



	Prepared by:	Checked by:	Released by:
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Date			
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Note:

- The supplier must ensure that this guideline is known and available to all units concerned.
- Publication of a new revision status invalidates the previous status which must be replaced at the appropriate places.

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1. Purpose

This quality assurance guideline is valid for suppliers of production material. It forms part of the general purchasing conditions agreed between the purchaser and the supplier.

This quality assurance guideline describes the mandatory specifications that apply between L'Orange and its suppliers.

2. Supplier's Quality Management System

Suppliers commit to implementing and maintaining a certified quality management system in compliance with the ISO 9001 standard as a minimum in order to be able to ensure the required quality of their products and services.

Commitment to the zero-defect target and a continuous improvement process for products/services must be demonstrated to L'Orange.

3. Audit

The supplier shall enable L'Orange to inspect its planning, production and quality assurance processes in use. This inspection will be made by way of previously announced process audits on the basis of the VDA 6.3 standard.

The supplier shall ensure that L'Orange has free access during the audit to those areas that are relevant for L'Orange (e.g. Engineering, Planning, Production, Stocks, Measurement, ...).

The supplier shall enable comprehensive inspection of quality-relevant documents.

L'Orange will inform the supplier in writing about the results of the audit. If L'Orange should stipulate any actions resulting from the audit, the supplier is requested to consider and implement the actions as necessary in due time.

4. Information and Documentation

If the supplier should notice that any quality criteria, delivery quantities or deadlines are not complied with, L'Orange shall be fully informed without delay. If the supplier should detect any non-conformity after shipment, such non-conformity shall also be communicated to L'Orange.

L'Orange shall also be informed in case of any

- change to production procedures, workflows, materials
- change to test procedures or test equipment
- relocation of production sites
- relocation of production equipment within a site
- change of subcontractors

in order to be able to determine whether such changes/relocations have a detrimental effect on the product.

5. Stipulation on Product and Process

The supplier shall only deliver products that have the agreed properties to the full extent. The supplier shall verify that the documents provided by L'Orange are free from errors, complete and plausible prior to accepting the order.

If this should not be the case, the supplier shall respond by informing L'Orange in writing before accepting the order.

6. Planning of Products and Processes, Contract Review

In the course of the contract review, the supplier shall produce a feasibility study (for a form, refer to section 15: Annexes) and shall submit it to L'Orange along with the offer.

The supplier shall plan the processes required for production. This includes, for example, the preparation of work plans, equipment plans or test plans. The supplier shall ensure the suitability of production facilities and production equipment. The documented proof shall be provided by the supplier by regular inspections.

Planning shall also cover capacities, any necessary qualifications of employees, test processes, logistic processes and products.

7. Product and Process Approval (PPF)

The production process and product approval shall be conducted in accordance with the production process and product approval procedure (PPF) of the current VDA Volume 2, submittal level 3, or in accordance with the production part approval process of QS 9000 (PPAP). In contrast with the PPF according to VDA Volume 2, a new PPF / PPAP shall only be required after discontinuation of production of 24 months. An entry into the IMDS database is not required until further notice.

As a matter of principle, all characteristics created or influenced in the production process shall be verified according to drawing and 3D model. If the inspection requires special test equipment unavailable to the supplier/contractor, an external test center must be commissioned. The supplier/contractor is responsible for this inspection. A standardized inspection procedure and/or standardized measuring points on the part shall be agreed between the supplier/contractor and L'Orange, if necessary. The inspection results shall be documented by way of inspection reports as specified in VDA 2 or QS 9000 PPAP. *(For a template, refer to: www.lorange.com, PURCHASING, DOWNLOADS.)*

Dimensioned parts shall be clearly numbered consecutively in order to safeguard the correlation of the parts with the measurement results. The method of marking shall be coordinated with L'Orange if necessary.

All characteristics shall be numbered in the drawing and entered into the inspection report along with the numbers. The tick columns (i.O. = OK / n.i.O. = not OK) shall also be filled in.

Unless otherwise agreed, the supplier shall submit or substantiate existence of the following documents along with the sample based on VDA Volume 2, submission level 3:

- Cover sheet
- Inspection/test results
- Drawing (all characteristics numbered)
- Risk analysis, e.g. FMEA or L'Orange form
- Process flow chart (production steps including any external work steps)
- Inspection and test plan (test steps, testing frequency and test equipment used)
- Evidence of material and heat treatments
- Acceptance record for supplements / devices, if applicable
- Photographic documentation of the casting pattern, if applicable
- Design and development approvals, acceptance records, if applicable

For similar parts, an overall FMEA for processes or part families is sufficient. For production, a process FMEA shall be created and in case of development for L'Orange, an additional design FMEA shall be created. Sending of the FMEA is not desired, however, its substantiation in the initial sample cover sheet. Any classification society approvals required shall be substantiated.

Series production shall not be initiated by the supplier before receiving written approval of the sampling process by L'Orange.

Exceptions:

- Standard and catalog parts are exempted from the sampling procedure.
- For very small amounts and spare parts, the scope of sampling shall be agreed in writing with the acceptance department and noted down on the cover sheet.
- For shipments from the stock, a cover sheet and a related note in the observations field shall be sufficient unless there were any complaints in the previous shipment.

8. Production

In the event of any quality or process deviations during production, the supplier shall analyze these in order to detect the root causes of the defects. Measures for improvement shall be initiated and their efficiency shall be verified.

9. Marking

Marking of products shall be as agreed with L'Orange. If individual marking is not agreed, it is necessary to ensure that unambiguous identification is possible during transport and storage.

10. Traceability

The supplier shall ensure the traceability of products and the containment of any defective parts/batches.

11. Exceptional Release

If the supplier should detect a minor non-conformity with specifications, an exceptional release issued by L'Orange can be applied for in writing. L'Orange sends exceptional releases to suppliers in writing, if any. *(For an application form, refer to: www.lorange.com/PURCHASING_DOWNLOADS.)*

L'Orange reserves the right to invoice the effort involved.

12. Delivery

The supplier shall deliver the products to L'Orange in suitable transport packaging. The transport packaging provides complete protection during transport and protection from corrosion, contamination and damage.

13. Complaints

If L'Orange should detect any deviation from the specifications when receiving the goods or during subsequent production steps, a notification of defect in 8D format will be sent to the supplier immediately. The supplier shall be obliged to perform a defect analysis immediately and communicate the results to L'Orange. Unusable products will be promptly returned to the supplier.

The 8D report completely filled in shall be returned by the supplier, indicating the actions envisaged for eliminating and preventing the defects.

If supply difficulties should arise because of complaints, the supplier undertakes to remedy the situation by taking suitable immediate action at its own charge. Such actions include, for example, replacement deliveries, extra shifts, sorting activities, special transport arrangements, etc.

14. Environmental Protection / Health & Safety


The supplier commits to complying with all legal regulations for environmental protection. The aim is to reduce the impact of industry on human beings and the environment to a minimum.

L'Orange recommends obtaining environmental certification according to DIN ISO 14001.

L'Orange reserves the right to conduct environmental audits with suppliers not maintaining an environmental management system.

Feasibility Study Form

(For a template, refer to: www.lorange.com, PURCHASING, DOWNLOADS.)



 YOUR POWERFUL INJECTION

Feasibility Study for Production under Series Production Conditions

Item no.: Revision index:

Description: Date:

Supplier: Supplier no.:

If there are no data available from a planned series production at this stage of planning, please refer to experience data from similar processes/parts.

	Yes	No
1. Is the product sufficiently defined to permit a feasibility study? If "no", please explain in detail.	<input type="checkbox"/>	<input type="checkbox"/>
2. Can all requirements be met (e.g. drawing, requirements specification, standards, specifications, tests)? If "no", which ones?	<input type="checkbox"/>	<input type="checkbox"/>
3. Have the key characteristics for the part specified above been identified according to the documentation?	<input type="checkbox"/>	<input type="checkbox"/>
4. Can process capability be expected for each key characteristic and/or is 100% inspection planned? If "no", please explain in detail.	<input type="checkbox"/>	<input type="checkbox"/>
5. Is statistical process control used for similar products? Are the processes mastered and feasible?	<input type="checkbox"/>	<input type="checkbox"/>
6. Are any outsourced processes planned? If "yes", which ones?	<input type="checkbox"/>	<input type="checkbox"/>
7. Can you execute the order with the currently existing production resources? If "no", please explain in detail.	<input type="checkbox"/>	<input type="checkbox"/>
8. Do you see any opportunities for cost reduction and/or quality improvement regarding, for example, characteristics, materials, processes, material handling? If "yes", which ones?	<input type="checkbox"/>	<input type="checkbox"/>
9. Indicate the maximum reject rate you expect in the initial year	1. Internal	<input type="text"/>
	2. External	<input type="text"/>

ppm ¹

¹ ppm = parts per million (number of defective parts out of 1 million parts produced, 10,000 ppm = 1%)

The feasibility of the component specified is hereby confirmed:

Date Responsible / Department / Phone ext. / E-mail Signature

