

Guideline

Requirements for supply parts

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P6-GL-FG-Guideline Requirements for supply parts

1. Purpose

These guidelines specify the minimum requirements for the Supplier's management system and govern rights and duties in regard to the products to be supplied.

In order to take account of the particular requirements of individual products the Supplier shall undertake to conform particularly but not limited to the quality assurance requirements (Appendix B) and logistics requirements (Appendix C) for custom components supplementary to these guidelines.

2. Scope of application

These guidelines shall apply to all manufacturing materials semi-finished products, finished components, auxiliary and operating materials) supplied to FORSCHNER and respective suppliers.

3. Requirements for the QM system of the Supplier

Suppliers must hold certification conforming to at least ISO 9001. The management system must be further developed according to the requirements according to the currently applicable standard of the automotive industry.

The SUPPLIER shall be obliged to subject the products manufactured for FORSCHNER to continuous monitoring, optimisation and improvement as part of a continuous process of improvement.

4. Scientific and Technical State-of-the-art

According to the requirements of the Product Liability Act, the Supplier shall ensure that its deliveries and services correspond to the scientific and technical state-of-the art.

5. Requirement to initial samples and serial deliveries

	Custom components (Components made to Forscher specifications)	Standard products (catalogue components, standard components, cables, lines, enamelled wire)	Finishing (surfaces, hardness)	Raw materials (granulate, rods)
Initial sampling	PPF LVL2 or LVL3 depending on agreement	PPF LVL1	PPF LVL1	PPF LVL0
Serial deliveries (requirements)	IMDS, By agreement: Test certificate	IMDS, By agreement: Test certificate	IMDS, Layer thickness / hardness measurement log	Acceptance test certificate 3.1, IMDS

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for each delivery)	Components with A-surface: Layer thickness log - hardened components Hardness log			
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6. Obligation of Disclosure and Triggers for the PPA Process

All modifications in the production process and product must be notified by the Supplier to Forschner for the PPA Process, triggers being as listed below;

- New parts
- Product modification- including modifications of material as well (approved by Development)
- Production relocation
- Production process modification (also includes modifications to the logistical value chain)
- Test process modification
- Production stoppage for more than 12 months
- Use of new, modified or replacement tools (not applicable to metal cutting tools)

Within the scope of sampling of new and of modified parts, the supplier is obliged to configure the material data sheets in IMDS. The ID-Number for the IMDS data record shall be specified in the initial sample cover sheet and the corresponding "Materials data sheet /IMDS" annex.

7. Requirements for initial sampling

If a PPA Process trigger caused by the Supplier arises, the Supplier shall provide notification of this trigger at least six months prior to planned implementation. In justified, exceptional cases, deviating regulations will be agreed with Forschner.

Forschner shall specify a sampling date to the Supplier. The number of sample parts must be agreed upon with the Forschner contact person for the PPA Process and the sample parts must be delivered free of charge.

Product and process characteristics for which capability studies shall be performed shall be coordinated with Forschner.

Step	Requirement	Submission level	
		Standard	Reduced
1	Initial sampling test release (ISTR) cover sheet according to VDA 2 or Part Submission Warrant (PSW) according to PPAP. (upon agreement)	X	(X)
2	Test results (dimension, function, reliability) of 5 components or 3 components per nest for mould-linked components plus drawing with numbered comments related to the test results.	X	
3	Pattern (as a rule 5 measured components or 3 measured components per nest)	X	
4	Documentation: Drawing and if necessary further specifications	X	X

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5	Materials certificate(s) pursuant to EN 10204: 3.1, layer thickness log, hardness measurement log	X	X
6	Design and process FMEA: Pareto analysis RPZ	(X)	
7	Production control plan pursuant to APQP	X	
8	Process flow chart	X	
9	Test equipment capability (gage R & R) pursuant to AIAG MSA (as a rule process 2) and list of test equipment	X	
10	Machines / tools capability (short-term capability) C_m , C_{mk} values for special features (B) min. 50 components	X	
11	Material declaration in IMDS	X	X
12	Preliminary processing capability p_p , p_{pk} values for special features (B) min. 25 spot checks (with $n = 5$ components) / minimal space of time 1h	(X)	
13	Emergency Concept (Production Equipment / Logistics)	X	X
14	Compliance with legal requirements	X	

Unless otherwise agreed, the submission level 'reduced' shall apply to standard products (catalogue goods, standard components) and raw materials. Unless otherwise agreed, the submission level 'standard' shall apply to all other production materials.

X= to be submitted with the sampling –**(X)** = to be submitted by agreement

8. Acceptance by Forschner

- The Supplier shall receive an acceptance if the initial sampling indicates that all requirements are within the specification and the above-mentioned requirements pursuant to Chapter 2 have been met.
- Should no acceptance be issued, the rejected measurements shall be re-sampled and/or the missing documents submitted. Any re-sampling due to a deviation in measurements / function must be accompanied by a new report with cover sheet in which the rejected features are re-presented.
- Acceptance by Forschner shall not exempt the Supplier from responsibility for the quality of his products; i.e. Conformity with all specifications (e.g. drawings, materials data, prohibited substances etc.).
- If necessary, Forschner shall carry out audits prior to and following acceptance after consultation with the Supplier. The acceptance shall continue to be valid only insofar as any requirements resulting from the process - audit have been met.

9. Zero defect strategy

Within these guidelines the SUPPLIER shall be obliged to conform to the zero-defect-principle / objective. This means that he must ensure that all his processes and products meet the zero PPM requirements. The zero PPM requirement shall apply as of the date of the approval of the initial sampling.

Forschner reserves the right to re-imburse and or invoice the cost resulting from claims to the supplier. Furthermore Forschner has the right to invoice 50,-€ per claim to the supplier.

10. Documentation

- Quality records shall be maintained by the Supplier in a way they can be evaluated, and which facilitates an unequivocal assignment of the respective product, production site and date of production.
- Quality records shall always be stored in a manner which ensures that they are secure and easy to find. They must be made accessible to FORSCHNER at short notice. Evidence shall be subject to a statutory duty of retention of at least 15 years. Components or features for which the documentation is subject to special archiving (DmbA) and which are labelled to this effect must be handled pursuant to VDA 1.

11. Machine and processing capability

- The SUPPLIER shall be responsible for installing an effective system for monitoring processing and production quality. He shall therefore be obliged to carry out long-term evaluation of his production processes based on the specifications. Processing capability inspections shall be carried out for all critical and important features using variable data on the basis of VDA Volume 4.
- The SUPPLIER must use appropriate procedures (e.g. statistical process regulation or manual control-card technology) to provide records and evidence throughout the entire production time of the processing capability value of $Cpk > 1.67$ for all critical features (BMS, BMZ) noted on the drawing. Evidence of a processing capability value of $Cpk > 1.33$ in serial production is required for important features (BMF, BMP). Should the SUPPLIER not achieve this value, he must protect his deliveries 100% using appropriate testing methods must use all means in his power to optimise the production process in order to attain the required processing capability.
- An annual production audit for requalification shall be carried out for features which are not monitored by SPC. The SUPPLIER shall select suitable means or methods. The results shall be recorded and submitted to FORSCHNER upon request.

12. Failure mode and effects analysis (FMEA)

The Supplier shall create and maintain a Design and Process FMEA for the system and/or component (component part) which is to be developed/supplied in a timely manner using a suitable system. The procedure thereby must comply with the AIAG/VDA FMEA manual for Design FMEA, Process FMEA, FMEA amendment to the Monitoring & System Response of engine friction torque control. The Supplier is solely responsible for his FMEA scope.

If necessary, the assessment of the error severity level of the error consequences ("B") must be agreed upon between the supplier and Forschner.

The documentation of the method and the evidence of the execution of the FMEA incl. documents shall be provided to FORSCHNER for inspection upon request.

All documents associated with this procedure must be stored by the Supplier in accordance with VDA Volume 1.

13. Auditing

FORSCHNER or a client of FORSCHNER shall, after agreeing a suitable date, be entitled to inspect the quality assurance measures undertaken by the SUPPLIER, to evaluate them and to require his cooperation particularly in regard to system, process and product.

FORSCHNER reserves the right to carry out a product audit or processing audit on the SUPPLIER in special cases such as continual complaints.

13.1 Requirements for VDA 6.3 auditors

The audits in the supply chain must be carried out by certified VDA 6.3 auditors. Evidence of the "certified process auditor" is provided by the VDA auditor card with inclusion of the auditor in the VDA QMC database.

14. Packaging

Where packaging has not been specified or given by FORSCHNER, the Supplier shall be responsible for selecting appropriate packaging, which keeps specification and function of material.

- **Procurement of packaging**

The Supplier shall be responsible for procuring the packaging insofar as this has not been provided by FORSCHNER.

- **Provided packaging**

The Supplier shall be responsible for packaging the goods in accordance with Forscher requirements. The Supplier shall be responsible for requesting the packaging from Forscher (dispatch department). The Supplier shall maintain an inventory of packaging items supplied. The Supplier shall report any damaged items to Forscher.

- **Handling and packaging rules**

- **General**

The Supplier shall be responsible for conforming to the following rules:

- The component must not be damaged or scratched during handling.
- After surface finishing, components with sensitive surfaces must only be handled with gloved hands.
- The number of components per packaging unit should be selected to ensure that components are not distorted or damaged in any way during packaging and transportation.
- Only clean packaging shall be used which does not impair the components by soiling them.
- The components must not soil the packaging.
- The packaging unit must be closed with a suitable lid so that no components can fall out.
- Every box of the packaging unit has to be marked with a label (partial charge/tracability)

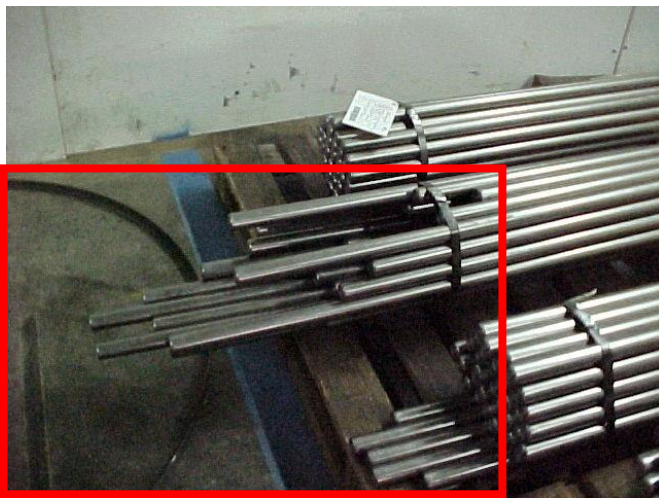
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- The outer carton (outer packaging) on the packaging unit shall be selected so that the individual packaging units are neither damaged nor soiled during transportation and so that they cannot come open.
- The Supplier shall undertake to ensure that his sub-suppliers take over from him and comply with the obligations in these guidelines.

- **Bar stock (raw materials)**

Bar stock must be secured in at least 3 places with fixed steel bands in order to prevent the bundle coming apart or slipping (see photo).

Bar stock must not be delivered in wooden boxes, plastic containers or similar containers -



inadmissible! Not allowed

- **Labelling the packaging and including the delivery note**

The outer carton / packaging must be marked with the following label-information (acc. VDA4902/4) as a minimum:

- **Number of delivery note**
- **FORSCHNER partnumber**
- **quantity**
- **box number**
- **supplier number**
- **identification code of box**
- **Charge number / batch code**

Labelling must be clear and assignable and according VDA4902/4.

The drawing index must be given on every position on the delivery note.

- **Contact**

The relevant buyer or the purchasing department is responsible for dealing with enquiries relating to packaging.

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- **EDI**

All deliveries must be declared before shipment by EDI to the designated Forscher location.

15. Environment, restricted or banned substances (ELV, IMDS, ROHS, etc.)

- **Laws, directives and responsibility of the Supplier**

Compliance with all laws and EU directives in their currently applicable form is an absolute requirement for all supply parts supplied to the Forscher Group. Forscher manufactures components and cable sets for use in the automotive industry and electrical and electronic equipment.

On top Eugen Forscher GmbH increases focus on sustainable supply chains. Please review our sustainability guideline on webpage www.forschner.com in download area.

The following laws, directives and supplementary guidelines in their currently applicable version particularly apply, therefore, to all vendor components supplied to Forscher, as their subsequent application cannot be clearly defined beforehand insofar as no written dispensation which has been discussed with Forscher exists:

- 2000/53/EC (Directive on end-of-life vehicles): ELV
- Directive 2011/65/EU (RoHS 2) (Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten): ROHS –Restriction of the use of certain hazardous substances in electrical and electronic equipment. For German implementation see electrical apparatus law (ElektroG).
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Law for protection against hazardous substances (ChemG) and chemical prohibition order (ChemverbotsV)
- California Proposition 65
- Directive (EU) 2018/851 & SCIP database of ECHA (European Chemical Agency)
- Conflict minerals (EU): REGULATION (EU) 2017/821 establishing supply chain due diligence obligations for Union importers of tin, tantalum, tungsten, their minerals and gold from conflict and high-risk areas.
- Conflict Minerals (U.S. Market): Dodd-Frank Act, Section 1502

Compliance with the requirements of these directives shall not exempt the Supplier or user from the obligation to comply with applicable laws and regulations. The Supplier shall be obliged personally to keep up to date with current legislation and to ensure that the laws are complied with.

If a supply part or product contains banned substances it must not be delivered to Forscher. If a vendor component or product contains declarable substances these must be submitted with the offer and declared on the initial sampling.

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- **IMDS (International Material Data System)**

Details of all substances contained in FORSCHNER supply parts shall be provided by the Supplier in material data sheets in the IMDS (<http://www.mdsystem.com>), insofar as no exemption which has been discussed with Forscher exists. The contact address for IMDS enquiries within the Forscher Group is: imds@forschner.de.

The Forscher IMDS ID number is: **10 46 4**

- **GADSL**

The automotive manufacturers have collated a list of prohibited, undesirable and declarable substances in the GADSL (Global Automotive Declarable Substance List). The Supplier shall note the requirements in that list and take the responsibility for complying with them.

16. Supplier evaluation –suppliers of serial components

The achievement of FORSCHNER's quality objectives is influenced to a great extent by the supply performance of its SUPPLIERS. Therefore Forscher carries out an annual supplier evaluation in accordance with the following criteria:

- Goods receipt quality
- PPM
- Reliability of deliveries
- Service (soft facts):
 - Communication, availability, Reaction to changes to orders at short-notice (evaluated by the scheduling department in UH)
 - Price, Reaction time/ flexibility, dependability, Communication (evaluated by the purchasing department in Spaichingen)

All suppliers who have been evaluated receive a written report from Forscher, C-ratings request automatically actions from the supplier.

17. Download Center on Forscher web-site

All purchasing documents, general business conditions/general terms of purchase can be viewed on the [Info- / Download-Center \(forschner.com\)](http://forschner.com). The documents provided there must be reviewed by the Supplier on a regular basis for any changes.

18. Acceptance

Place, date:

Name / function (supplier)

19. Version info

Nr.:	Gültig ab:	geändert von:	Freigabe:	Stand
RL-FG-001a-eng	10.07.2015	Haffa	Geiger	10
	23.05.2018	Handeck	Handeck	11
	07.05.2019	Damer	Handeck	12
P6-GL-FG	06.09.2021	Handeck	Handeck	13
	16.05.2021	Zelch	Belser	14
Adding Marc Eckert	10.10.2023	Haffa	Geiger	15
Addition of point 10.1	22.03.2024	Belser	Handeck	16
Addition of point 4,6,12,17	10.09.2024	Özcan	Handeck	17