KIEFEL TECHNOLOGIES A Member of Brückner Group

Rev. 2

QUALITY is a commitment for **KIEFEL GmbH**. In addition to the high KIEFEL quality standards, DIN EN ISO 9001 certification and the associated continuous checks express our quality consciousness. Out suppliers are our partners and are also measured by their quality capability.

THE FOLLOWING LIST OF GUIDELINES AND ARE A COMPONENT OF OUR CONTRACT AWARD:

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1 Preamble

This quality assurance agreement shall be completed with the goal of forming a long-term oriented supply partnership with mutual benefits.

Continuous improvement and readiness to develop new solutions together form the basis of long-term cooperation with Kiefel GmbH.

2 Purpose and area of application

Over the course of endeavours to exceed the expectations and to ensure a high level of customer satisfaction, Kiefel GmbH obligates itself to develop a quality standard according to the 'zero errors' principle. To achieve this goal, Kiefel GmbH must be able to rely on the quality and reliability of the products and services provided by the supplier. For this reason, this agreement shall be signed to regulate the minimum requirements of the quality system that the respective supplier needs to maintain.

3 Order acceptance and feasibility analysis

- 3.1 It is the responsibility of the supplier to check that the technical equipment, qualifications of the employees, and the required capacities are available to a sufficient degree.
- 3.2 The supplier shall be obligated to check inquiry and offer documents received or referred to for completeness and freedom from contradictions. If information and data for processing are missing, the purchasing department of Kiefel GmbH must be contacted immediately.
- 3.3 Prior to accepting the order, the ability to produce the components must be checked by the supplier. If conflicting requirements or requirements that cannot be implemented economically are requested, then the supplier has an obligation to inform Kiefel GmbH immediately.
- 3.4 This inspection offers the supplier the opportunity to contribute their experience and skill with recommended changes for our mutual benefit.
- 3.5 The supplier shall be completely responsible for the quality of the delivery. This responsibility shall also include the scope of their sub-suppliers.

4 Test equipment planning

4.1

The supplier shall ensure that all required testing equipment for inspecting items produced for Kiefel GmbH are available at all times and are subject to continuous monitoring, calibration, and upkeep.

4.2

The supplier shall be obligated to acquire testing equipment such that all contractually agreed quality properties are able to be checked. In case an external measurement company is utilised, this must be correspondingly accredited.



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5 Testing and measurement logs and test certificates

- 5.1 All measurement results for fittings, tolerated dimensions, shape and position tolerances must be documented according to the specifications. If the ordering documents include Kiefel testing instructions, then these must be filled out completely by the supplier.
- 5.2 In order to assign the testing logs, measurement logs, and inspection documents clearly to the delivered parts, the supplier must name these according to the following example.

Kiefel order number – Kiefel material number - xxx.pdf

Example:	4500215321 - 10329642.pdf	(minimum requirement)
	4500215321 - 10329642 - 001.pdf	(with sequential number)

The numbers and letters according to the material number may be selected freely by the supplier. (maximum number of characters 10). The files must be saved in the **PDF** portable file format.

- 5.3 All testing and measurement logs must be sent before delivering the components to the following email address: <u>gs-office@kiefel.de</u>
- 5.4 The storage duration for inspection logs, measurement logs, and inspection documents is at least 10 years after delivery of components.
- 5.5 A 100% inspection (of all components) is required for the following components:
 - if the KIEFEL inspection document indicated *inspection severity 100% inspection*

6 Complaint management and subsequent improvement of products

- 6.1 In case of complaints, the supplier shall be informed immediately and an opportunity for subsequent improvement shall be granted, provided this is possible according to the deadline situation of our order.
- 6.2 If subsequent improvement of the disputed products is required, then Kiefel GmbH reserves the right to complete this themselves to prevent disruptions during their own assembly processes, e.g. assembly stoppage. Subsequent work organised by Kiefel shall be invoiced to the supplier
- 6.3 The supplier must react to all quality complaints immediately and within one workday at the latest and take all of the necessary measures.
- 6.4 The supplier must complete an error cause analysis as per the 8D system and provide a detailed error analysis report to Kiefel GmbH including notification of the respective introduction of correction and cessation measures within 20 workdays after initial request. The corresponding Kiefel template 5D report is available as a download via the Kiefel supplier portal.
- 6.5 The supplier must maintain a system for controlling nonconforming products. The respective test status of the products must be recognisable in all production phases. Nonconforming parts must be physically identified and clearly separated from conforming parts (e.g. scrap box), scrap area.

Further processing or delivery without the approval of Kiefel must be effectively excluded.



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In addition, appropriate traceability must be guaranteed (e.g. through to the production batch/charge) so that if nonconformities are identified internally or externally, the cause of the nonconformity can be Identified.

6.6 After the discovery of nonconforming units at Kiefel the further treatment of the parts need to be agreed with the supplier. A quality notification will be sent to inform him of the decision of Kiefel. Furthermore, Kiefel reserves the right to pass on all associated costs to the supplier (initiator).

Kiefel has the following options:

- immediate rejection of the entire delivery,
- sorting and / or reworking by the supplier at the Kiefel premises,
- sorting and / or reworking, 100%-test by Kiefel or one of its subcontractors at the expense
 of the supplier after prior agreement,
- Unique temporary release.
- 6.7 Rejected parts will be returned to the supplier in the agreed scope. It undertakes to analyze each deviation and to comment on it by means of a 5D report. After returning the complained parts, an report shall be provided to Kiefel within 5 working days.

7 Special authorisation

7.1 Materials and products that deviate from the required specifications may be authorised by Kiefel GmbH at their own discretion after written special approval; however, this requires the explicit condition that the functionality, durability, and safety of the products are not negatively impaired.

7.2 Special authorisation shall only be issued in the following exceptional cases:

Deadline situation:

A replacement is not available within an acceptable time and defects may be repaired technically during production.

Economic factor:

The defect is not relevant to the function and a new production will lead to disproportionate costs

- 7.3 Inquiries regarding 'special authorisation' must generally be submitted in writing by the supplier to Kiefel GmbH's quality assurance department. In this case, the supplier must use the corresponding Kiefel template. This is available as a download via the Kiefel supplier portal.
- 7.4 If Kiefel awards a special authorisation, then the parts affected by this special authorisation must be delivered separately, and they must be unmistakable vis-a-vis the packaging unit directly and clearly labelled on the delivery slip.
- 7.5 Kiefel GmbH expects the supplier to develop and implement a procedural plan for avoiding all types of defects in future deliveries.
- 7.6 Kiefel GmbH reserves the right to submit an invoice in case of special authorisation and reduced quality.



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8 Delivery labelling

- 8.1 The delivery must be clearly labelled with the order and material number and the quantity of pieces. If labelling is lacking, costs for assigning deliveries will be invoiced to the supplier by Kiefel GmbH.
- 8.2 All parts requiring labelling must be labelled according to Kiefel **KND 008 002**. Parts requiring labelling must also be indicated as such in the order text.

9 Transport, storage, and packaging planning

The supplier shall be responsible for packaging, storage, and transport of their components. In this case, the supplier must ensure that the product cannot be damaged or fouled on internal and external transport routes via external effects.

Additional information is provided in the Kiefel standard for packaging instructions KNV 040 002.

10 Delivery correctness

We essentially demand complete delivery correctness from our suppliers with regard to delivery quantity and deadline. If difficulties arise within the supply chain, Kiefel GmbH must be informed in advance.

Furthermore, the supplier shall be obligated to provided corresponding emergency plans, e.g. fallback inventories for materials, preventive maintenance and upkeep of machines.

11 Supplier assessment

11.1

Kiefel GmbH shall complete regular supplier evaluations to monitor and ensure delivery quality. The evaluation will result in a supplier rating of A, B, or C.

11.2

The results of the Kiefel GmbH supplier evaluation form the basis of decisions to assign new orders and will be indicated to the supplier in continuous intervals.

12 Supplier audit/supplier development

Kiefel GmbH shall be entitled to complete supplier audits following prior consent. The supplier must provide a suitable contact person on-location.

Audits are also used for continuous development of the supplier and offer support for the creation, introduction, and maintenance of their QA systems.

13 Supplier approval and authorisation

Suppliers are authorised following positive results of a specified supplier selection process. Kiefel GmbH must provide the complete required information, e.g. supplier voluntary information.

14 Kiefel supplier portal

http://partner.kiefel.de/