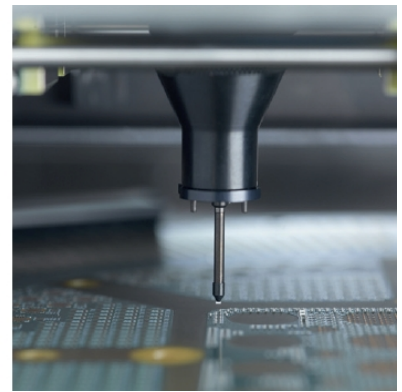
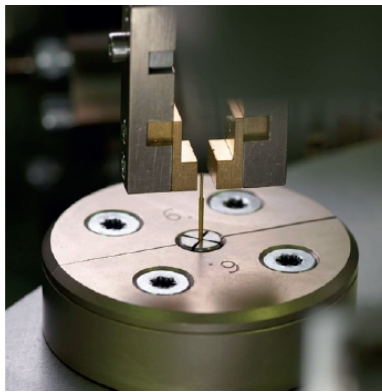




FEINMETALL
Contact Technologies

SUPPLIER MANUAL

Feinmetall GmbH





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General

1. General

The development and production of contacting solutions for testing electrical and electronic components that is our world. We are good at it.

Our goal is to contribute to the safety, reliability and quality of components. A challenge that we meet every day with technical competence, highest precision and certified quality. Our products are used in the automotive industry, PCB and semiconductor manufacturing, telecommunications, medical technology, energy technology and many other areas. We are at home wherever good contacts are the measure of all things.

Our contacting solutions convince through diversity and quality. They offer maximum individuality and functional reliability. Our test cards for wafer testing stand for successful cutting-edge technology at the edge of what is possible.

We maintain direct contact with our customers and business partners in order to understand their requirements and needs, and meet them in the best possible way.

The quality and position of our products on the world markets, are directly influenced by the quality of the supplier products.

This is why FEINMETALL purchasing pursues a consistent procurement management. We consider our suppliers as innovative partners who are characterised by above-average commitment, flexibility and reliability. It is our aim to involve suppliers in the development and design phase at an early stage.

The Supplier Manual describes and explains details and requirements for our suppliers, especially with regard to quality management, organisation, service and communication as well as aspects of joint work.

With this Supplier Manual, we further underline that we expect our suppliers to have an effective quality and environmental management system. We do not necessarily require certification of this system by external parties. Should this be necessary in individual cases depending on customer requirements, we will coordinate this with you within the framework of the project.

Dr. Peter Geiselhart

Patrik Dinser

Michael Wössner

Hans-Martin Mozer

Management

Commercial management

Head of purchasing

Head of Quality
Management

Purchasing - procurement process

2. Purchasing - procurement process

2.1 General information

The purchasing strategy of Feinmetall GmbH requires an intensive and long-term partnership with our suppliers.

We need suppliers who will face the challenges together with us.

We build on cooperation and on continuous improvement of processes based on partnership. Therefore, we would like to work with suppliers whose corporate philosophy is similar to ours.

The following points are of essential importance for Feinmetall GmbH suppliers.

2.2 Registration of suppliers

Please enter your company details in our "Onboarding Form" on our homepage.

This gives us a first impression of you as a potential supplier and serves as a contact.

2.3 General conditions of purchase

The Feinmetall General conditions of purchase are generally valid for orders / deliveries and are also binding in addition to the conclusion of other contracts. A current version is available for download on our website:

[http://www.feinmetall.com/fileadmin/FM-Homepage/Dokumente/2020-01-20 FM Einkaufsbedingungen en.pdf](http://www.feinmetall.com/fileadmin/FM-Homepage/Dokumente/2020-01-20_FM_Einkaufsbedingungen_en.pdf)

In general, we would like to express that suppliers must ensure that all documents relating to Feinmetall GmbH are stored in accordance with the statutory retention period and must be kept available for Feinmetall GmbH in a legible version.

2.4 Contact person, purchasing

Purchasing at Feinmetall GmbH is divided into two areas, Strategic Purchasing and Operational Purchasing (purchasing officers).

In the stage of development and customer projects up to series production release, our suppliers communicate with the group of strategic purchasers.

Subsequently, the suppliers are supervised by the purchasing officers who accompany the procurement of the series parts.

At Feinmetall GmbH, purchasing works closely with the quality management (QM) department concerning quality issues from external procurement.

Purchasing - procurement process

2.5 Supplier self-disclosure

As a potential supplier, you will receive a supplier self-assessment from Feinmetall in which you inform us about further details of your company:

- Information on the company structure
- Information on the quality management system
- Information on environmental management and energy management, etc.

2.6 Tools / manufacturing equipment

For the procurement of tools and production equipment, the currently valid purchasing conditions and a tool loan agreement concluded between Feinmetall GmbH and the supplier as well as separate agreements, if applicable, shall apply. Tools and equipment belonging to Feinmetall GmbH must be permanently marked in order to make the ownership situation visible and maintain it.

2.7 Requirements relating to customs and foreign trade regulations

As an authorised economic operator, Feinmetall GmbH must comply with official requirements. Parts of these requirements also apply to our suppliers. For this reason, we require a long-term supplier's declaration from you in the case of series deliveries.

Long-term supplier's declarations are one-off declarations, which are valid for deliveries over a longer period and document the origin of the goods.

Development and construction of new products

3. Development and construction of new products

3.1 General information

For the development of new products, we want to involve suppliers at a very early stage of the project.

In a team consisting of development, purchasing, quality management and the supplier, the aim is to develop both innovative and cost-effective solutions together.

We are frequently deliberately moving in the technically feasible limits, this requires an intensive cooperation, so that the supplied parts can be manufactured process-safe and faultlessly.

Feinmetall GmbH supports suppliers in process design as well as important testing and measuring processes.

3.2 Inquiries and supplier selection

For inquiries, we turn with priority to our regular suppliers.

We are happy to supplement our supplier portfolio if you can offer us technical, qualitative or economic potential as a "new supplier".

With the inquiry, the supplier receives all the necessary information (drawings, specifications, data, etc.) required for a qualified submission of an offer.

We expect our suppliers to consider the technical feasibility of the requirements and to submit a reliable offer.

From the offer overview, the purchasing department selects the suitable supplier according to commercial, technical and logistical reasons.

Quality management

4. Quality management

4.1 General information

With our quality management system, we want to further develop the trust of our customers in our products and services and increase our performance effectively and sustainably.

As only the delivery of our products in the correct quantities at the correct times as well as the complete fulfilment of all requirements and specifications directed at us, under consideration of the legal defaults, eventually lead us to the ZERO ERROR GOAL declared by us.

From an early phase of the product development, there is already a close contact with the suppliers. Together with the supplier, we implement the following instruments of quality assurance.

4.2 Quality assurance agreement

In general, Feinmetall GmbH would like to conclude a quality agreement with its suppliers. This helps to avoid misunderstandings in the cooperation in detail and to clearly describe the mutual expectations. The following aspects are essentially regulated within this framework:

- Quality assurance tasks by the supplier
- Quality assurance tasks by Feinmetall GmbH
- Verification and duty of information of the supplier
- Communication channels for detected deviations
- Confidentiality of information

The quality assurance agreement should be concluded at an early stage of the cooperation. This enables both sides to implement the agreements within the framework of the project work. Feinmetall sends out our standardised quality assurance agreement for this purpose. Individual adjustments due to the product and/or processes in the supplier company must be communicated by the supplier.

4.3 Measuring system capability

The goal of the measurement system capability analysis (MSA) or test process suitability (VDA Sheet 5) is to ensure the suitability of the measuring equipment for the intended task. This has the advantage that the measurement results have a sufficiently high precision to minimize the influence of the measurement on the manufacturing process. Within the scope of the measuring system capability analysis, the supplier proves that the measuring systems selected by him are suitable for the respective measuring task.

Quality management

First Samples

4.3.1 Reason for initial sampling

On subsequent occasions, Feinmetall GmbH requests an initial sample from the supplier:

- New part (Ident no.)
- Technical modification
- Changed production conditions
- New production site

4.3.2 Implementation of initial sampling

As a rule, parts from an order with a series quantity are first sampled. The supplier manufactures the initial sample parts under series production conditions with series tools and carries out the initial sample inspection. All measurement and test results shall be composed in an initial sample test report and delivered with the goods. The supplier is free to create samples for his own storage (retained samples).

After presentation of the initial samples and measurement results by the supplier, we usually carry out a counter measurement to confirm the measurement results of the supplier. In addition to confirming the comparability of the measurement technology, this also permanently confirms the secondary test characteristics. The supplier is informed in writing of the result of the counter measurement and receives a copy of his test report with the signature of the responsible person at Feinmetall GmbH.

4.3.3 Marking of the initial samples

The assignment of the individual parts to the data in the initial sample test report must be given. The marking of the initial sample parts must be clear for this purpose.

4.3.4 Test characteristics

The drawing of Feinmetall GmbH in the current drawing revision according to the order text serves as the basis for testing. If we have not emphasized any special features or made any agreements, all features must be taken into account in the sampling process. The measured features are to be listed individually with nominal and actual values, even if free dimensional tolerances are specified. Where several samples of the same type are tested, all measured values of each sample shall be listed. Materials must be verified by means of a material certificate.

Quality management

4.3.5 Further regulations

In agreement with us, the initial sample release can also be carried out by a "cover sheet sampling".

In the case of "cover sheet sampling", only the cover sheet of the initial sample test report is filled in, stating:

- New revision index
- Reference to the valid initial sample test report
- Comment on the reason for the cover sheet sampling

Initial sample testing is not required for standard parts.

An initial sample may only be presented to us if all test characteristics are within the specification. In the case of a detected deviation, the test report can be presented as a measurement report with the request to check a possible adjustment of the drawing.

4.4 Series quality

4.4.1 General information

In order to avoid unnecessary waste through rejects and/or test, we expect the supplier to work according to the principle of a "zero defect strategy". Quality requirements are reliably met by means of suitable preventive measures and meaningful tests in the processes.

The documentation of the tests carried out by the supplier is archived by the supplier and made available to us on request. The verification of manufacture and testing is provided in the respective documentation based on the series or batch number.

4.4.2 Changes after series release

Changes to the manufacturing process (e.g. tool revision, repair or process optimization, production site) must always be processed via the supplier's established change management system. Within the scope of this change procedure, the supplier shall identify and evaluate all effects on the process affected and the necessity of passing on information to Feinmetall GmbH by means of a risk assessment. The necessity of a new initial sampling is agreed between Feinmetall GmbH and the supplier.

4.4.3 Traceability

The supplier undertakes to ensure the traceability of the products they deliver. In the event of a defect being detected, traceability must be possible in such a way that it is possible to limit it to the delivery batch with defective parts / products.

Quality management

4.4.4 Deviations from specifications

If the supplier discovers deviations from the specification on the goods, which they believe may be acceptable to Feinmetall GmbH, there is the possibility of a special release before the goods are dispatched. The supplier can apply for a release of the detected deviations from the specification or drawing with the "Application for deviation tolerance before delivery or specification change". It is advisable to contact the QM department personally before formally submitting the application.

In this form, the supplier documents both the form of the deviation from the specifications as well as the long-term remedial measures to avoid future faults. After receipt of the application, Feinmetall GmbH decides to which extent the parts in question can be accepted within the scope of a special release. The decision will be documented in the form and a release note will be sent to the supplier upon request.

In the case of a release, the approved application for release must be enclosed with the delivery of the affected parts. A definite assignment between the parts delivered differently and the release issued must be ensured.

The responsibility for the part properties ("warranted characteristics") remains with the supplier. In the event of process faults and quality deviations, the causes must be analysed, improvement measures must be introduced and their effectiveness must be checked.

4.4.5 Complaint processing

If Feinmetall GmbH discovers defects or indications of the existence of defects in the delivered product during the incoming goods inspection or further processing, the supplier will be informed of the defect in the form of a notice of defect. The supplier shall then initiate immediate measures to prevent further defective deliveries. If the supplier recognises the necessity for immediate measures at Feinmetall GmbH (e.g. concerning earlier deliveries), they shall inform Feinmetall GmbH immediately.

The result of the subsequent cause analysis and the resulting permanent remedial measures and their effectiveness are communicated to Feinmetall GmbH in the form of an 8D report.

General expectations of the 8D Report:

- The complete 8D report is available within 5 working days after receipt of the defected parts of the Feinmetall GmbH. Should the processing of the complaint take more time, a new date will be arranged within the above-mentioned period.
- In the case of repeated errors, a more detailed analysis was carried out with renewed verification of the effectiveness review carried out.
- After completion, the 8D report generated serves as a summary for the described error case. Therefore, all information is listed in the 8D report without reference to other documents.
- A separate template for processing a complaint can be maintained.

Quality management

4.5 Supplier audits and strategic supplier visits

4.5.1 Planning supplier audits and strategic supplier visits

Feinmetall GmbH draws up an annual plan for conducting supplier audits and strategic supplier visits. When drawing up the plan, aspects such as the strategic importance of the supplier, the result of the supplier assessment, customer requirements and delivery quality are taken into account.

4.5.2 Supplier audit

The goal of the supplier audit is to assess the effectiveness of the supplier's QM system with regard to achieving the required quality of the supplied parts. With the focus on components manufactured for us, the audit is intended to identify possibilities for improving the supplier's QM system and to examine the effectiveness of the QM system for sustainably ensuring the required product quality. The current valid version of DIN EN ISO 9001 serves as a guide.

Supplier audits are determined in the context of an annual planning and coordinated with the respective suppliers at an early stage. However, due to short-term requirements, for example due to complaints, they can also be planned and implemented at short notice.

The result of the supplier audit is made available to the supplier in the form of a written audit report. A distinction is made between notes and findings.

Recommendations serve to improve processes; in the opinion of the auditor, there is no risk with regard to product quality. The decision to which extent these recommendations are taken up is the responsibility of the supplier.

In the event of deviations / subsidiary deviations, a risk has been identified with regard to the quality of purchased parts from Feinmetall GmbH; the supplier is requested to initiate remedial and, if necessary, immediate measures and to notify Feinmetall GmbH of their implementation and effectiveness. For this purpose, Feinmetall GmbH provides a monitoring report, which is completed by the supplier. The dates for the implementation of the respective measures will be determined within the framework of the audit between Feinmetall GmbH and the supplier.

Supplier evaluation system

5. Supplier evaluation system

5.1 General information

The supplier evaluation system is part of the supplier management process at Feinmetall GmbH.

We carry out annual supplier evaluations to determine the performance of our suppliers. The supplier evaluation is very important to us. We therefore expect our suppliers to use the supplier evaluation as an important tool for joint development and continuous improvement, and to derive suitable measures from the evaluations. Together we can maintain and expand our competitiveness and establish and develop long-term cooperation for mutual benefit.

5.2 Implementation of the supplier evaluation

In cooperation with the QM (quality management) department, the purchasing department regularly carries out supplier evaluations according to a defined process.

Suppliers are evaluated according to an ABC classification.

The annual assessment assesses the suppliers and is carried out once for the past calendar year.

Various criteria from the areas of technology, quality, service, delivery reliability / order processing, price and environmental protection (e.g. technical equipment, result audit / SEQ / Q visit, availability, offer processing etc.) are evaluated.

Some of the criteria are objective and backed up by data from our ERP system, while others are subjective assessments by meaningful members of the assessment team.

We evaluate each individual criterion as well as the combined overall result.

The overall performance of the supplier is decisive for the overall result. In addition to the evaluation of the weighted individual criteria, long-term knowledge and special occurrences are also taken into account. Measures that we may demand are determined individually.

If you have any questions about our manual, please contact the purchasing department of Feinmetall GmbH.

Best regards

M. Wössner

Head of purchasing and materials management