

MAGNET-SCHULTZ

Ihre Spezialisten für elektromagnetische Aktorik und Sensorik

SUPLLIER MANUAL

In order to secure further development of our business activities, we depend on successful and reliable suppliers.

This supplier manual describes basic principles and procedures of our quality requirements, collaborations and supplier management. Here, we aim at manufacturing products of the highest quality and at securing and promoting cooperation with our partners.

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1. General

1.1. Background of Supplier Manual

Magnet Schultz (MSM) provides many various branches of industry and markets with its products. With this Supplier Manual, we intend to demonstrate how MSM will act with you as supplier and what our requirements are for you.

1.2. How to become MSM supplier

Our suppliers are qualified and selected according to a corporate standardized process.

1.3. Minimum requirements for new suppliers

- Automotive products and services (production material): The supplier is qualified according to ISO 9001 with a valid certificate from an accredited authority.
- For all other products and services (production material): The supplier is qualified according to ISO 9001 with a valid certificate from an accredited authority. Alternatively, the supplier may be qualified by a release process defined by Magnet-Schultz GmbH &Co. KG
- Communication with all relevant departments (Purchase, R & D, Quality, Logistics) in English or German
- Option to visit/audit production facilities
- Signed Non-Disclosure Agreement before starting business
- Completed questionnaire (supplier self-assessment) before starting business in the production field of production material
- Suppliers are expected to adhere to ethical principles and to prevent bribery and corruption in their company policy in accordance with the MSM Code of Conduct.
- Compliance with the applicable legal and official requirements of the exporting country, the importing country and the country of destination specified by the customer – if provided to the supplier.
- Business must be executed in compliance with MSM supplier manual
- MSM expects a disclosure obligation regarding Conflict Minerals and regulations of harmful substances (REACH, RoHS...) from their suppliers.
- The supplier has and maintains a system (e.g. ISO 27001) against Cyber attacks, phishing, ransomware (blackmail software) etc.





1.4. Supplier qualification process consists of three parts:

- Part one controls whether or not minimum requirements are met.
- Part two contains the qualification for various branches.
- Part three is the product-specific qualification and concentrates on the supplier's ability to produce a certain product or to provide services.

In order to get to know you we expect you to fill out a supplier self-assessment, a nondisclosure agreement and a company presentation.

Please download these documents from our **Homepage** .

1.5. Non-Disclosure Agreement

Prior to the first contact, a non-disclosure agreement must be concluded (particularly for information exchange).

1.6. Quality Management System

Requirements are defined in our document "supplier self-assessment"; please also see $\underline{1.4}$ Minimum requirements.

1.7. Quality Assurance Agreement (QSV)

Prior to business, we conclude a Quality Assurance Agreement (QSV) with our suppliers from the Automotive and Aerospace sector. For all other suppliers, a situational decision on a QSV requirement will be taken.

1.8. Conflict Minerals

Regarding the topic of Conflict Minerals, we kindly ask that you obtain the corresponding information via the following link:

http://www.eiccoalition.org/initiatives/conflict-free-sourcing-initiative/

We act on the assumption that all products delivered to MSM are free of any Conflict Minerals.

1.9. Pollutant Guidelines / Regulations

Furthermore, we expect our suppliers to be in line with current guidelines and regulations (ELV; EU RoHS; China RoHS; REACH; WEEE), with GADSL as well as the laws and rules. Modifications must be reported without any delay.





1.10. EDI (Electronic Data Interchange)

MSM aims at creating an EDI connection with suppliers. MSM uses an SAP system. For further information, please address to your responsible procurement manager.

1.11. Documents and Retention Periods

The supplier must secure that MSM receives order-bound quality records upon request. In the field of quality records, original documents must not be amended. If business is terminated before maturity, all quality records must be submitted to MSM upon request. After the retention period (normally 15 years), MSM must approve of the records' deletion.

1.12. Work Standards

Essential requirements on products received by MSM externally are stipulated in suitable company standards. There is a reference to the corresponding company standard on the drawing and the relevant order documents. Company standards are maintained indicating the revision status. As supplier, you are personally responsible to obtain the currently valid MSM company standard.

1.13. Valid Regulations and Standards

We expect you, as supplier, that you personally obtain the relevant regulations and standards in the currently valid version.





2. Advance Quality Planning

2.1. Project Plan

We expect project planning to be agreed upon with MSM. It must be submitted upon request. This project planning must contain the results of product and process planning.

MSM differentiates between A, B, C and D samples. Depending on the project, you will receive an order with a reference to the applicable sample status with a corresponding checklist which specifies the requirements for the paperwork regarding documentation (requirement from A to D rising). These must be included in the delivery of each initial sample. Please observe that production deliveries may only be sent after release of initial sample test report.

2.2. Specific Characteristics

Basically, all product and process characteristics are important and must be adhered to. For specific characteristics, additional regulations regarding verification, validation and record keeping are valid.

Handling specific characteristics, MSM follows the recommendations and standards of VDA volume "Specific Characteristics" and customer requirements. On MSM production drawings, specific characteristics are marked according to MSM company standard (W0133-03).

2.3. Process FMEA

In line with MSM company standard, MSM requires a process FMEA to be created by suppliers for products with specific characteristics. According to MSM company standard, MSM must be granted the right of inspection of these documents after agreement with the supplier. MSM will submit the error severity chart.

2.4. Certificate of Proficiency and SPC

MSM is committed to stable and continuously proficient processes. This, in turn, is also expected from MSM suppliers. Certificates of Proficiency (e.g. measuring systems analysis, machine and process capability control) need to be issued within the framework of MSM company standard/drawings. A suitable procedure for process control is the statistical process control (SPC). These regulations explicitly also apply to deliveries within the framework of sample taking.





2.5. Production Process and Product Release

2.5.1. General

The production process and product release procedure (PPF) is to demonstrate that the demands agreed upon with the customer match present drawings and specifications.

Material and parts subject to initial sample inspection require a release in line with the stipulations of VDA volume 2, ordered with the following documents:

Checklist (here, necessary documents and certificates to be provided by the supplier are marked) and the optional **drawing** (stamp drawing) on which the characteristics to be tested by MSM have been marked and the **original drawing** of the relevant revision status.

Serial parts must only be delivered after release of MSM PPF report. You will receive the written release from the responsible procurement manager.

A decision with status "partially ok" and/or "rejected" calls for immediate contact of the supplier with the purchasing agent as well as inducing adequate corrective measurements, taking into account a binding schedule. In case of an active order placed by MSM, the release in the form of a design deviation (BAW) for status "partially ok" must be collected from MSM.

2.5.2. Material Data Recording System (IMDS)

If an entry into the Material Data Recording System IMDS is necessary (www.mdsystem.com), MSM informs thereof. IMDS company ID of MSM is 29134.





3. Production delivery

3.1. Order Procedure

Usually, you will receive the order as an e-mail generated by our SAP system. The e-mail is sent to the person you name. We expect an immediate order acknowledgement, ideally in electronic form (no paper). Please also see point 1.11..

3.2. Incoming materials Inspection at MSM

As a general rule, incoming materials inspection is restricted to the following:

- Damage during transport as well as obvious flaws
- Identity
- Number of pieces
- Certificate of proficiency for specific characteristics as well as acceptance test certificates, if required.
- If you supply goods with an expiration date (MHD), please indicate on the smallest packaging unit.

3.3. Delivery with Manufacturer's Certificates/Reports

If requested on the MSM drawing or order, a corresponding certificate must be enclosed or ready to be communicated by the supplier.

3.4. Goods provided by MSM

Measures for goods provided by MSM that do not match MSM requirements need to be discussed with MSM before processing.

3.5. Design Deviations for Serial Production

If products do not correspond to the valid MSM specifications, an application for design deviation may be filed. Here, a specific form needs to be used and transferred to our purchase department. If the application is approved, the relevant products need to be marked and delivered to MSM. The release will be submitted by the responsible purchasing agent.

3.6. Project Change Management

3.6.1. Amendment of Revision Status

Documents relevant for the order such as drawings, company standards and production material in orders are maintained indicating a revision status. If there are amendments, the revision status is increased. Furthermore, for products subject to initial sample testing (marked on the drawing) a new sample-taking is conducted, updating the revision status.





3.6.2. Amendments of Product or Process and/or Organization

The supplier must have a documented process regarding management and implementation of amendments.

An "amendment" refers to all situations regarding drawings, production processes and flows, sub-suppliers, materials or supply parts for products as well as the execution of re-work. Furthermore, when relocating production sites, fundamental organizational changes, changes for systems for product control or other quality assurance measures. In case of amendments, the supplier must inform MSM in written form and in advance within an adequate period of time.

3.7. Competence and Awareness Raising

The supplier must secure that personnel are competent due to adequate training, courses or experience. Furthermore, the supplier must guarantee that personnel are aware of the following aspects:

- Their contribution to product and service conformity
- Their contribution to product safety
- The importance of ethical behaviour





4. Suppliers for the Aerospace segment

For suppliers providing their products to our Aerospace segment, the following additional regulations are valid:

4.1. Right of Access

Commissioned MSM employees as well as our customers and regulatory authorities must have a right of access at any adequate time, e.g. in case of audits, quality problems or cases of damage, in order to carry out measures on products and processes that are part of the contract.

4.2. Device Class and Component Classification

Aerospace devices are classified into one of three applicable safety classes. Please observe MSM company standard W3100-03.

In addition, components and raw materials are classified in one of six different component classifications according to MSM company standard W3100-03.

The device class and component classification is indicated on the MSM drawing (on the form device class/component classification) and/or on the order documents.

4.3. Retraceability

Product retraceability is determined on the basis of the classification into device classes.

SN retraceability with serial number

For products with the requirement SN, retraceability is effected by the serial number clearly applied to the products.

CR1 - Batch retraceability for device class 1

For orders with the requirement CR1, only products of one batch are to be delivered for each order.

CR2 - Batch retraceablity for device class 2, with a high level of operational demand

For orders with requirement CR2, only products of one batch are to be delivered for each order.

FIFO – Retraceability for device 2 and 3

For orders with requirement FIFO, only products of maximal two batches are to be delivered for each order.

Further explanation on the topic "retraceability" can be obtained from the MSM company standard W3100-03.





4.4. Manufacturing

For all manufacturing procedures, the necessary documents must be available (drawings, process drawings, work plans, test plans etc.).

MSM reserves the right to assess procedures by means of test samples and/or specific supplier audits.

Electrochemical procedures (ECM), electroerosive procedures (EDM, wire vertical eroding) are generally not permitted, unless explicitly required by the drawing. Laser beam cuts are subject to MSM admission.

Re-working is only possible after written MSM consent.

4.5. Sub-suppliers

If production steps are handed over from the supplier to a sub-supplier or if the latter will be substituted, it must be approved in written form by MSM (not applicable for sub-suppliers of raw material, half-finished products or standard parts).

For secured production procedures (as described by company standard W3100-03), the employment of sub-suppliers is generally not permitted.

4.6. Qualification for Specific Processes

Specific processes are all processes of which the results cannot be verified by subsequent monitoring or measuring, such as all heat and surface treatments, welding processes, brazing, processing tensile steel, non-destructive testing (NDT testing)..

If specific processes are conducted, a written approval by means of an MSM supplier audit or an NADCAP approval is necessary.

4.7. First Article Inspection FAI

Within the framework of its activities regarding contract review, the supplier must determine the requirement needed for the execution of FAIs.

First article inspection has to be conducted in line with the requirements indicated on the drawing and/or the order.

If production is ceased for more than 24 months, FAI must be repeated.

For class 1 parts, MSM must release the delivery of the products by written consent. They may be released, e.g. by an FAI report submitted prior to delivery or by control of FAI at the supplier's premises.





5. Supplier Evaluation and Complaint Handling

5.1. Supplier Evaluation at MSM

Supplier assessments are conducted by MSM annually, in accordance with our own system. Suppliers will receive the results of their assessment from our purchase department. These results directly influence the assignment of projects.

B and C suppliers are obliged to respond in written form, indicating appropriate improvement measures. In case of deterioration in comparison to the past year's result, we principally require a statement.

5.2. Complaint Handling

If there are complaints about consignments, these must be responded to by means of an 8D report.

Suppliers receive a quality message with a corresponding number; this number must be indicated with each correspondence. Immediate measures (3D) must be reported within two working days. The final 8D report must be available within 10 days. If this is not possible within the period of time, an interim report must be submitted until the determined date, indicating the scheduled remedial actions as well as the completion date.

Methods like Ishikawa, 5-Why must be applied and submitted within the framework of 8D for analyses of causes.

Costs arising in connection with complaint handling will charged to your account.





Forms and Literature

BAW: Application for Design Deviation

Terms of Purchase EN 9100 / EN 9102

FAI: First Article Inspection Non-disclosure agreement

IATF 16949 ISO 9001

Supplier Self-Assessment (LiSA)

PPAP - Production Part Approval Process

Quality Assurance Agreement

VDA Volume 2: Production process and product release (PPF)

VDA Volume 6.3: Process audit

VDA Product creation - process description: Specific characteristics (BM)

Expressions and abbreviations

Components: single parts which are needed for producing MSM products

BAW: Design Deviation

EDI: Electronic Data Interchange

Device: MSM Product

IMDS: International Data Material System

LiSA: Supplier Self-Assessment MSC: Magnet-Schultz (Suzhou)

MSM: Magnet Schultz GmbH & Co. KG Memmingen

PPF: Production Process and Product Release

QM: Quality Report

QS department: Quality Assurance Department

QSV: Quality Assurance Agreement QVP: Advance Quality Planning

REACH: Registration Evaluation Authorization of Chemicals

RoHS: Restriction of Hazardous Substances