for purchased parts.

If the Supplier is legally obligated to report products to the SCIP database of the ECHA, then the Supplier shall take the initiative and inform Knorr-Bremse of the SCIP number for each

supplied product before delivery. The Supplier shall be liable for ensuring that SCIP entries are complete and correct.

The Supplier must comply with the restrictions in the current version of Annex XVII to the REACH, which are amended from time to time.

For preparations, the Supplier is obligated to provide a current material safety datasheet according to the REACH and CLP regulations before delivery. The material safety datasheet may not be more than two years old. Regardless of the statutory provisions, the material safety datasheet must be provided in English. Updates to the material safety datasheet shall be provided to Knorr-Bremse without requiring a further request to do so.

Preparations must be labelled according to the CLP regulation.

Materials as such, and materials in preparations, must either be pre-registered or registered by the Supplier if these materials are not excepted from registration under the REACH.

4.2. RoHS directive

The Supplier hereby recognizes that it must comply with directive RoHS (EC) 2011/65 on the restricted use of certain hazardous materials in electrical and electronic equipment, insofar as this is required by law for the products supplied. Upon request by Knorr-Bremse, the Supplier shall provide the necessary material information and declarations of conformity to verify RoHS conformity.

4.3 Battery directive

The Supplier hereby recognizes that it must comply with the Battery Directive 2006/66. The Supplier shall ensure that delivered objects containing batteries are registered for all EEA countries, regardless of whether the battery is delivered as such or integrated into a device. The Supplier shall provide verification of this to Knorr-Bremse.

4.4 Packaging directive

The Supplier hereby recognizes that it is obligated to comply with the packaging directive 94/62/EC as well as to comply with the limit values stipulated in the directive for substances for delivered packaging and packaging materials; the provisions of the Knorr-Bremse packaging manual shall also apply.

4.5. Material declaration

The Supplier is obligated to complete a material declaration for all delivered products and their packaging, and to provide the same to Knorr-Bremse in writing. The Supplier shall use the system defined by Knorr-Bremse to provide this information and keep it up to date. Knorr-Bremse can request all information from the Supplier in accordance with the specifications of this QAA or Knorr-Bremse plant standards for the delivered products or their packaging. The Supplier is obligated to provide the same to Knorr-Bremse in writing in the current valid version. Knorr-Bremse may request written confirmation from the Supplier of compliance with specific regulations indicated by Knorr-Bremse, in particular if these regulations are part of Knorr-Bremse in-house standards or specifications set forth in this QAA.

4.6 Violations of statutory environmental protection regulations

If the Supplier is in violation of statutory environmental protection regulations or Knorr-Bremse in-house standards, for example if the SVHC list (REACH) is expanded by adding new materials, or in case of changed product/mixture compositions, and/or changes in the products / (raw) materials received from its sub-suppliers, then the Supplier is obligated to take the initiative to inform Knorr-Bremse of this immediately and in writing, and to promptly submit relevant updated lists, complete material declarations, instructions and other

information to Knorr-Bremse. Furthermore, the Supplier shall promptly provide Knorr-Bremse with a thoroughly developed action plan in writing for future compliance with the relevant statutory environmental protection regulations and/or the requirements of Knorr-Bremse in-house standards. Acceptance of exceptions to the specifications of Knorr-Bremse in-house standards shall likewise require written approval from Knorr-Bremse in the relevant technical documentation. If the Supplier does not comply with these obligations, then Knorr-Bremse may consider this a good cause to terminate all contractual relationships with the Supplier. The Supplier shall likewise be liable for all personal injury, property damage and pecuniary losses resulting from failure to comply with statutory environmental protection regulations, in accordance with the law.

The Supplier is obligated to pay a contractual penalty of 10,000 EUR to Knorr-Bremse for each culpable violation of statutory environmental protection regulations or Knorr-Bremse in-house standards. This amount serves partially as compensation for expenses related to the subsequent consideration of new products not reported in the Supplier's product manufacturing or changes to the composition of products delivered by the Supplier for Knorr-Bremse's value creation process. Paying such a penalty, however, does not release the Supplier from compliance with its obligations under this QAA and Knorr-Bremse in-house standards, and shall not exclude further claims for damages by Knorr-Bremse.

4.7 Involvement of third parties

The Supplier hereby undertakes to use environmentally friendly products and processes in its deliveries and services, including deliveries or ancillary services received from third parties, whenever this is feasible from a technical and economic standpoint. The Supplier shall obligate its subcontractors and sub-suppliers to also comply with the obligations it has accepted under this QAA and Knorr-Bremse in-house standards.

5. Product liability insurance

Insofar as nothing to the contrary is regulated in a supply framework agreement, the Supplier shall cover liability risks by taking out a policy of business liability and product liability insurance which must include product economic loss and recall costs with adequate cover amounts with a reputable insurance company domiciled in the EU. The amount of coverage must be at least EUR 5 million respectively for the sphere of personal injury and property damage and for the sphere of product economic loss and recall costs. The Supplier undertakes to submit to Knorr-Bremse the corresponding proof of insurance at the latest at the time of initial delivery.

The Supplier shall ensure that any exclusion of cover is avoided, taking into account the outgoing goods control imposed upon the Supplier in this agreement.

6. Duties of documentation and preservation

The Supplier must document all quality assurance measures and preserve such documentation for the period stated in the table below.

DOCUMENT TYPE	START OF ARCHIVING PERIOD	ARCHIVING PERIOD
Documents from the product and process development phase and from the production phase of the delivery object, e.g. process descriptions Production control plans, specification sheets,	After product phase-out for serial and replacement parts requirements or after a change of the document.	15 years: Documents for S/C and C/C parts 3 years: all others

illustrations or instructions for an examination.		
Illustrations from the product and process development phase and from the production phase of the supplied object, e.g. measurement records, control charts, audit reports, reviews, evaluations, audit certificates.	With delivery of the product to which the illustrations for the product and associated process belong.	15 years: Documents for S/C and C/C parts 3 years: all others
Illustrations and documents relating to process and product authorisation (FAI).	After product phase-out with KB for series and replacement parts requirement.	15 years: all

The documentation must be issued upon demand by Knorr-Bremse.

7. Secrecy obligation

7.1 The Parties shall have a mutual duty to observe secrecy in relation to information of which they gain knowledge in the course of implementation of this agreement which relates to the business of the other Party, insofar as the latter designates the relevant information as requiring secrecy or insofar as it is evident when paying reasonable attention that there is an interest in secrecy in respect of the relevant information.

7.2 The duty of secrecy in accordance with Section 7.1 shall not apply insofar as it can be proven that the information

7.2.1 relates to a level of technology available in the public domain or

7.2.2 was already known to the Party that has the duty of secrecy or is disclosed by a third party which has the right to forward it or

7.2.3 is developed by the Party that has the duty of secrecy without involvement of the other Party and without exploitation of other information or knowledge acquired through the contractual contact.

8. Term of the Agreement

8.1 Term

This Quality assurance agreement shall enter into force upon signature by the Parties and shall expire on **[Date]**.

8.2 Renewal

Irrespective of section 8.1 of this Quality assurance agreement, the Quality assurance agreement shall be prolonged automatically by one (1) year respectively unless it is terminated by one of the Parties with six (6) months written notice.

9. Termination

Both Parties shall be entitled to terminate this QAA by written statement for cause without a period of notice. A cause shall be deemed to exist in particular if there are essential changes in the legal status or in the ownership and control situation of the other Party in such a way that an adherence to this QAA cannot reasonably be expected from the Party effecting the termination (in particular in the case of a competitor taking an equity holding).

**10. Other rights in the case of non-compliance with the QAA**

10.1 Furthermore, Knorr-Bremse shall be entitled to terminate the supply relationship if the Supplier fails to fulfil essential duties from this agreement, refuses to convey the essential information due without a legal reason, refuses to carry out an audit that is agreed or justifiably requested without a legal reason for breaches other essential duties of co-operation in a culpable manner.

Rights of Knorr-Bremse to assert compensation claims shall remain unaffected by the termination. In particular, Knorr-Bremse may, irrespective of other contractual claims established by the supply framework agreement, insofar as it exists, demand reimbursement of expenses incurred because Knorr-Bremse has had to carry out incoming goods inspections or further quality assurance measures beyond the agreed scope on account of the said breaches of duty.

10.2 Knorr-Bremse shall have the right to refuse to accept the goods ordered or requested by call orders and to refuse to effect payment of the purchase price until the Supplier has complied with all its duties from the business relationship between the Supplier and Knorr-Bremse. The above-mentioned right of Knorr-Bremse to refuse performance shall not exist if the outstanding duty of the Supplier is disproportionately small in relation to the withheld performance or counter-performance by Knorr-Bremse or if there is no temporal or factual connection between the relevant claims.

11. Severability clause

If one or more regulations of this QAA is or becomes fully or partially invalid or ineffective, the effectiveness of the other regulations of this QAA shall not be affected by this invalidity. In such a case, the ineffective regulations shall be replaced by effective regulations that reflect as closely as possible the ineffective ones in terms of commercial and legal content. The same shall apply for any gaps in the regulations of this QAA, but irrespective of individual contracts concluded within the framework of this QAA.

12. Choice of law

This QAA shall be subject exclusively to the law of the Federal Republic of Germany with the exclusion of the conflict of law provisions and the UN Convention on Contracts for the International Sale of Goods (CISG).

13. Arbitration agreement

All disputes arising out of or in connection with this agreement, including disputes concerning its validity, breach, rescission or voidness shall be decided definitively in accordance with the arbitration regulation of the German Institution of Arbitration (DIS) with the exclusion of the ordinary legal process. The place of arbitration shall be Munich. The language of the proceedings shall be German.

14. Amendments

Amendments, deletions and additions to this QAA as well as cancellation of this written form clause must be in written form.

15. Subsidiary agreements

There are no subsidiary agreements.

16. No waiver of rights

A postponement granted by a Party shall not signify that this Party has waived any right within the framework of this QAA or that the Party has given up such a right. The granting of such

postponement accordingly shall not mean that the Party is prevented from exercising rights that have arisen or which shall arise in relation to the other Party.

17. Headings

All headings in this QAA merely serve to provide an overview. In cases of doubt, they shall have no effect on the content of the clause or the content of the regulation.

18. Definitions and abbreviations

Target market	The market to which the supplier delivers, e.g. the country in which the goods receiving Knorr-Bremse branch is located. The target market is specified by Knorr-Bremse, e.g. within an order.
RoHS	Directive RoHS (EC) 2011/65 to restrict the use of certain hazardous materials in electrical and electronic equipment; valid for the European Economic Area (EEA); similar regulations in the People's Republic of China and other countries.
REACH	REACH regulation (EC) 1907/2006 concerning the registration, evaluation, authorisation and restriction of chemicals, valid for the European economic area (EEA); similar regulations in the USA (TSCA) and South Korea (K-REACH).
Candidate list	Synonym for SVHC list -> see SVHC
SVHC	SVHC (Substances of very high concern) are particularly concerning substances under the REACH directive (EC) no. 1907/2006.
SCIP	Substances of Concern In articles, as such or in complex objects (Products). The name of a database provided by the EHCA. Data on products that require reporting is entered into this database.
ECHA	European Chemical Agency, the official agency of the EU that regulates chemicals and biocides on the EU market
Product	Object that is given a specific shape, surface or design during manufacture that determines its function to a greater extent than its chemical composition (Art. 3 (3) of the REACH regulation).
Preparation or mixture	means a mixture or solution composed of two or more substances (Art. 3 (2) of the REACH regulation).
CMR materials	Carcinogenic, mutagenic, toxic for reproduction according to the CLP regulation (EC) 1272/2008.
PBT materials	Persistent, bioaccumulable, toxic according to CLP regulation (EC) 1272/2008.
vPvB	Very persistent, very bioaccumulable according to the CLP regulation (EC) 1272/2008.
CLP regulation	CLP regulation (EC) 1272/2008 on classification, labelling and packaging of substances and mixtures; applicable for the European economic area (EEA).
Use	means any processing, formulation, consumption, storage, keeping, treatment, filling into containers, transfer from one container to another, mixing, production of an article or any other utilisation (Art. 3 (24) of the REACH regulation).
US Dodd-Frank Act	Section 1502 of the Dodd-Frank Wall Street Reform & Consumer Protection Act stipulates that companies must regularly report the presence and origin of conflict minerals in their products to the US Securities and Exchange Commission. This obligation applies to companies that are publicly traded in the USA.
3TG	A term under the US Dodd-Frank Act (Conflict Minerals): T in, T antalum T ungsten and G old.
Battery Directive 2006/66	Directive 2006/66/EC of the European Parliament and of the Council 2006/66 for batteries, accumulators, old batteries and accumulators; valid for the European Economic Area (EEA); similar regulations i.a. in other countries.



TDC or QMDP	Technical Delivery Conditions (TDC) or Quality Management Directive for Purchasing (QMDP)
QAA	Knorr-Bremse Quality Assurance Agreement

This QAA has been signed in a legally valid way by the relevant statutory or authorised representatives of the Parties and shall come into effect on [date].

Signed:

Knorr-Bremse SfS GmbH

Moosacherstrasse 80

80809 Munich

Germany

Signature Date

Name in block capitals

Position

[Name supplier + form of company]

Signature Date

Name in block capitals

Position

Signature Date

Name in block capitals

Position

Signature Date

Name in block capitals

Position