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1 Objective of the initial sample inspection

With the initial sample inspection and the documentation of the results in the initial sample inspection report, the supplier confirms that the requirements and specifications set by PVL have been fully understood and that they can be met under series conditions.

2 Reason for an initial sample inspection

An initial article inspection is required for:

- delivery of a new part or assembly,
- drawing and specification changes,
- relocation of production,
- use of new or modified, renewed or refurbished tools,
- new subcontractors,
- new or modified manufacturing processes and materials.

3 Terms

Initial samples are products and materials that are manufactured under series conditions exclusively and completely with the equipment, machines, tools and parameters intended for series production and have been tested with the test equipment intended for series products

Other samples are products and materials that have been manufactured in accordance with the development drawings, specifications and specifications, but not under complete serial conditions. For the purposes of this Directive, other samples include, without limitation, the following products:

- Prototypes
- development patterns,
- visual patterns, and
- Hand samples

Other samples may **not** be presented as part of the initial sample inspection and do not replace initial samples.

4 Documents and initial sample inspection report (ISIR)

4.1 General

Parts and assemblies according to PVL specifications and/or drawings are subject to the initial sample report.

The supplier is required to compare the existing drawing status with the drawing status listed in the purchase order and to inform PVL (Development Department) in the event of

deviations. Only drawings with the note "Release of initial samples" may be used for the initial sample inspection.

The initial sample test report must be in either in the PVL standard form or in accordance with the PPF documentation according to VDA Volume 2 (current version).

Applicable documents can be found on the last page of the Supplier Policy.

If these or additional documents are required, they can be requested from PVL (Purchasing Department).

The initial sample inspection report must be provided in German or English.

4.2 Requirements

The supplier is obliged to demonstrably meet these requirements unless waived in writing by both PVL and supplier. If requirements from **Table 1** cannot be fulfilled in full or in part, the supplier must consult with PVL (Purchasing and/or Quality Management) to determine if a waiver is allowed.

Table 1

No.	Demand
1	Signed and stamped drawing/specification
2	EMPB cover sheet
3	Pattern
4	Geometry and dimensional inspection
5	Verification of the mechanical/physical/chemical properties listed on the drawing - Surface treatment
6	Testing
7	Process Flow Chart
8	Test plan/test coverage
9	Testing & Testing Measuring devices
10	Tool overview
11	Compliance with legal requirements
12	Other

Note – Assessment of the submitted test reports

- The test reports are only checked by PVL for completeness and for the indication of deviations from the specification or planned series production.
- Deviations from the specification and the planned series production must therefore be expressly and clearly noted on the cover sheet.
- It is hereby agreed that PVL is not obliged to carry out substantive reviews or cross-checks.

- The performance of the tests set out in the specification does not release the supplier from its obligation to deliver defect-free contractual items and to comply with the zero-defect principle.

4.3 Explanations of Requirements from Table 1

1 Signed and stamped PVL drawing/specification

The drawing available for initial sampling must be stamped with a company stamp and must be signed by the supplier. Sampled features must be marked and numbered on the drawing.

2 EMPB cover sheet

The cover page must be completed in full. The reason for the sampling must be clearly stated. The agreed requirements must be observed.

3 Patterns

The sample quantity to be presented can be found in the order. Deviations from the sampling quantity must be approved by PVL (Purchasing/Quality Management Department). In principle, five samples must be completely tested or measured for submission. The samples must be marked in such a way that they can be permanently assigned to the measurement results.

4 Geometry and dimensional inspection – test results

- All requirements contained in the drawings and specifications must be checked and listed in the initial sample test report with target and tolerance values as well as actual values. All items (dimensions, material specifications and other drawing requirements, e.g. weight and standards) must be numbered and transferred to the initial sample test report under "Product-related test results".
- The actual values must be clearly assignable to the patterns.
- The measured values of each sample (including identical samples) must be given in full and individually.
- If the test requires the destruction of the sample(s), each sample must be individually packaged in a suitable manner (e.g. polybags, marked accordingly) and presented in PVL.
- In the case of tools with several mold cavities, the number to be tested per nest must be agreed.
- In the case of multiple stamped parts, each stamped part must be measured separately.

5 Mechanical/physical/chemical properties

- Surface treatment: Coating thickness measurement protocol and, if necessary, proof of corrosion resistance.
- Heat treatment: hardness measurement protocol and, if necessary, hardness curve (EHT).
- UV and leak tests or similar agreed tests.
- Shore hardness and other agreed tests for silicone parts.

6 Materials testing

Steel: Acceptance test certificate according to EN ISO 10204 type 3.1 with specification of mechanical properties and chemical analysis (nominal/actual representation).

Plastic: Acceptance test certificate according to EN ISO 10204 type 3.1 of the manufacturer for granules. The release refers exclusively to the material that was presented with the sampling. Any use of the alternative material listed on the drawing must be indicated in advance.

For other materials, the material tests are to be carried out by appointment. An initial sample presentation is mandatory before the first series delivery.

7 Process Flow Diagram

The current process flow chart must be attached. The process flow should include all steps in the production process and show the complete material flow.

8 Test plan/test coverage

The current test plan for series production must be attached. This includes, among other things, test criteria or parameters, test intervals, test and measuring equipment, test quantity and results of the test. - Test for certain electronic parts may require additional information or test criteria. Please consult PVL (Engineering) for confirmation of any additional requirements.

9 Testing & Testing Measuring equipment (for providing evidence for initial samples)

A list of the test and measuring equipment used for the initial sampling must be attached. The required suitability of the measuring and testing equipment used must be guaranteed (e.g. calibration certificate). Upon request, proof of the corresponding measuring equipment capability must be provided.

10 Tool Overview

Overview with number of pieces / number of nests and information on the tool concept.

11 Compliance with legal requirements

The confirmation of conformity must be attached, unless it has already been delivered with the declaration of feasibility or order confirmation. If the confirmation has already been made, this must be pointed out in the EMPB under the item "Remark".

12 Miscellaneous

Additional documents (e.g. software test reports and similar) that were not listed can be attached to the initial sample report.

5 Carrying out the initial sample inspection at the supplier's premises

Upon receipt of the initial sample order, the supplier undertakes to carry out the initial sample inspection in accordance with this policy. He is responsible for the correct and complete implementation. Deviations from this guideline must be agreed in advance and approved by PVL (Purchasing/Quality Management Department).

As part of the initial sample inspection, the supplier takes a random sample to prove the product characteristics and meet the specification requirement. The initial samples must be manufactured under series conditions. In coordination with PVL, the initial samples can also be taken from a pilot series production.

If product characteristics cannot be measured by the supplier himself, he must ensure proof by an e.g. accredited external measuring laboratory/service provider. Measurement reports from the measurement laboratory/service provider can be enclosed as test results with the initial sample documents.

In the above-mentioned case, the necessary tests to ensure series production in accordance with specifications must be coordinated and agreed with PVL (Purchasing/Quality Management Department).

Unless otherwise agreed, initial sample tests must be carried out for assemblies for all individual parts according to the parts list or assembly drawings. Unless otherwise agreed, submission documents and samples are to be presented.

The initial sample inspection report must be completed in full, signed and sent to the customer PVL. An exact assignment to the patterns must be ensured. Before sending the submission documents, the supplier must ensure that they are complete.

Attention! Incomplete documents as well as a lack of assignment of the initial samples to the test protocols lead to the rejection of the initial samples.

6 Cover sheet sampling

In the case of cover sheet sampling, only the cover sheet is to be presented as proof documentation. This applies in principle to the following cases:

- a) Drawing index increase from development status to series production after successful sampling (00).
- b) Editorial changes without specification change

7 Deviations

Initial samples with specification/drawing deviations may **not** be presented. If deviations are found at the supplier's premises during the initial sample inspection, these must be reported in advance to PVL (Purchasing/Quality Management Department). Insofar as these can be accepted by PVL in writing, the supplier must document the decision in the "Remark" field on the deviating feature.

Unapproved deviations, or lack of documented approvals for deviating features, lead to the rejection of the initial sampling as well as subsequently determined deviations to a cancellation of the series order. PVL reserves the right to charge the supplier for consequential costs incurred due to the cover-up of the deviations or defects.

8 Marking of initial samples

The initial samples and the packaging must be unique, assignable and permanently marked. This can be done by means of tags, labels or similar. The delivery note must contain the note "Initial sample". If these requirements are met, the supplier is free to design the labeling, and if questions arise, PVL (Purchasing/Quality Management Department) can be consulted

9 Sampling and decision on series delivery release by PVL

Upon receipt of the initial samples and submission documents, PVL evaluates the documents and initial sample parts. The scope of the audit is at your own discretion. The initial sample decision is documented by PVL on the cover sheet, signed and sent to the supplier by email with the corresponding test report. The following decisions are possible:

Release: This means that all requirements are fully met. Serial delivery release is granted. This does not relieve the supplier of responsibility for the quality of the products.

Free with condition: This means that the demands are not fully met. The delivery of the product can be made for a limited time or quantity in accordance with coordination with PVL purchasing, if necessary QM (deviation approval). The supplier has requested that corrective measures be identified and demonstrably introduced within the agreed period. Follow-up sampling is required in good time before the defined limitation expires.

Refusal: This means that the demands are not met. A series delivery release will not be issued. A new/resampling is required. The supplier must name and provide evidence of corrective measures prior to the presentation of new samples.

10 Applicable documents

- QMU 0702 Supplier Questionnaire
- QMU 0701 Initial Sample Test Report

11 Contact

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