ebm-papst Supplier Manual

ebmpapst

engineering a better life



Foreword

We appreciate your interest in working with us as a supplier and want to ensure that our partnership is based on clear expectations and transparent processes.

This manual serves as a binding document for all our suppliers and contains important information regarding our expectations of suppliers, quality standards, and principles of sustainability and responsibility. It is intended to help you understand our requirements and ensure that you can meet them.

As an ebm-papst supplier, you play a crucial role in our supply chain, and we place great value on a trusting and long-term partnership. We are committed to working with you to develop sustainable solutions and create added value for all stakeholders.

We thank you for your commitment and your willingness to familiarize yourself with the contents of this handbook. If you have any questions or need clarification, please do not hesitate to contact us.

Table of Contents

1. Introduction 1

1.1 Scope and Validity 1

2. Supplier Selection 1

2.1 Non-Disclosure Agreement (NDA) 1

2.2 Supplier Code of Conduct (SCOC) 1

2.3 Management Systems 1

2.4 Framework Agreement 3

2.5 Quality Assurance Agreement ( ) 3

2.6 Tool Loan Agreement 3

2.7 Potential Analysis Based on VDA 6.3 3

3. Quality and Product Requirements 3

3.1 Material Compliance 4

3.2 Environmental Compatibility and Hazardous Substances in Accordance with the REACH and RoHS Regulations 4

3.3 Production Process and Product Approval (PPF or PPAP) 5

3.3.1 Manufacturability Analysis 5

3.4 Supplier Audit Based on VDA 6.3 6

4. Ensuring Delivery Reliability in Series Production 7

4.1 Quality Records 7

4.2 Special Approval/Nonconformance Request (AWA) 7

4.3 Change Management (PCN) 7

4.4 Claims Due to Quality Defects / Notice of Defects 8

5. Continuous Improvement Process 9

5.1 Supplier Evaluation 10
5.2 Quality Objectives 10
5.2.1 ppm Target Agreement 10
5.2.2 ppm Monitoring 10
5.3 Supplier Performance Management (SPM) 10
6. Logistical Requirements 12
6.1 Ordering Procedures 12
6.1.1 Individual Orders 12
6.1.2 Sample Order 12
6.1.3 Delivery Schedule 12
6.1.4 Logistics Concepts 12
6.2 Packaging Guidelines 12
6.3 EDI Connection 13
6.4 Ensuring Production Capacity 13
6.5 Suppliers in Third Countries 13
6.6 Trade Compliance and Foreign Trade 13
7. Information Technology 14
7.1 Cyber and Information Security 14
8. Sustainability 14
8.1 Tracking and Reducing Greenhouse Gas (GHG) Emissions 15
8.2 Supply Chain Due Diligence Act (LkSG) 15
9. List of Abbreviations 16

1. Introduction

1.1 Scope and Validity

The scope of the ebm-papst Supplier Manual extends to all suppliers and service providers who enter into or maintain business relationships with ebm-papst. This includes all of ebm-papst's production sites and business divisions worldwide.

The Supplier Manual forms an integral part of every agreement between ebm-papst and the supplier. Unless expressly agreed otherwise in writing, the supplier is obligated to comply with the provisions set forth in this manual.

Mutual openness, honesty, and loyalty play an important role in our business relationship. At the same time, strict confidentiality and secrecy are required.

We recommend that you familiarize your relevant employees with the contents and requirements of the Supplier Manual. This ensures that all employees involved in working with ebm-papst share a common understanding of our corporate principles and standards.

2. Supplier Selection

The selection of suppliers for production materials is carried out by the Purchasing department in close coordination with the Quality Management, Development, and SCM departments. In addition to technical, economic, and logistical aspects, the supplier's ability to deliver quality is considered a decisive criterion in the selection process. Within our supplier selection process, the requirements described below are of binding importance:

2.1 Non-Disclosure Agreement (NDA)

We place great importance on the security and confidentiality of our data, information, and agreements. Based on the supply agreements, we always expect our business partners to fully commit to and uphold confidentiality regarding any confidential information shared. A non-disclosure agreement serves to ensure that sensitive information is protected and used only for the agreed-upon purpose. We ask all suppliers to adhere to these provisions to ensure the confidentiality and integrity of our data.

2.2 Supplier Code of Conduct (SCOC)

As a responsible company, we place great importance on our suppliers' social, environmental, and ethical conduct. ebm-papst's Supplier Code of Conduct (SCOC) ensures that our suppliers share ebm-papst's values regarding labor standards, health, safety, and business ethics. We expect our suppliers to commit to the principles set forth therein and to implement them in their daily business operations. We are convinced that adherence to these standards not only strengthens our business relationship but also helps to have a positive impact on society and the environment. We therefore ask that you familiarize yourself with our Supplier Code of Conduct and ensure that you respect and comply with it. The Supplier Code of Conduct is available on our website.

2.3 Management Systems

ebm-papst expects suppliers to establish and maintain an effective management system to ensure the quality of the products and services they provide and to meet the requirements of ebm-papst and its customers. This section details the requirements for suppliers' management systems to ensure that all suppliers meet the necessary standards and continuously improve.

The supplier must promptly, unsolicited, and on its own initiative submit to ebm-papst Purchasing all certificates relevant to the supply of contractual items to ebm-papst. Certificates must include proof that they were issued by a recognized certification body (e.g., an accreditation symbol or a registration number). Changes in the type or scope of certification, new revision statuses of the certificates, or the loss of a certificate must also be reported to ebm-papst immediately and without being asked.

2.3.1 ISO 9001 and IATF 16949 Quality Management System

The supplier must establish, maintain, and continuously improve a quality management system in accordance with the following guidelines. The minimum requirement is a quality management system compliant with ISO 9001 or IATF 16949, as currently in effect.

To the extent that ebm-papst provides the supplier with materials, in particular production and testing equipment, for the manufacture of the contractual items, the supplier must incorporate these into its QMS in the same manner as its own production and testing equipment.

To the extent agreed upon with ebm-papst, the supplier is obligated to procure products (components, semi-finished products, and materials) and services from sources approved by ebm-papst. The use of these sources does not relieve the supplier of the responsibility to ensure the quality of the procured products and services on its own responsibility.

2.3.2 ISO 14001 Environmental Management System

ebm-papst expects the supplier to be committed to environmental protection. The supplier must implement an environmental management system and consistently carry out waste separation, recycling, air pollution control, and water protection.

The supplier undertakes to comply with all applicable environmental protection requirements and to work toward minimizing the adverse effects of its activities on people and the environment. To address this special environmental responsibility, ebm-papst expects the supplier to implement and maintain an environmental management system in accordance with the international environmental standard ISO 14001 or EMAS, or to continuously and efficiently improve its existing environmental management standards based on these systems.

2.3.3 Energy Management System According to ISO 50001

The efficient use of energy throughout the entire supply chain is a key factor in a sustainable economy. This is also the rationale behind the Energy Efficiency Act (EnEfG), under which all companies—including ebm-papst—with a total annual final energy consumption of more than 7.5 GWh are required to implement and have certified an energy management system in accordance with ISO 50001 or an environmental management system in accordance with EMAS by July 18, 2025. As part of this effort, we actively involve our suppliers in

efforts to reduce energy consumption and therefore expect our suppliers to obtain ISO 50001 certification in accordance with legal requirements.

We recommend that our suppliers

- develop, monitor, and report specific energy performance indicators (EnPIs),
- raise awareness of energy efficiency through regular employee training,
- procure energy-efficient products and services while taking life-cycle costs into account,

- conduct regular energy audits,
- and to incorporate the results of these audits into the continuous improvement of their energy efficiency,

in order to achieve improvements in energy consumption that are both sustainable and economically significant.

2.4 Framework Agreement

For a long-term and comprehensive collaboration, it is of great importance to us to enter into a framework agreement. This agreement will define the future collaboration as well as the legal framework, thereby creating a reliable foundation for our partnership.

2.5 Quality Assurance Agreement ( )

As part of the supplier onboarding process, the conclusion of a Quality Assurance Agreement (QAA) is mandatory. The Quality Assurance Agreement serves to ensure the quality of products and services between suppliers and customers. It defines the requirements, responsibilities, and processes to ensure that the agreed-upon quality standards are met. Concluding a QAA establishes a binding foundation for a long-term and successful collaboration.

2.6 Tool Loan Agreement

Tools or other equipment provided by ebm-papst to suppliers remain the property of ebm-papst

The Tool Loan Agreement governs the terms under which ebm-papst lends tools, fixtures, and gauges to suppliers for the manufacture, machining, or delivery of parts for ebm-papst. The agreement includes important provisions such as transfer of ownership, tool marking, return conditions, and disclaimers of liability.

2.7 Potential Analysis Based on VDA 6.3

Before awarding a contract, ebm-papst conducts a potential analysis based on VDA 6.3 to evaluate suppliers' processes.
The results of the potential analysis are categorized into **three levels**:

- **Green:** Requirements fully met. You are a preferred supplier, which leads to closer collaboration.
- **Yellow:** Requirements are largely met. Improvement measures are agreed upon and monitored; re-evaluation is required after implementation.
- **Red:** Requirements not met. Collaboration is suspended; no new orders. Significant improvements and a re-analysis are required.

3. Quality and Product Requirements

At ebm-papst, we place the utmost importance on the quality of our products and therefore expect our suppliers to meet these high quality standards as well. For this reason, the following sections must be adhered to.

3.1 Material Compliance

For a component to be approved, ebm-papst must have the signed supplier declaration of material compliance on file. The template is available on the ebm-papst website.

3.2 Environmental Compatibility and Hazardous Substances in Accordance with the REACH and RoHS Regulations

The supplier shall ensure that the contractual products comply with the requirements of the relevant substance-related regulations, such as Directive 2011/65/EU on the

Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS), at the place of performance. If the contractual products are to be used at a different location and the supplier is notified of this, the regulations applicable at that location must also be complied with.
In particular, for Contract Products that are delivered to or imported into the European Union (hereinafter "EU"), they must comply with the provisions of Regulation (EC) No. 1907/2006 (hereinafter "REACH Regulation"). The Supplier shall ensure that all substances, including those contained in the Contract Products, are pre-registered or registered to the extent required by the REACH Regulation.

In the event that the Contract Products or parts thereof are to be regarded as articles within the meaning of the REACH Regulation, the Supplier shall, following appropriate investigations, notify ebm-papst whether the release of substances contained in the articles—which requires registration under the REACH Regulation—is intended, or whether the articles or parts thereof contain SVHCs as listed on the European Chemicals Agency's Candidate List (hereinafter the "ECHA Candidate List") in a concentration exceeding 0.1%. The Supplier shall inform ebm-papst of the identity of these substances and, if applicable, their concentration in the products. This obligation also applies to products in which the respective substances were added to the ECHA Candidate List at a time when the contractual products had already been delivered.

The Supplier shall inform ebm-papst in a timely manner of any additional restrictions contained in the REACH Regulation or issued by the competent authorities in connection with the implementation of the REACH Regulation. This includes, in particular, all restrictions on use or authorization requirements pursuant to Annexes XIV and/or XVII of the REACH Regulation that actually or likely affect the use, sale, or disposal of substances contained in the delivered contract products.

The Supplier shall provide ebm-papst in a timely manner with all necessary information regarding the delivered contractual products that the Supplier or the party from whom the Supplier sources the products must disclose with ly the supply chain (i.e., downstream purchasers or users) in accordance with the REACH Regulation. Furthermore, the Supplier must provide all information required by ebm-papst or downstream actors in the supply chain to fulfill their obligations under the REACH Regulation.

Conflict Materials under Section 1502 of the Dodd-Frank Act: ebm-papst is required to provide information to its customers within the supply chain regarding the use of certain materials (so-called "conflict materials"). These include, among others, the minerals gold, tin, tantalum, tungsten, and their derivatives, particularly when sourced from the Democratic Republic of the Congo. If the supplier uses these minerals in the subject matter of the contract, it is obligated to inform ebm-papst of this in a timely manner prior to contract performance, to respond annually to a corresponding customer inquiry, and to provide appropriate evidence.

To the extent that the supplier performs work on ebm-papst's premises, the supplier shall comply with ebm-papst's relevant, currently valid safety and accident prevention regulations and

Follow ebm-papst's instructions regarding conduct on company premises in accordance with the policy for outside contractors.

3.3 Production Process and Product Approval (PPF or PPAP)

The supplier must submit the required approval documents for the relevant product group, including initial samples that conform to the drawings and specifications, in accordance with the schedule agreed upon with ebm-papst.

Initial samples must be taken from a representative production run using mass-production equipment. Our Sampling Guidelines specify the scope of the documents to be submitted. For your assistance, we also provide the "Sampling Scope Checklist." The templates are available on the ebm-papst website.

3.3.1 Manufacturability Analysis

It is crucial that the supplier conduct a manufacturability analysis to ensure that the requirements and specifications of the order can be met. This analysis identifies both the supplier's fundamental suitability and potential risks, and enables measures to minimize those risks. In addition, the analysis provides a realistic assessment of costs, the timeline, and resources. The supplier must review all technical requirements and documentation and clarify any ambiguities without delay. Written consent is required for any ancillary agreements. By conducting the manufacturability analysis, the supplier commits to being able to manufacture the products reliably. Should additional expenses arise, the supplier agrees to bear these costs. The manufacturability analysis must be completed prior to placing the order. The template is available on the ebm-papst website.

3.3.2 Special Characteristics

Features classified by ebm-papst as safety-related (SC S), approval-related (SC A), function-related (SC F), or as test criteria—and which therefore require special attention ("Special Features")—are marked accordingly in the technical specifications, particularly in drawings.

Unless ebm-papst specifies any Special Characteristics, the supplier is obligated, based on its technical expertise and its product and process experience, to independently identify and define those characteristics whose deviation could impair product safety, function, quality, performance, or process stability. The supplier is responsible for the completeness and appropriateness of the characteristics it defines. The supplier must clearly identify the defined Special Characteristics in all relevant product and process documentation. This includes, in particular, drawings, FMEA, risk analyses, work and test instructions, control plans, and other quality-related documents. The supplier must ensure that Special Characteristics are appropriately taken into account throughout the entire product development, industrialization, and series production phases. To this end, suitable measures for control, monitoring, documentation, and verification of effectiveness must be defined and demonstrably implemented.

The identification and definition of special characteristics by the supplier does not relieve the supplier of its unrestricted responsibility for the conformity, safety, functionality, and quality of the delivered products.

3.3.3 Process Capabilities

The supplier undertakes to comply 100% with all characteristics specified in the drawing and specification (zero-defect target). To this end, the supplier shall define appropriate measures, such as in-process inspections or verification of process capability.

For the specific characteristics listed in the drawing, there are generally testing and verification requirements; that is, the characteristics must be continuously monitored and the measured values documented. In the case of multiple nests, cavities, tracks, etc., this applies to each nest, cavity, track, etc., unless otherwise agreed in writing.

Unless otherwise agreed in writing on a project-specific basis, the following minimum requirements apply to special features:

	Special Features	Safety-Related Features
Short-term/machine capability	cmk > 1.67	cmk > 2.0
Preliminary process capability	ppk > 1.67	ppk > 2.0
Long-term/process capability	cpk > 1.33	cpk > 1.67

Figure1: Process Capabilities

If the capability required above is not achieved, a 100% inspection must be performed.

Evidence of machine and process capability must be prepared and provided to ebm-papst free of charge upon request. In the event of a complaint regarding the specified characteristics, the supplier shall also make this evidence available free of charge for a period requested by ebm-papst or allow access to all relevant data and documents.

3.3.4 Test Methods

Test methods and the test equipment used must be coordinated with ebm-papst as necessary. The test equipment must be procured by the supplier or already be available and subject to systematic test equipment monitoring; this also applies to the test and measuring equipment provided by ebm-papst. In addition to timely, recurring calibration, test equipment monitoring generally includes ensuring linearity and long-term stability by means of a measurement system analysis

(MSA); see, for example, MSA 4 and MSA 5 in the AIAG Measurement Systems Analysis Manual, Bosch Booklet 10, or VDA Volume 5.

Verification must be performed in accordance with the general requirements of VDA Volume 5 (Test Process Capability) or an MSA according to AIAG (MSA 1 with cgk ≥ 1.33, followed by MSA 2 or MSA 3 for metric test characteristics—provided that operator influence can be ruled out—with %R&R ≤ 10%). For categorical or qualitative inspection characteristics, an attributive measurement system analysis, preferably MSA 7 (Kappa statistic), must be used (see, e.g., ISO 22514-7 or VDA Volume 5).

3.4 Supplier Audit Based on VDA 6.3

A supplier audit in accordance with VDA 6.3 is a standardized procedure for evaluating and monitoring suppliers. It serves to ensure quality assurance throughout the entire supply chain and to identify potential risks.

ebm-papst is entitled to enter the production facilities and other business premises of suppliers and their upstream suppliers, subcontractors, and other agents or service providers

together with the end customer, following prior notice during normal business hours, and to verify compliance with the requirements for the contractual products and underlying management systems. In urgent cases, e.g., an immediate complaint, ebm-papst is entitled to access the premises on the day following the notice.

In doing so, ebm-papst will take into account the legitimate interests of suppliers and their upstream suppliers, subcontractors, and other agents or representatives, particularly confidentiality concerns. ebm-papst is entitled to have such audits conducted by a third party bound by a confidentiality agreement. The supplier and its upstream suppliers, subcontractors, and other agents or assistants shall provide ebm-papst or the third party commissioned by ebm-papst with appropriate support in the preparation and conduct of such audits, in particular by granting access to the relevant documents and providing a technically qualified employee. ebm-papst will treat the information received in the course of such an audit as confidential.

If, in ebm-papst's view, a supplier fails to meet the requirements for the contractual products and the underlying management systems, the supplier is obligated to immediately develop an action plan, implement it within the specified timeframe, and notify ebm-papst accordingly. The audit results will be incorporated into the supplier evaluation.

Conducting such an audit does not relieve the supplier of its responsibility regarding the manufacture and delivery of contract-compliant products or the provision of contract-compliant services.

4. Ensuring Delivery Reliability in Series Production

4.1 Quality Records

The supplier shall maintain records of the implementation of all quality assurance measures, in particular measurement values and test results, and shall store these records, as well as any product samples, in a clearly organized manner. The supplier shall grant ebm-papst access to these records to the extent necessary and shall provide copies of the records as well as any samples. The retention period for all quality records and aggregated data from the final inspection of the

contract products delivered is 15 years from the date of the last delivery, unless the parties have agreed otherwise. The documents and records must be stored and disposed of in such a way that they are not accessible to third parties.

4.2 Special Approval/Nonconformance Request (AWA)

If a supplier or an extended workbench (outsourcing of certain upstream and/or downstream work on a product to service providers) identifies a deviation in supplied parts, it may request special approval from ebm-papst by submitting a corresponding application. Once approved by ebm-papst, the parts may be delivered with special markings. Costs incurred as a result of this process will be billed to the supplier. The form is available on the ebm-papst website.

4.3 Change Management (PCN)

Changes to parts may, under certain circumstances, have unforeseeable consequences for the supplier. The specific application of purchased parts in ebm-papst's product range means

that features which may seem insignificant to the untrained eye can pose risks to human life and limb. For this reason, change management at ebm-papst is subject to a special duty of care.

For this reason, ebm-papst has specified which changes to parts or processes must be reported to or approved by ebm-papst. This also applies to subcontractors.

Changes Not Subject to Notification

- Personnel changes in the operational area
- Changes to process parameters within a defined process window in accordance with process approval
- Changes to machines, equipment, or production facilities, provided that any impact on product quality can be ruled out
- Test equipment of the same type, performance, etc., without any impact on product quality
- Maintenance-related changes (replacement parts)
- Additional quality inspections, e.g., process control (outgoing goods inspection)
- Additional visual inspections due to new defects (defects not yet listed in the defect catalog)

Changes Requiring Notification

- Replacement of machines with better and more powerful models, without any foreseeable impact on product quality

Changes Requiring Approval

- Changes to machines, production facilities, test equipment, or manufacturing sites that may affect product quality
- Changes to process parameters with a potential impact on product quality
- Changes to test parameters and test methods
- Changes to (raw) materials
- Changes to material suppliers or service providers
- Changes to the process sequence (process flow), including inspection steps

Before implementing changes that require approval, written consent must be obtained from ebm-papst, and the change must be documented in the product history. Notice of a planned change must be provided in writing in a timely manner, but no later than six months prior to the planned implementation, and must include all necessary data and facts.

If a supplier makes changes without ebm-papst's consent, ebm-papst is entitled to terminate the contract and all affected purchase orders immediately and without notice. In addition, the supplier must compensate ebm-papst for all damages incurred by ebm-papst as a result of the failure to notify ebm-papst of the change. Any further rights and claims of ebm-papst remain unaffected.

4.4 Claims Due to Quality Defects / Notice of Defects

Upon delivery, ebm-papst inspects the products only for identity, quantity, and any transport damage visible on the outside of the packaging. Defects discovered during this inspection are reported to the supplier immediately upon discovery. Hidden defects are also reported immediately upon their discovery. Any further statutory inspection obligations on the part of ebm-papst are excluded. To this extent, the supplier waives the right to object on the grounds of a delayed notice of defect. The supplier

must adapt its quality management system and quality assurance measures to this reduced incoming goods inspection. As soon as the supplier becomes aware of complaints regarding delivered products that are used by other customers for comparable applications, it shall immediately notify ebm-papst. The supplier and ebm-papst agree to a direct and open exchange of information regarding this matter so that any potential impact on the end customer can be ruled out or at least minimized. This approach serves to minimize damage in the interest of both partners. Therefore, both parties will cooperate fully in identifying the causes and possible solutions within their respective areas of responsibility, even if the cause of the complaint is disputed between the partners.

If defective products are discovered at ebm-papst or at the customer's site, the supplier is obligated to immediately take appropriate corrective actions and, upon request, implement a problem-solving process in accordance with the 8D methodology. The status of the immediate corrective actions (D3 in the 8D report) must be reported to ebm-papst within 24 hours and updated regularly. As part of the immediate corrective actions, the supplier agrees to:

- to immediately establish a quality gate to ensure that only conforming goods are delivered to ebm-papst
  (e.g., 100% inspection)
- to deliver replacements immediately
- to pick up the suspect goods from ebm-papst
- to immediately organize sorting or rework at ebm-papst (e.g., using external service providers specified by ebm-papst)

The completed 8D report will be evaluated by ebm-papst using the 8D evaluation form. A score of > 70.8% must be achieved. If the score falls below this threshold, the 8D report must be revised.

Root cause analyses for the occurrence and failure to detect the issue must be conducted using appropriate problem-solving methods and submitted to ebm-papst. In addition, detailed analyses (such as Ishikawa diagrams, the 5 Whys, failure simulations, etc.) must be conducted. ebm-papst is entitled to participate in the inspections and assessments conducted by the supplier and its subcontractors or to conduct such inspections at the supplier's premises in collaboration with the supplier. A detailed action plan (D5 in the 8D report) for effectively resolving the root cause, the occurrence, and the failure to detect the issue must be submitted to ebm-papst within 14 calendar days of receiving the complaint. The complete 8D report must be submitted in writing to ebm-papst within 30 calendar days at the latest. If corrective actions need to be revised, the 8D report must be updated. If necessary, different deadlines may be agreed upon in consultation between the supplier and ebm-papst. The 8D process can only be concluded with ebm-papst's approval.

All costs incurred in connection with a complaint caused by the supplier shall be borne by the supplier. Flat rates may be agreed upon for individual defects.

5. Continuous Improvement Process

Continuous improvement plays a central role in our company and is crucial for maintaining competitiveness, adapting to dynamic market conditions, and ensuring customer satisfaction. Through continuous improvement, processes can be optimized, costs reduced, quality enhanced, and

innovation promoted. In the following section, we present our methods and tools to support our suppliers in their continuous improvement efforts.

5.1 Supplier Evaluation

Supplier evaluation is necessary to ensure that suppliers meet the company's requirements and standards. Regular evaluation allows potential risks to be identified early and minimized. In addition, supplier evaluation enables continuous improvement of supplier relationships by identifying weaknesses and jointly developing solutions.

Our suppliers are evaluated on a regular basis. The evaluation of individual areas is conducted by the various functional departments (Purchasing, Quality, and SCM). Based on the results, suppliers are classified as A, B, or C. If a supplier receives a B or C rating, they are required to analyze the causes, develop an action plan, and keep the customer informed of the status. If a supplier receives a C rating, they are barred from receiving new orders. In the event of repeated C ratings, the supplier's continued suitability is reviewed, and further steps are taken as necessary.

5.2 Quality Objectives

The supplier's quality strategy must be geared toward the continuous improvement of its processes and performance. The specific objectives are "zero defects," 100% delivery and on-time performance, and cost reduction.

5.2.1 ppm Target Agreement

To approach a zero-defect target as quickly as possible, the parties will agree on specific, measurable quality targets. Unless otherwise agreed, 100 ppm applies.

The agreement on quality targets and measures, as well as intervention limits—including special approvals or deviation authorizations—does not release the supplier from liability for claims for material defects and damages by ebm-papst arising from defects in the delivery, unless such liability is explicitly excluded in the respective special approval.

Unless otherwise agreed, all defective units found prior to delivery to ebm-papst, as well as all customer complaints, will be included in the calculation.

Likewise, the agreement on quality targets does not exempt the supplier from liability for costs incurred from special shipments, special corrective actions, and any claims for damages.

5.2.2 ppm Monitoring

The supplier must monitor compliance with ppm targets so that it can identify negative trends or widespread issues at an early stage. Any anomalies must be analyzed using standard analytical methods (e.g., Pareto, First Level – Second Level…), corrective actions must be initiated, and the effectiveness of the measures taken must be demonstrated.

At the same time, ebm-papst performs a monthly ppm calculation and, in the event of anomalies, nominates suppliers for a supplier development project (see Chapter 5.3).

5.3 Supplier Performance Management (SPM)

The goal of ebm-papst's Supplier Performance Management is to improve delivery quality, product quality, and process quality using specific tools and methods.

Objectives of the supplier development project:

1. Quality improvement: Ensuring a consistently high quality of the products and services delivered.
2. Cost Efficiency: Reducing production and delivery costs through process optimization and efficiency improvements.
3. Promoting Innovation: Supporting suppliers in developing new technologies and products to meet market demands.
4. Sustainability: Promoting environmentally friendly and sustainable production methods.
5. Risk minimization: Identifying and reducing potential risks in the supply chain

Possible triggers for launching an SPM include:

- High, negative ppm metrics over several months
- Defects posing a high safety risk (danger to life and limb)
- High costs associated with defects
- Risk minimization project (for identified risks)
- Supplier evaluation with a B/C rating
- Specific triggers for fundamental issues (e.g., improvement of the sampling process, special release, AWA procedure, etc.)
- Poor delivery performance (adherence to deadlines and quantities)
- Opportunities for process optimization, potentially with high efficiency gains
- Fundamental areas for improvement identified through audits, potential analyses, and supplier evaluations

To launch an SPM, a joint project agreement with a timeframe is drawn up. The basic process of an SPM follows these steps:

1. Conduct a current state analysis (preferably using Pareto analysis: 1st level, 2nd level, etc.). Depending on the situation, a process assessment conducted jointly with ebm-papst can also be helpful. However, the use of defect collection cards, time series analysis, quality control charts, measurement system analysis, process capability analyses, etc., is also suitable for assessing the current state. Key performance indicator (KPI) calculation should begin at the start of the project to visualize the “BEFORE-AFTER” effect.
2. Identify areas for improvement and set goals (if necessary, implement immediate measures or conduct a root cause analysis). If needed, the timeframe of the SQIP must be adjusted.
3. A 5Why analysis is the preferred method for root cause analysis. If necessary, use the 6M-oriented “5Why / ∞ How” form beforehand; if multiple chains of causes are expected, it is also helpful to create an Ishikawa diagram to visualize all potential causes across the 6M dimensions; for complex technical failures, an FTA (Failure Tree Analysis) can be very helpful.
4. Continuous definition, coordination, and tracking of the supplier’s corrective actions

5. Final evaluation (comparison with the project agreement) and presentation to the responsible buyer and quality engineer (including lessons learned)

As a minimum requirement, the supplier must maintain an action plan with regular progress updates. The effectiveness of the measures must be monitored as part of the action plan.

6. Logistical Requirements

The Supplier Manual specifies the logistical requirements that suppliers must meet to ensure a smooth and efficient supply chain. It serves as a guideline for suppliers to ensure that all logistical processes comply with the standards and expectations of

Compliance with these requirements is crucial for a successful partnership and on-time delivery of products.

6.1 Ordering Procedures

The ordering procedures are designed to make the purchasing process efficient and transparent. Here are some of the common order types used at our company, ebm-papst:

6.1.1 Individual Orders

Individual orders specify the scheduled requirements and the previously agreed-upon prices. They are typically sent to the supplier via email, EDI , or the Supplier Portal. In the event of deviations in delivery dates or quantities outside the specified tolerances, the supplier is obligated to notify ebm-papst immediately within 3 business days. The order must be rejected in writing if the supplier cannot accept the specified terms and conditions.

6.1.2 Sample Order

A sample order is placed to test or evaluate a product or service in advance. It serves to verify the quality, functionality, and suitability of the product before ordering larger quantities.

6.1.3 Delivery Schedule

This is agreed upon between ebm-papst and the supplier. The delivery schedule constitutes an extension of the framework purchase agreement. This section of the delivery schedule specifies the quantities to be delivered, the timeframe, and the price. In addition, the materials planning department regularly issues delivery calls specifying the exact parts required by ebm-papst on fixed dates. These must be objected to in writing within 3 business days. If this is not done, the delivery calls (LAB s) are directly binding on the supplier.

6.1.4 Logistics Concepts

To optimize its logistical connections with its suppliers, ebm-papst aims to implement consignment inventory management (VMI) contracts or Kanban agreements

6.2 Packaging Guidelines

The Shipping & Packaging Guidelines for our Landshut location, in their currently valid version, contain detailed instructions and guidelines for the proper packaging of products to ensure they are optimally protected during transport. These guidelines specify which materials should be used, how the products should be packaged, and what labeling is required. Compliance with these guidelines is essential to

prevent damage to the products and ensure smooth delivery. Labeling of shipments and the smallest delivery containers in accordance with VDA 4994 is required for unambiguous identification and serves as the basis for traceability in the event of an error.

6.3 EDI Connection

ebm-papst's goal is to exchange information with suppliers via EDI. In this process, the ebm-papst IT department specifies a standard for encrypted data transmission to the supplier. We

can offer two connection types: AS2 or OFTP2 (preferred). If you believe an EDI connection is appropriate for data transmission, our IT department will provide you with more detailed information on the standards and codes.

6.4 Ensuring Production Capacity

The exact quantities and requirements will be communicated to you approximately 12 months in advance, to the extent possible. This information is based on our forecasts and serves as an estimate to ensure the production capacity required for our delivery volumes.

When you provide us with your capacities, please calculate them based on the following assumptions: Capacities for a material number should be reported per working-day week with two shifts, using the required tools. We always assume a 5-day workweek.

6.5 Suppliers in Third Countries

It is important that suppliers in third countries notify ebm-papst Logistics when goods are ready for shipment to the carrier designated by us (unless otherwise agreed). This notification must include all shipment-related documents, such as the commercial invoice, packing list, and, for example, the bill of lading (B/L) or air waybill (AWB).

This gives us an overview of the shipments in transit (including shipping or flight data) and allows us to prepare for the upcoming import customs clearance. The relevant documents must be available by this time at the latest.

6.6 Trade Compliance and Foreign Trade

Export Regulations and Supplier Information
The supplier must notify ebm-papst if the delivery of the contractual products is prohibited or subject to authorization under the applicable export and customs regulations of the Federal Republic of Germany, the European Union, the United States, or the People's Republic of China.

The Supplier must also provide ebm-papst with the following information:

- List of all relevant export control list numbers;
- Information regarding any potential inclusion on the U.S. Commerce Control List (CCL) and the relevant list number; Information on whether the contractual products are subject to an export license pursuant to the EU Dual-Use Regulation (EU) 2021/821, as currently in force
  and the relevant list item number;
- Statistical commodity code as defined in the Commodity Classification for Foreign Trade Statistics (WA) and the HS (Harmonized System) code
- Declaration of origin (non-preferential origin) of the contract products;

- Supplier's declaration regarding preferential origin (if required by ebm-papst);
- Certificates regarding preferential and/or non-preferential origin (if required by ebm-papst);
- Other information required by law in connection with importation into the European Union (e.g., depending on the product, information regarding CO2 emissions generated during manufacturing, as well as information on the country of smelting and casting of the metal).

The supplier expressly warrants compliance with export control regulations and embargo/sanctions regulations of the Federal Republic of Germany, the European Union, the United States, and the People's Republic of China, including, but not limited to, prohibitions or licensing requirements regarding the import or direct or indirect purchase of, and any related processing of, products to be delivered.

If ebm-papst is responsible for obtaining an export and/or import license, the effectiveness of an order is subject to the condition precedent of the license being granted. The supplier is obligated to provide ebm-papst with all information and documents necessary for the granting of the license without delay.

7. Information Technology

7.1 Cyber and Information Security

Suppliers must have systems and procedures in place to protect computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks of any kind.

In addition, suppliers must have procedures in place that describe in detail how to respond to attempted or actual cyberattacks. These procedures must include immediate notification to ebm-papst regarding any potential impact on ebm-papst's data or business operations. Given the growing reliance on electronic systems and electronic communication, as well as the ever-increasing threats to information protection and security, we require our suppliers to implement an information security standard based on a recognized standard (e.g., ISO/IEC 27000, BSI -Basic Protection, etc.).

All identified confidential information, such as technical data, development and design data, and other critical information, must be managed and maintained in a secure environment.

Depending on the nature and protection requirements of information and data, suppliers must demonstrate appropriate security measures and a sufficient level of information security.

8. Sustainability

In an era marked by global warming, resource scarcity, and a rapidly growing population, we at ebm-papst place great emphasis on achieving a balance between environmental, social, and economic aspects through sustainable corporate management, in order to meet the needs of the present generation without compromising the opportunities of future generations.

However, this can only be fully achieved if our suppliers also integrate sustainable practices into their business processes. This enables the development of business relationships designed for the long term. As a result, both ebm-papst and its suppliers can jointly benefit from the advantages of a sustainable economy.

Issues related to sustainability in the supply chain are also part of the annual sustainability report, which ebm-papst is required to publish under the Corporate Sustainability Reporting Directive (CSRD). This alone underscores the need for ebm-papst's suppliers must increasingly implement sustainable practices and report the results to ebm-papst.

8.1 Tracking and Reducing Greenhouse Gas (GHG) Emissions

Companies that commit to measurable targets for reducing greenhouse gas emissions benefit from increased investor confidence, support for innovation, an improved brand reputation, and regulatory certainty. In accordance with its Science Based Targets initiative (SBTi) commitment, ebm-papst is therefore pursuing a wide range of projects to achieve the binding targets set for reducing greenhouse gas emissions. We view this as a contribution to mitigating climate change and its associated negative impacts on humanity. At the same time, we expect this to yield economic benefits, as more efficient processes and products are typically associated with lower resource consumption and are therefore more cost-effective.

At ebm-papst, greenhouse gas (GHG) emissions are tracked and reported in accordance with the Greenhouse Gas Protocol across the three categories: Scope 1, 2, and 3.

Scope 1 encompasses all direct emissions from sources owned or controlled by the company itself. This includes emissions from the combustion of fossil fuels in company-owned facilities and vehicles

Scope 2 emissions arise indirectly from the consumption of purchased energy, such as electricity, steam, heat, and cooling. Although the company does not generate this energy itself, it is responsible for the emissions resulting from the production of this energy.

Scope 3 encompasses all other indirect emissions generated along a company's entire value chain. This includes emissions from the production of purchased raw materials, the use of sold products and services, and business travel.

Through a range of measures, ebm-papst is working to reduce emissions in all areas. With regard to Scope 3 measures, this includes, among other things, requiring suppliers to take responsibility for actively quantifying and reporting their greenhouse gas emissions, as well as planning and implementing measures to reduce them.

8.2 Supply Chain Due Diligence Act (LkSG)

Compliance with the Supply Chain Due Diligence Act (LkSG) is of great importance to us as a company, as it ensures that we act in a socially and environmentally responsible manner throughout our entire supply chain. By complying with this law, we can help ensure that our products are manufactured under fair working conditions and that no human rights violations or environmental damage occur along the supply chain.

We are aware of our responsibility within global supply chains. We are committed to reducing environmental and human rights risks throughout the value chain. This means that we review our own operations and our supply chain for potential environmental and human rights risks in order to prevent or mitigate violations or risks. This requires a joint effort, and we therefore ask you to meet the requirements and expectations for a "zero-harm value chain." To this end, we have established a risk management system to meet these standards.

The regular annual supply chain risk analysis conducted as part of our risk management process takes place in two main steps. In the first step, an abstract risk assessment of direct suppliers (Tier 1) is

conducted. Suppliers are mapped according to country and industry risks. The potential risks posed by high-risk and at-risk suppliers are further investigated. In a

second step, specifically identified risks and/or violations are assessed based on the legally established adequacy criteria (nature and scope of business activities, degree of influence, severity and probability, contribution) and then prioritized according to the assessment results. An event-driven risk analysis is also conducted in certain cases. In the event-driven risk analysis, the scope extends beyond Tier 1 suppliers and also includes suppliers further down the supply chain (Tier n, n>1). For our own business division, the annual analysis of human rights and environmental risks is integrated into the regular central risk management system.

For more details on the legal requirements of the Supply Chain Due Diligence Act and their implementation at ebm-papst, please refer to our Policy Statement in its currently valid version. We would also like to take this opportunity to draw your attention to our reporting system. The web-based and certified whistleblower system, EQS Integrity Line, is available around the clock and from any location to all employees and business partners of the ebm-papst Group, as well as to any other person, for reporting compliance violations of legal requirements and internal organizational rules. Furthermore, this system enables users to report human rights and environmental risks, as well as violations of human rights-related or environmental obligations arising from ebm-papst's business activities within its own operations, among our business partners, or among suppliers in our supply chains. The system is accessible 24/7—and, if desired, anonymously—via *the whistleblower system*.

9. List of Abbreviations

3D	*three-dimensional*
AIAG	*Automotive Industry Action Group*
AWA	*Deviation Request*
AWB	*Air Waybill*
BOM	*Bill of Materials*
BSI	Federal Office for Information Security
CBD	*Cost Breakdown*
CO_2	Carbon Dioxide
CSR	*Corporate Social Responsibility*
DDP	*Delivered Duty Paid*
DGQ	*German Society for Quality*
ECHA	*European Chemicals Agency*
EC fans	electronically commutated fans
EDI	*Electronic Data Interchange*
EMAS	*Community System for Environmental Management and Environmental Audit*
EMS	*Electronic Manufacturing Services*
FCA	Free Carrier
FMEA	*Failure Mode and Effects Analysis*
IEC	*International Electrotechnical Commission*
ISO	International Organization for Standardization
LAB	*Delivery Calls*
LEP	*Supplier Development Program*
LP	*Printed Circuit Board*
LSA	*Supplier Self-Assessment*
MOQ	*Minimum Order Quantity*

MSA	*Measurement System Analysis*
NDA	*Non-Disclosure Agreement*
NRE	*non-recurring engineering costs (one-time costs)*
PCN	*Product Change Notification*
PPAP	*Production Part Approval Process*
PPF	*Production Process and Product Approval*
ppm	*Parts per million*
QM	*Quality Management*
QS	*Quality System Requirements*
QSV	*Quality Assurance Agreement*
REACH	*Registration, Evaluation, Authorization, and Restriction of Chemicals*
RoHS	*Restriction of Certain Hazardous Substances*
SCoC	*Supplier Code of Conduct*
SPC	*Statistical Process Control*
SVHC	*Substance of Very High Concern*
TK	*Technical Data Sheet*
VDA	*German Association of the Automotive Industry*
VMI	*Vendor-Managed Inventory*
PU	*Packaging Unit*