B/S/H/

Supplier Quality Assurance Manual

English

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Contents

Dear Partners, Service Providers and Suppliers,

We at BSH promise our consumers top quality and we take this responsibility very seriously. This is why we expect you, our partner, to make the same promise to us. For it is only by working together that our products will satisfy the highest demands.

Zero defects and continuous improvement are two of the most important quality requirements for keeping this promise. For us quality already begins with reaching binding and comprehensive agreement with you, our supplier, at any early stage, and remains the centre of attention throughout the product development process up and including series production. So we can ensure uniformly high product quality, we provide relevant procedures and documents for all agreements over the entire lifecycle of a component.

This includes the present manual – our service offer for you and our business relationship based on partnership. Please make use of the detailed explanations of the individual process steps and do not hesitate to ask questions or suggest improvements.

We look forward to successful cooperation!

Terms and abbreviations

8D	Systematic problem-solving method (see section 7.2)
CQP	The component qualification planning defines the necessary requirements for the provision of documents by the supplier at different times.
Initial samples	Manufactured using the final tools and production equipment under series production conditions
FMEA	Failure Mode and Effect Analysis (see 3.1.3.8 and 3.1.3.13)
Pilot production	Manufacture of initial samples at the supplier's plant
PRODUCTS	Goods and services produced by the BSH supplier for BSH
SIR	Sample inspection report (see 3.1.3.19)

Legal notice

This document does not constitute a binding document and is solely intended as an aid for suppliers of BSH when dealing with our quality requirements. The Supplier Quality Assurance Manual is based on the contents of the quality management agreement, which is signed either on its own on conclusion of a contract or in conjunction with the framework contract.

1. Conforming products

Higher customer expectations in terms of quality and flexibility call for the continuous improvement not only of all products, assemblies and materials, but also of service and processes.
Customer satisfaction with quality in all areas is the key criterion for the success of BSH Hausgeräte GmbH and also for you as a supplier whose products are incorporated in those of BSH. To meet these requirements, we need reliable and competent suppliers who feel an obligation to uphold the common objectives and quality level of BSH.
This manual has been compiled to serve as a guideline / aid for our suppliers.

2. General agreements

In line with the obligation of BSH vis-à-vis its customers, the supplier is likewise obliged vis-à-vis BSH to uphold its philosophy of zero defects. The quality "0 defects" is an absolute requirement which can only be achieved through joint effort. The supplier undertakes in this context to proactively demonstrate to BSH the relevant strategy.

2.1 Quality management system

The supplier shall employ an adequate, efficient and reliable quality management system, which must correspond to the state of the art at all times and shall be adapted as appropriate (e.g. management systems based on DIN EN ISO 9001 or ISO 9001). The BSH buyer must be notified of the expiry of a certificate where no recertification is planned at least three months prior to the date of expiry. The withdrawal of a certificate must form the subject of immediate notification.

Where an uncertified quality management system is used by the supplier, an audit carried out by BSH may alternatively also serve here as evidence following approval by BSH. The supplier shall manufacture and test the products according to the rules of one of these quality management systems.

Should it transpire that the quality management system employed does not meet the specified requirements, the supplier undertakes to immediately improve the system to ensure conformity. To this end, the supplier shall submit binding schedules, which are subject to approval by BSH.

Where valid certificates and / or binding schedules have not been submitted and where the supplier is responsible for such failure, BSH shall be entitled, following the issue of a previous warning to no avail, to terminate existing supply contracts and the framework contract without prior notice.

2.2 Supplier management for sub-suppliers

The supplier shall be obliged to ensure that the execution and supply of the PRODUCTS are free of defects including all parts of PRODUCTS also supplied to him by third parties (referred to below: "sub-suppliers").

The utilization of sub suppliers by BSH shall not relieve the supplier of his responsibility to ensure the quality of the supplied PRODUCTS.

The requirements of BSH on its suppliers shall equally apply to all sub-suppliers. All manufacturers included in the production chain must employ suitable quality management systems to guarantee the quality of the final product. The supplier is thus obliged to plan and carry out audits or to request evidence of adequate quality assurance systems from sub-suppliers. The supplier is responsible for monitoring the appropriate measures of the sub-supplier to guarantee the agreed quality.

The BSH buyer must be notified of any change in a sub-supplier, whereby this must be approved by BSH if there is a need for mutual agreement.

2.3 Auditing by BSH

The supplier shall allow BSH to verify whether all quality requirements of BSH are being satisfied at his premises. Depending on the situation, this may take the form of a quality-related or technical discussion, in addition to a system, process or product audit. BSH shall timely inform the supplier about his intention.

Quality management system audits will be performed by BSH according to DIN EN ISO 9001. Process audits are based on the VDA6.3 questionnaire, although auditing is not carried out accordingly. The 14 quality principles of BOSCH form a substantial part of both these types of audit. Detailed information about these principles can be found using following link:

http://purchasing.bosch.com/en/de/quality_innovation/quality_management/requirements/29_wertstrom_q_basics/wertstrom_q_basics.html

The supplier shall grant BSH access to his entire business premises and to all testing stations, warehouses and adjacent areas in which the PRODUCTS to be supplied are developed, manufactured and / or stored. BSH shall be permitted here to inspect the procedures, documents and records of the supplier where they might concern the QM system or the quality of the PRODUCTS to be supplied.

BSH shall notify the supplier of the result of this inspection. Should corrective measures be necessary from the viewpoint of BSH, the supplier undertakes to immediately draw up an

action plan together with a binding schedule, to notify BSH accordingly and to implement it in a timely manner. The catalogue of measures and the schedule require the consent of BSH.

. Where necessary, BSH reserves the right to ask the supplier to arrange an audit of its sub-suppliers. It must be possible here for for BSH to also take part in the audit. On conclusion of a contract with the sub-supplier, the supplier must impose an obligation on the sub-supplier regarding performance of this audit.

The performance of such inspections shall not lessen the contractual responsibility of the supplier for the PRODUCT.

3. Product development and qualification

3.1 Quality requirements / Quality requirements specification

With BSH's official enquiry requesting a offer the potential supplier is also receiving the "Quality Requirements" along with other documents. The Quality Requirements describe component-specific requirements made on the supplier. This includes his manufacturing and quality assurance processes, as well as additional requirements with technical relevance that are not described in the drawing or specifications.

By submitting an offer, the supplier thereby confirms the stipulations of the Quality Requirements. Any deviations, risks and further information must be reported via the Feasibility Commitment (see 3.1.3.1) and agreed with BSH prior to the conclusion of a contract.

In the event of changes to the information in the following documents the supplier must proactively send an updated copy to BSH.

The individual sections of the quality specification are described below. The Quality Requirements document is divided into 5 parts (cover sheet, explanations, quality targets, CQP and technological and process-related requirements).

3.1.1 Cover sheet

The cover sheet provides general information. BSH consists of different product areas. Different requirements may result for a PRODUCT depending on the product area. Identification of the product group can be found in the field "Product Division".

The field "ESN-4 / Product Group" is an internal BSH instrument used to classify materials into different categories.

The Q-Classification (A, B or C) is an internal BSH key that standardizes processes and requirements and regulates the need for different documents for the preventive assurance of product quality at the supplier's plant.

3.1.2 Attachment 1: Quality targets

The quality targets not only define failure rates for 0-hours failures but also failures experienced by BSH's end customers. The relevant explanation and calculation basis is described in section 7.

3.1.3 Attachment 2: Part classification and component qualification planning

The purpose of the CQP (component qualification planning) is to approve purchased PRODUCT and processes. Timely incorporation of the supplier in the CQP is an important prerequisite for ensuring the required supply quality. Evidence must be provided via the CQP procedure that a product can be reliably developed and manufactured according to the requirements and standards. The area encompasses 22 fixed elements, which can be extended with individual requirements (depending on the component classification).

No.	Item	A	B	C	Available latest till	Comments
1	Feasibility Study / Commitment (based on requirements)	X	X		offer	feasibility study has to be discussed and agreed between BSH and supplier; every change with impact on price, date and/or quality requires updated and confirmed feasibility commitment; update has to be sent proactively to BSH
2	Tooling / Capacity Planning	X			order placement	every change on capacity planning requires update; update has to be sent proactively to BSH
3	Production Layout	X			order placement	every change on layout requires update; update has to be sent proactively to BSH
4	Process Flow Chart	X			order placement	every change on process requires update; update has to be sent proactively to BSH
5	Control Plan	X	X		order placement	every change on measurements requires update; update has to be sent proactively to BSH
6	Packaging Specification and Concept	X			order placement	every change on packaging requires update; update has to be sent proactively to BSH
7	Advanced Quality Planning (APQP)				tbd.	optional
8	FMEA Product (Design and System)				tbd.	optional
9	Design Release				tbd.	optional
10	Material Report				tbd.	optional
11	Measuring Report / Dimension Check	X	X	X	every sampling	every sampling requires measurement report; for catalog part data sheet acceptable
12	Qualified Laboratory Documentation	E			production initial samples	
13	FMEA Process	E			production initial samples	every change on process requires update
14	List of Test / Measurement Equipment	E			production initial samples	every change on Control Plan requires update; update has to be sent proactively to BSH
15	Measurement System Analysis (MSA)	E			production initial samples	
16	Approval Evidence for Purchased Parts from Sub Suppliers	E	E		production initial samples	
17	Process Assessment (Audit)	X			production initial samples	
18	Supplier Declaration on Prohibited or Declarable Substances (RoHS, REACH)	X	X	X	initial sampling	
19	BSH Sample Inspection Report	X	X	X	initial sampling	full documentation for final release mandatory (measuring report, other reports, components lists, preliminary process capability study,material report)
20	Machine Capability Analysis	X			initial sampling	
21	Preliminary Process Capability Analysis	X	X		initial sampling	
22	Reference Samples					

X...Evidence/documentation must be submitted according to the column "Available latest till"

E...Evidence/documentation must exist and be available at BSH's request

The requested documents must be returned in their entirety by the deadline.

3.1.3.1 Feasibility Commitment

In the framework of the contractual review, the supplier must check all commercial, logistical and technical specifications such as drawings, CAD data or test instructions whether it is feasible (use of internal checklists, technical feasibility studies, capacity planning, cost analyses, packaging requirements, FMEA). The Feasibility Commitment (see also Annex 2) is focusing on individual aspects of the contract review. The supplier must answer all questions in this document and enter appropriate responses.

The Feasibility Commitment must be submitted with each offer for A- and B-parts (see 3.1.1, Q-Classification), as well as with any changes in specifications as agreed.

3.1.3.2 Tooling / Capacity planning

The supplier must submit a binding declaration relating to tooling plans and mould cavity data, in addition to the maximum production rate, prior to final award. The ramp up/disposition plan must be considered into the time schedule planning. The tooling / capacity plan must be updated with the project progress and series production.

3.1.3.3 Production layout

The production layout is a diagram showing the production equipment of the production facility planned for manufacture of the components/assembly specified in the offer. This diagram must largely correspond to the local circumstances and link up with the process flow (3.1.1.4).

3.1.3.4 Process flow chart

The flow chart is a simplified portrayal of the entire production sequence. It may form part of the control plan or be generated in a separate document. The process flow chart links up with the production layout, and comprehensible assignment to the control plan must be possible here.

Where more than one production, storage or test facility is planned for manufacturing, this must be clearly recognisable as such.

3.1.3.5 Control plan

The control plan specifies what is to be tested, when, how, by whom and the scope of testing. It contains the necessary information and quality assurance measures which are required during the entire production process in order to guarantee the quality of the final product. The production flow shown in the process flow chart must be reflected in the control plan.

3.1.3.6 Packaging specification and concept

The supplier is responsible for the packaging of his components. It must be designed so that the PRODUCT cannot become damaged or soiled through external influences during shipment.

Stipulations made by BSH as regards the handling of load carriers and materials must be observed, as well as regulations on packaging, logistics and environmental protection.

The planned packaging forms part of the offer and will be evaluated in terms of its quality-specific requirements and capabilities.

3.1.3.7 Advanced quality planning (APQP)

The APQP is a plan drawn up by the supplier to assure development and production quality. This plan is a supplier-dependent document and in many points resembles the Component Qualification Planning document (see 3.1.1).

3.1.3.8 Design FMEA (design and product)

Suppliers with development responsibility must perform a design FMEA. The design FMEA remains with the supplier, who shall allow BSH to inspect the documentation on request at any time. The participation of BSH in FMEAs shall take place by mutual agreement. The findings resulting from the design FMEA must be reflected in the specifications as well as the process and control plan. The FMEA must be amended with any changes and is subject to regular updating.

3.1.3.9 Design release

Where a supplier bears the responsibility for development, design release must be verified and given by BSH according to the project plan depending on the contractual agreement.

3.1.3.10 Material report

The material report covers all materials which are used in a PRODUCT to be tested and their properties. The material report contains all information relevant to release of the component and makes reference to compliance with the common standards and legal requirements such as the RoHS directive and the REACH regulation. Deviations should be proactively reported to BSH at once. It is recommended that a material report is kept for every sub-supplier so that all materials, their products and the available releases are listed in a table. New materials without any release should be highlighted with a blue background. The change history can be found on the left-hand side. All changes in the form are documented here (e.g. with a new material, new product). The material report is subdivided into groups of materials, and it is recommended sorting the list by component.

3.1.3.11 Measuring report / Dimension check

The measuring report contained in the SIR is used to check the actual values against the specified values plus the tolerance from the design drawing (see Annex 3). If the actual value exceeds the tolerance, this value is automatically highlighted in red.

The dimensions to be measured are identified by being stamped with a number. If the design drawing has not been stamped, it must be stamped by the supplier.

With multi-cavity components a separate measuring report must be drawn up for every mould cavity. The sheets in the template should be copied here as required. Parts weights should be indicated in grams or kilograms.

3.1.3.12 Qualified laboratory documentation

Stipulation of BSH relating to laboratory accreditation or concession: All external laboratories must be accredited according to ISO / IEC 17025. The extent of accreditation must correspond to the testing performed. Where internal or unaccredited laboratories are used, the supplier must submit a concession to BSH beforehand or optionally, a process audit must be carried out.

3.1.3.13 Process FMEA

The process FMEA is drawn up based on the results of the design FMEA and is evaluated in relation to possible weak points in the production process. The process FMEA remains with the supplier, who shall permit BSH to inspect the documentation at any time on request. The participation of BSH in FMEAs shall take place by mutual agreement. The findings resulting from the design FMEA must be reflected in the process and control plan.

Risks that are disclosed with the help of a FMEA must be minimised by means of appropriate measures.

Deadlines and the persons responsible for implementation of the measures should be specified so that the measures will have been completed prior to the commencement of series delivery. The measures initiated should be re-evaluated in terms of their efficiency. BSH must be immediately informed of any necessary design changes.

The FMEA must be amended with any changes and is subject to regular updating according to the principle of 0-defects.

3.1.3.14 List of test/measurement equipment

The supplier must provide a list itemising the parts-specific test / measurement equipment (possibly integrated into the control plan). This should be submitted two weeks prior to pilot production.

3.1.3.15 Measurement system analysis (MSA)

The supplier must draw up an MSA study in relation to the capability of measuring instruments and complete measurement systems in terms of accuracy, repeatability, reproducibility, stability and linearity. The measurement system analysis must be submitted at the latest two weeks prior to pilot production.

3.1.3.16 Approval evidence for purchased parts from sub-suppliers

Evidence of release for parts bought in from a sub-supplier (sample inspection report, materials certification, process evaluation, etc.) must be available by the time the initial samples are produced.

3.1.3.17 Process assessment

The process inspection at the supplier's premises under series production conditions forms an integral part of the component qualification planning for complex parts mostly with the Q-classification A.

3.1.3.18 Supplier declaration on prohibited or declarable substances (RoHS, REACH)

The supplier must disclose to BSH all declaration documents for substances and materials in their entirety. The availability of these documents is a prerequisite for the release of parts and assemblies.

3.1.3.19 BSH sample inspection report

The supplier must submit an initial sample inspection report (SIR) documenting all characteristics forming the basis of the contract (generally drawings, specifications) together with the initial samples prior to the start of pilot production. The initial sample inspection report includes a) Dimension b) Function c) Material d) Haptics, Acoustics e) Appearance f) Surface check g) Reliability h) Other.

All yellow fields in the individual spreadsheets of the SIR should be filled by the supplier and completed accordingly. When completed, the background of these fields will automatically change to white in colour.

The BSH e-mail address given on the cover sheet is the address to which the completed SIR should be sent.

An example of a completed SIR can be found in the annex.

Deviations from the nominal value and the tolerances are fundamentally not permitted (see also 4.1). Three parts must be measured per cavity.

The submission of initial samples with deviations is only permitted by way of exception and with the approval of the relevant BSH development

BSH-QM uses the finalised sample inspection report (SIR) to notify the supplier of the component release decision (release, limited release or no release). The release decision can be found at the bottom of the cover sheet. The decision in relation to release is valid throughout BSH (see also 5.1).

The template can be found on the BSH home page under the heading: www.BSH-Group.com → Company → Global Supply Chain → Documents

(https://ocp.bsh-group.com/en/documents#section-quality).

3.1.3.20 Machine capability analysis

BSH stipulates a machine capability index (Cmk) ≥ 1.67. The requirements for the process capability characteristics can be found on the BSH home page under the heading www.BSH-Group.com → Company → Global Supply Chain → Documents

(https://ocp.bsh-group.com/en/documents#section-quality) .

The machine capability analysis must be submitted prior to the pilot production.

See also section 3.2 Planning of series monitoring.

3.1.3.21 Process capability analysis

For regular production BSH expects a process capability index (Cpk) ≥ 1.33 and optionally for production release, a preliminary process capability index (Ppk) ≥1.67.

The BSH requirements for the process capability specification can be found on the BSH home page under the heading Quality & Environment / Statistical calculation for initial sample inspection.

See also section 3.2 Planning of series monitoring.

3.1.3.22 Reference samples

Reference samples are parts retained from pilot production at the supplier's plant (see "Terms and abbreviations") and must be preserved by the supplier.

The obligation to retain the documents (incl. reference samples) shall remain in force for at least 10 years after the last product was "placed on the market" by BSH unless longer periods are stipulated by law (see European Directive 1999/34/EC). This period shall commence at the end of the calendar year in which the last PRODUCT was supplied. The supplier shall allow BSH to inspect the documentation at any time on request.

3.1.4 Technology and process-related standard Q-requirements

This section formulates all minimum requirements on the supplier necessary for manufacturing and quality assurance.

3.2 Planning of series monitoring

All product and process characteristics are in principle important and must observed.

Special characteristics (see also item 3.2.1) requires evidence of process capability. To this end the supplier must monitor these characteristics with appropriate methods, e.g. using quality control charts (SPC).

3.2.1 Scope of testing for special characteristics

BSH assigns special characteristics which are relevant to release according to the following criteria to a PRODUCT in drawings.

Critical characteristic (CC) Category 1

These are product or process characteristics

- which are clearly relevant to safety
- where non-compliance may result in a risk to life or limb

Significant characteristic (SC) Category 2

These are product or process characteristics

- whose quality is critical but not critical to safety
- where non-compliance results in impaired functional capability, marred aesthetics or limited capability for further processing of the product or component

Important characteristic, Category 3

These are product or process characteristics

- whose quality is critical to a certain extent but not critical to safety
- where non-compliance may result in impaired functional capability, marred aesthetics or limited capability for further processing of the product or component

Relevant characteristic, Category 4

These are product or process characteristics which have a minor impact on quality.

Table

		Category 1 **Critical characteristic** 123,45 ±0,2 CC	**Category 2** **Significant characteristic** 123,45 ±0,2 SC		**Category 3** **Important characteristic** 123,45 ±0,2		**Category 4** **Relevant characteristic** 123,45 ±0,2
Target criterion for pilot series (M5 – M6)	Criterion	within tolerance	within tolerance	$c_{mk} \geq 1{,}67$ (1, 2)	within tolerance	$c_{mk} \geq 1{,}67$ (1, 2)	within tolerance
	Random sample	100% measuring	according to inspection plan	n=50 (7) k=1 (8)	according to inspection plan	n=50 (7) k=1 (8)	according to inspection plan (6)
Criterion for series release (at M6)	Criterion	within tolerance	$p_{pk} \geq 1{,}67$ (3, 5)		within tolerance	$p_{pk} \geq 1{,}67$ (1, 3, 5)	within tolerance
	Random sample	100% measuring	n=3 - 5; k=25		according to inspection plan		according to inspection plan
Series attendant inspections (after M6)	Criterion	within tolerance	SPM (9) $C_{pk} \geq 1{,}33$	SPC (10) $C_{pk} \geq 1{,}33$	within tolerance		within tolerance
	Random sample	100% measuring	n≥5; k≥20 ongoing according to inspection plan		according to inspection plan		if applicable: according to inspection plan

Footnotes (for table)

(1) Inspection optional; only necessary where specified in the release plan and/or supply agreement

(2) Cmk machine capability index (short-term capability)
The acceptance inspection of production equipment performed at the equipment manufacturer's plant generally includes a short-term capability test, also known as a machine capability test. This test aims to examine only the influences originating from the production equipment itself. The framework conditions should be kept as consistent as possible in order to minimise or avoid any influences from man, material or environment. The result of the short-term capability test is a provisional assessment of the suitability of the production equipment to satisfy specific requirements. Normally, at least 50 parts are manufactured in an uninterrupted sequence. The quality characteristics of interest are measured and the measured results

are recorded according to the sequence of manufacturing and then subjected to statistical analysis, e.g. in terms of stability and distribution time model. Lastly, the Cmk machine capability index is calculated

(3) Ppk provisional process capability index
It is possible to examine the series production conditions as all variance influences take effect. It is possible to assess process capability prior to the commencement of series production. Performance of this test generally involves sampling at least 125 units from the process. The allocation of these 125 parts to the individual samples and also the sampling intervals should be determined according to the specific process and cannot be defined in a generalised basis. The customary sample size is 3-5 parts.

(4) Cpk process capability index (long-term capability)
Long-term capability is assessed by the statistical study of control charts. Quality capability is determined under real process conditions. The impact of process improvements becomes apparent. The observation period is at least 20 days of production.

(5) The use of components with dimensions relevant to process capability analysis (PCT) for purposes of series production should be controlled by means of limited releases until conclusion of this testing. Should there be changes to the tool during determination of the Ppk, it should be clarified in agreement with Development, QM and, where necessary, Production whether the Ppk needs to be determined again.

(6) Testing can be omitted in consultation with Development, Production and Quality Management.

(7) Number of parts

(8) Sample

(9) Statistical process monitoring

(10) Statistical process control
If the production process permits statistical process control and the necessary measuring and control equipment is available or such investment is planned, this is preferable to process monitoring. The quality control chart (QCC) is used to monitor and control the process. For the person responsible it serves as a control loop, where the process represents the control system, and the geometry to be produced (dimensions, shape and position tolerances) represents the control variable (machine settings). The following limits should be specified in the QCC: tolerance limits (UTL, LTL), control limits (UCL, LCL) and warning limits (UWL, LWL).

If it is not possible to demonstrate process capability for one of the categories of characteristics, 100% inspection and testing must take place.

3.3 Planning and procurement of systems, inspecting/testing equipment and operating resources

All systems and operating resources for manufacture of the component must be planned and procured in such a manner that they are available with sufficient capacity at the latest by production of first of tool parts (FOT) on the date for initial sampling. In addition, all devices must also be taken into consideration here, as well as internal and external means of transport.

The supplier defines the test method for all characteristics along with the relevant inspection/testing equipment.

The procurement process should be planned so that the necessary inspection/testing equipment is available at the latest by pilot production and evidence of the suitability of the testing process has been provided.

This evidence should be based on the requirements of the "Measurement System Capability" Reference Manual (version 2.1) and is available from the company Q-DAS® GmbH (q-das@q-das.de).

Evidence of suitability must be provided, as well as of the maintenance of in-house and external systems, inspecting/testing equipment and operating resources. Where using more than one device or multi-cavity

3.4 Control of parts

To avoid the mixing of batches and ensure traceability, unfinished parts and purchased parts from sub suppliers or self-manufactured should be processed and supplied according to the "First In - First Out" principle.

3.5 Cleanliness

Cleanliness is a fundamental prerequisite for the manufacture of high-quality products. BSH expects its suppliers to focus on this basic requirement as appropriate. The supplier is responsible for the cleanliness of his parts and packaging, also giving consideration to any stipulations of BSH in relation to residual soiling.

3.6 Prototype manufacturing

A prototype test report must be presented for prototype parts from an experimental tool on first delivery and with any changes (index / reference number). In this report all drawing characteristics and the scope of changes must be evidenced on at least one part. Any further scope of documentation required here will be specified in each case by the Quality Management department responsible.

Prototype deliveries should be additionally identified in an appropriate manner.

3.7 Audit planning / Outgoing goods inspection

The supplier is required to set up an outgoing goods inspection suited to the product where the supplier is unable to reliably demonstrate that all relevant product characteristics will be guaranteed during production. The regular performance of a product audit with a defined scope is stipulated in the corresponding case.

BSH can order the performance of an outgoing goods inspection subject to the need for quality assurance or may call in an external service provider at the supplier's expense.

3.8 Production output

The supplier undertakes to ensure his quality at the start of series production by appropriate measures (Run@Rate, pilot production, quarantine stock production etc.).

3.9 Continuous improvement process

One of the most important tasks prior to the start of and during ongoing series production is the development and implementation of measures to ensure the Continuous Improvement Process .

The following points must be considered here:

- Improvement in process capability by reducing variance
- Increase in productivity
- Centring of processes
- Avoidance of reworking and rejects
- Analysis of complaints

4. Release of components/assemblies

4.1 Sampling procedure

The supplier shall use pilot production to manufacture a sufficient quantity of samples in relation to BSH's order and according to the requirements of statistical evidence.

If all requirements on the component and the production process are met, the supplier shall send the sample parts to the BSH delivery address together with the SIR (see also 3.2.1.19).

If the parts do not satisfy all requirements and no agreement is reached beforehand with BSH Development, BSH will reject the sample delivery before the start of in-house testing. The supplier may be charged for any costs incurred thereby.

BSH shall sample the components using both in-house release procedures and those laid down by the legal regulations.

The release decision will be documented in the SIR and the supplier informed accordingly.

4.2 Contractual basis

The drawing, 3-D model, Quality Requirements, technical terms of delivery and other written specifications for the parts to be supplied shall form the contractual basis for the initial sample inspection.

4.3 Initial sample inspection by the supplier

With the initial sample inspection by the supplier evidence of the following shall be provided:

- compliance of the part with the contractual basis
- the capability of the supplier to manufacture and test the part
- the conformity of the materials and substances utilised

4.4 Supplier's test report

The supplier is asked on submission of the initial samples and creation of the measuring report to use the current test report and protocol forms available on BSH's home page or they shall be transmitted as an electronic contract package.

The supplier shall send the documents completed electronically to the address specified in the SIR (see 3.1.3.19), together with the material report and additional documents ensuring unambiguous assignment of the test measurements (e.g. stamped drawing with test measurements numbered consecutively or drawing coordinates).

Where sent by e-mail, the subject line should indicate the supplier's name, at least one material number and the drawing incl. index. The report must be sent in at the same time as the sample parts.

If the supplier does not submit a measuring report, BSH reserves the right to charge the supplier for the costs of the initial sample inspection performed either in-house or by an external service provider.

4.5 Dispatch and safe receipt

The fast and safe dispatch of initial samples with the test report is of special importance in a time-critical phase of a project.

- Initial samples should not be submitted together with series deliveries
- Delivery in a separate container or separate packaging with a separate delivery note
- Adequate protection of the parts from damage and environmental influences
- Containers/packaging clearly marked "Muster/Sample" (sample consignment)

5. Series production

5.1 Delivery prior to release

Following the decision of "Limited release" by BSH, deliveries may be effected according to the provisions of the test report (stipulations, quantity, deadline). Series deliveries are not permitted if "Release" or "Limited release" has not been given.

In case of an order for series production parts without any release, the supplier is asked to request release from BSH in good time.

On the one hand, the supplier is entitled to receive a release decision by BSH, but on the other hand, he should contribute towards release by sending in samples with a test report in good time.

Regular series delivery of products may not commence until the manufacturer has demonstrated his capability to satisfy the specified quality requirements and release has been given by BSH at the receiving site.

Release of the initial samples does not relieve the supplier of his responsibility to ensure constant series quality of the products.

5.2 Prerequisite for series production

The supplier shall be obliged to perform regular and comprehensive testing of his production process and its results by means of sampling (at least for the test characteristics agreed according to the test plan, see also 3.1.3.5 Control plan) and to document this testing. The scope of sampling can be agreed separately, e.g. in the quality requirements specification. It is also necessary to give sufficient consideration here to process parameters which might negatively affect product characteristics. The documentation must clearly indicate any process interruptions and quality control measures in terms of type and frequency. This documentation shall be submitted to BSH at regular intervals and at once at the request of BSH.

In case a fault is ascertained in a PRODUCT during the production process, the supplier must at once interrupt the process, correct it and segregate any products concerned.

In this case all PRODUCTS that were manufactured since the last sampling with a positive finding (last OK part) must undergo 100% testing. Defective PRODUCTS shall be immediately segregated and held at a safe location ("quarantine stock") until final clarification of the cause of the fault. Any corrective measures must be documented in the records in a transparent manner. If there is a risk that BSH has been supplied with defective PRODUCTS, BSH must be notified accordingly and immediately informed in detail about the measures initiated.

Should reworking of the products not be possible, the parts concerned must be reliably scrapped in a verifiable manner. In the event of reworking, all series testing specified must be carried out. If the supplier is exceptionally unable to supply PRODUCTS that conform to the specifications, the supply of PRODUCTS not conforming to the specifications shall be subject to special release by BSH. The PRODUCTS concerned (and their delivery containers) must be clearly labelled in agreement with BSH.

5.3 Traceability and labelling of PRODUCTS

The supplier undertakes to ensure the traceability of the PRODUCTS he has supplied. This also includes all sub-suppliers and complete documentation of changes to the product and production process. Where a fault is ascertained, identification of the defective PRODUCTS / product parts / batches, etc. must be guaranteed.

To enable unambiguous traceability, relevant data on production, testing and condition shall be furnished by the supplier and his sub-suppliers.

The supplier undertakes to label PRODUCTS, parts and packaging according to the agreements concluded with BSH.

He must ensure that the labelling of the packaged products is also legible after transport and storage.

5.4 Notification of changes and deviations

All changes to the PRODUCT or its production or testing should be agreed with the parties concerned at BSH. The following points are described in the quality management agreement: "The supplier undertakes, **prior to**

- making any changes to the PRODUCT, in particular any change to product parts relevant to function / processing or safety (e.g. bought-in parts, materials),
- making changes to production processes, equipment, sequences and materials,
- changing a sub-supplier,
- making changes to test methods / equipment,
- relocating or establishing production sites, and
- making other changes whose impact on quality cannot be ruled out,

to obtain written consent to these measures from BSH. This shall also apply where the change has been requested by BSH. The supplier furthermore undertakes to inform BSH in detail (results of inspection/testing, risk analyses, etc.) of planned measures in good time so that BSH is able to conclusively examine the impact of the changes.

If it becomes apparent that concluded agreements, e.g. quality characteristics, dates, delivery quantities, cannot be observed, the supplier shall immediately notify BSH (relevant departments of the accepting BSH sites) and clarify further procedure with BSH, including for PRODUCTS that have already been delivered. The supplier shall disclose the necessary data and facts in the interest of quickly finding a solution.

5.5 Special release

In the case of deviations from the specification, release by means of "Special release" must always be obtained prior to delivery. All deliveries effected on the basis of special release must be additionally marked as such on all load carriers (see also 5.3).

6. Quality targets

The supplier shall be obliged to plan measures to set up and maintain his own quality assurance system with all concomitant activities in order to achieve the level required for attaining and verifying quality targets established by mutual agreement.

Independently of the agreed ppm upper limit, this does not relieve the supplier of his obligations to deal with claims and ensure continuous improvement.

The costs of handling claims shall be borne by the party who caused the defect.

6.1 Zero-hours failure rate (0h ppm)

The 0-hours failure rate describes the number of the supplier's PRODUCTS found to be defective in the time between delivery of the PRODUCT to BSH and delivery of BSH's final product, manufactured with said PRODUCT, to its customer. It is calculated by determining the number of defective products per calculation period in relation to the number of total products delivered by the supplier per calculation period and extrapolating this to a number of 1 million delivered products ("parts per million").

$$PPM = \frac{\text{bewertete, fehlerhafte Einheiten}}{\text{gelieferte Einheiten}} \times 1.000.000$$

All defects or deviations that were not previously agreed with BSH will result in a complaint.

Where BSH finds a defect in a PRODUCT and the PRODUCT is part of a delivery batch (referred to below as the "lot") and inspection of each PRODUCT in this lot involves a level of expenditure that is no longer insignificant, BSH shall be entitled to reject the lot as a whole.

6.2 Warranty failure rate

The number of defective products per calculation period is determined as follows: Defects brought to BSH's attention are processed and rectified by its customer service. If customer service finds from its inspection that a defect involves the supplier's final PRODUCT, this defect will be recorded in a BSH computer system (referred to below as the "PQM system").

BSH will analyse at regular intervals how many defective products have been recorded in the PQM system and whether these defects were caused by the supplier. BSH must give the supplier the opportunity to inspect the defective PRODUCT or a sample of it. The supplier should be aware that not all defective PRODUCTS can be stored by BSH so that inspection may have to be carried out based on random sampling.

If inspection is carried out based on such a sample, the result of the sampling analysis will be extrapolated to the number of products supplied during the calculation period.

The number determined by BSH in this manner represents the number of defective products during the calculation period.

For every time that the limit of the agreed ppm warranty failure rate is exceeded in relation to the actual number of instance of non-observance (in relation to the number of PRODUCTS delivered by the supplier), the supplier shall be obliged to pay a flat-rate sum as reimbursement of expenditure for each defect for the expense and services of BSH corresponding to the amount stipulated by the contracting parties in the document "Agreement on Conditions".

In the case of safety-relevant failures, the upper defect rate of 0 ppm shall apply (see also 3.2.1).

6.3 Reporting by BSH to the supplier

BSH measures the performance of its suppliers at regular intervals. The 0-hours failure rate attained is used as the basis here. The supplier will be notified accordingly if he exceeds the agreed limits. In addition to the general requirement on the supplier to deliver uniformly good quality ("zero defects" principle) and to rectify defects according to the cause-effect principle, the supplier must immediately introduce special measures in the event of deviations.

7. Complaints and elimination of errors

7.1 Complaints procedure

Defects constitute exceptions and BSH will notify the supplier in this regard in the form of complaints. The supplier shall be advised here by e-mail, short notification, detailed documentation or additional return of parts.

Depending on the type of defect and frequency, BSH reserves the right to send parts forming the subject of complaint back to the supplier either immediately or by means of a consolidated return consignment.

The top priority is to ensure trouble-free production at BSH with flawless products.

The supplier shall make sure of comprehensive and regular communication when handling complaints. BSH expects deviations of any type to be processed according to the cause-effect principle (8D logic). It should be noted that deviations are not only due to technical, but also to organisational causes. Both should be examined here. BSH reserves the right to request an 8D report depending on the type of defect and frequency. The quality of such problem-solving methods will be included in the in-house supplier evaluation.

7.2 Problem-solving process using 8D

Proper application of the "problem-solving process" throughout the company in order to eliminate the cause of defects forms the basis of a professional business partner.

The 8D methodology is a procedure for solving problems consisting of 8 steps. It is necessary to work through all eight steps when solving a problem. If necessary, the steps should be processed recursively, i.e. the 8D methodology is reconstituted at a previous point with known and confirmed facts. Steps D1 to D3 can be processed in parallel.

D1: Create a team

D2. Describe the problem

D3: Develop measures for short-term containment

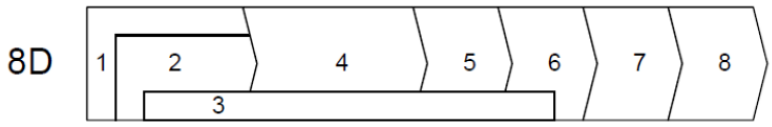
D4: Perform cause-effect analysis

D5: Define permanent correction measures and determine test statistics

D6: Implement correction measures from D5 and monitor their efficacy

D7: Introduce preventive quality assurance practices

D8: 8D finalisation and evaluation of 8D



Each of the individual disciplines entails numerous possible methods that could be applied. 8D is a time-consuming instrument which is therefore only used selectively.

Use the following link to access BOSCH's freely available 8D online training.

BOSCH Supplier Quality Trainings

7.3 Renewed delivery of returned PRODUCTS

All PRODUCTS that form the subject of a complaint or are separated out by the supplier as being defective but are suitable for revision and conditional usage may be reworked on the basis of a previous enquiry from the supplier and written confirmation by BSH.

The supplier must inform BSH about delivery of these PRODUCTS in advance as they must be additionally labelled as such, whereby each PRODUCT must be clearly marked on an individual basis (at least each packaging unit).

Rectification and repair of returned or defective PRODUCTS and delivery without reaching prior agreement with BSH constitutes a major breach and will result in immediate escalation.

8. Forms

The necessary forms from this manual and other relevant documents can be found as a file in the current version on the Internet at:

www.bsh-group.de → Company → Global Supply Chain → Important documents

https://ocp.bsh-group.com/en/documents#section-quality

Annex 1: Template Quality Requirements

B/S/H/	Quality Requirements for Supplied Parts	Doc.-ID: 60100004704447 Rev, Seq: A1 Date: 2020-04-29

Content

Basic Information

Product Division:	
ESN-4 / Product Group:	
Further Description:	
Q-Classification of Component *A, B or C*	**B**

Optional Information

BSH Material No.:	
Part Description:	
Drawing No. / Revision:	

Version	Reason for Modification	Date	Creator

Explanations

General

The aim of the document is to describe the quality and CQP requirements for the production of supplied parts. With the request for quotation (RFQ) all known requirements of BSH are submitted to the supplier by the respectively responsible purchasing department.

The quality requirements complements the BSH purchasing frame contract and quality assurance agreement (QMA) with product specific quality requirements. The supplier has to implement the quality requirements into a quality functional specification (incl. manufacturing and testing concept) and confirm with feasibility commitment.

In case of inconsistencies of contract, specification, requirements, etc., the responsible QMS has to be informed.

The supplier covenants to participate in our IT-based quality data exchange.

Quality Targets

The supplier is obliged to produce and deliver zero-defects products. As an intermediate goal on the way to reaching the final goal, BSH defines the following time-restricted upper limits for 0h ppm and the WFR (Warranty Failure Rate). Quality targets are defined in RFQ supplier report or Attachment 1.

Attachment 1 Individual Quality Agreements

Part Classification and Component Qualification Planning (CQP)

The classification is done by the respective quality management department according to the anticipated part and process criticality. The part classification defines the scope of required release documents.

Further information regarding the component qualification planning (CQP) is available on BSH homepage.

- Leaflet on sampling BSH homepage

  https://media3.bsh-group.com/Documents/MCDOC02042899_Leaflet-Sampling.pdf

Independent of the requested documents, the supplier has to document all applicable records and has to make them available on request.

Prior to placement of order, this document and feasibility study have to be agreed between BSH QM and supplier.

Part Classification and Component Qualification Planning (CQP)

X: Requirements according part classification, additional requests are possible

E: Only on request or review during process assessment

No.	Item	A	B	C	Available latest till	Comments
1	Feasibility Study / Commitment (based on requirements)	X	X		offer	feasibility study has to be discussed and agreed between BSH and supplier; every change with impact on price, date and/or quality requires updated and confirmed feasibility commitment; update has to be sent proactively to BSH
2	Tooling / Capacity Planning	X			order placement	every change on capacity planning requires update; update has to be sent proactively to BSH
3	Production Layout	X			order placement	every change on layout requires update; update has to be sent proactively to BSH
4	Process Flow Chart	X			order placement	every change on process requires update; update has to be sent proactively to BSH
5	Control Plan	X	X		order placement	every change on measurements requires update; update has to be sent proactively to BSH
6	Packaging Specification and Concept	X			order placement	every change on packaging requires update; update has to be sent proactively to BSH
7	Advanced Quality Planning (APQP)				tbd.	optional
8	FMEA Product (Design and System)				tbd.	optional
9	Design Release				tbd.	optional
10	Material Report				tbd.	optional
11	Measuring Report / Dimension Check	X	X	X	every sampling	every sampling requires measurement report; for catalog part data sheet acceptable
12	Qualified Laboratory Documentation	E			production initial samples	
13	FMEA Process	E			production initial samples	every change on process requires update
14	List of Test / Measurement Equipment	E			production initial samples	every change on Control Plan requires update; update has to be sent proactively to BSH
15	Measurement System Analysis (MSA)	E			production initial samples	
16	Approval Evidence for Purchased Parts from Sub Suppliers	E	E		production initial samples	
17	Process Assessment (Audit)	X			production initial samples	
18	Supplier Declaration on Prohibited or Declarable Substances (RoHS, REACH)	X	X	X	initial sampling	
19	BSH Sample Inspection Report	X	X	X	initial sampling	full documentation for final release mandatory (measuring report, other reports, components lists, preliminary process capability study,material report)
20	Machine Capability Analysis	X			initial sampling	
21	Preliminary Process Capability Analysis	X	X		initial sampling	
22	Reference Samples					
23						

Attachment 1 Individual Quality Agreements

ESN-4 / Product Group	Failure Rate* [ppm]	Warranty Failure Rate** [ppm]	
	0-hours	1st Warranty Year	2nd Warranty Year
<text>	<100>	<100>	<100>

*All defects detected by BSH (including lots) and confirmed by supplier
**Warranty failure rate (WFR)

Attachment 2 Technology and Process related Standard Q-Requirements

General Requirements

<text>

Process Requirements

Incoming Inspection	
<process step>	
<process step>	
<process step>	
<process step>	
<process step>	
<process step>	
<process step>	
<process step>	
Finished Goods Management	

Additional Requirements

<text>

Attachment 3 Part Specific Characteristics & Requirements

Pos. No.	Important Items / Characteristics	cpk/cmk	Comments / Additional Information (e.g. measurement tool, frequency, etc.)
1	As defined in specification		
2			
3			
4			
5			
6			
7			
8			
9			
10			

Annex 2: Template Feasibility Commitment

Project / Part Description:			
Material Number(s):		Drawing No. / Revision:	
Basis for Assessment:	☐ For Quotation / Update ☐	RFQ No.:	

Supplier Name Address / Plant:	

Team Members Supplier:	Plant / Dept.:	Function:	Mail / Phone:

Explanations

The aim of this document is to evaluate the ability of you, supplier, producing the requested parts according to BSH requirements. While checking the feasibility and creating the offer, the supplier has to consider all requirements amongst others in material specifications, drawings and quality requirements. The prices in the offer shall match with the information given here in the feasibility commitment.

One feasibility commitment document can be used for several part numbers of one project, if the feasibility is valid for these material numbers. The feasibility commitment will be valid for the drawing numbers mentioned above with the following revisions, until feasibility is no longer valid (e.g. due to technical modifications) or a new feasibility commitment is requested by BSH.

The yellow fields have to be filled by the supplier

Each question that is answered with “no” has to be commented by the supplier. If necessary additional information / documents can be attached.

Question for Feasibility Commitment:	Feasible:
1. You should have received amongst other things drawings (also additional sub-drawings that are mentioned on the part drawings), part specifications, quality requirements. According to your professional evaluation, are those documents plausible,	Please choose decision between yes and no.

Comment:		
2. Are the requirements out of those documents feasible and measurable?		Please choose decision between yes and no.
Comment:		
3. Are the needed capacities (production, quality, laboratory, qualified work force, project management resources etc.) available and planned? Do you confirm the time schedule and are you able to produce on time?		Please choose decision between yes and no.
Comment:		
4. Do you have experience with all required and necessary technologies (materials, machinery, processes etc.)? No new operations or processes necessary, which are normally not within the scope of your operations?		Please choose decision between yes and no.
Comment:		
5. Do you use only your own facilities and processes for the production of the parts?		Please choose decision between yes and no.
Comment:		
6. Is the measuring procedure for the part(s) defined, available and all measuring equipment capable?		Please choose decision between yes and no.
Comment:		
7. Is the process/machine capability and stability controllable without foreseeable risks?		Please choose decision between yes and no.
Comment:		
8. Overall Result		Please choose your decision.
Comment:		
9. Your comments are welcome. Please write them in case you see improvement potentials regarding process and component quality, raw material, sustainability, delivery etc.?		

Annex 3: Specimen of a completed SIR

Sample Inspection Report

B/S/H/

Request for Order-No.	60100005347894	Rev.	A2
Report No.		Rev.	
Release Plan No.	60100012XY	Rev.	B

Supplier Report No. X7394 Rev. 1

Supplier Address

Sample Producer GmbH			Company Name
Firststreet 1			Street Name
12345			Post Office Box
89537	Zip Code	Giengen	City
Germany			Country
78945	Supplier No.	Germany	Production Location

BSH Serial No.	8001123456
Part Designation	Sample for Fridge
BSH Drawing No.	5700 0001234567
Drawing Status	A 7, 29.08.2019 Released
Project	NewFridge
Quantity Ordered	25
Change Request (BSH)	

SIR Recipient (please send all sampling documents to following E-Mail address)

E-Mail: FRFG-sampling@bshg.com

FRFG - Refrigeration

BSH Hausgeräte GmbH
Robert-Bosch-Str. 100,
89537 Giengen,
Germany

[X] Initial Sample Inspection [ ] Subsequent Inspection

Reason for sampling:

[ ] New Part [ ] Production Relocation [ ] New Tool
[X] Part Modification [ ] Changed Production Conditions [ ] New Raw Material
[ ] New Sub-Supplier [ ] Long Delivery Interruption
[ ] Short text stating reason for sampling:

Raw Material has changed from PS to ABS

Level of Component Q-Qualification: C "C" = Only SIR

In case of Level A or B please expand the sheet and select the enclosed CQP-items

Please select the enclosed items related to this SIR

[X] 19 **BSH Sample Inspection Report (cover sheet) (Items nr. 11, 18, 19 and 22)**

[X] a Measuring Report / Dimension Check
[X] b Functional Test
[X] c Material Report/ Material Test
[ ] d Haptics/ Acoustics/ Odors
[ ] e Appearance
[ ] f Surface Check
[ ] g Reliability Test
[ ] h Other:
[X] 11 Supplier declaration (RoHS, REACH)
[ ] 18 Machine capability analysis (Cm;Cp)
[X] 22 Process capability analysis (Ppk;Cpk)

to be completed by supplier

We confirm, ...

1. that the presented samples were manufactured under standard conditions using standard operation resources,
2. the correct implementation of the sample inspection and recording of the findings in this sample report (all deviations are indicated in this report),
3. that the release of products does not exempt the supplier from his responsibility to deliver the goods in accordance to the respective valid drawing and specification,
4. that we accept and will abide by the rules regarding information and documentation stated in the quality assurance agreement.

Supplier Part No.	913	Delivery Note Date	01.10.19	BSH Tool No.	4569
Delivery Note No.	453195	Quantity Delivered (total)	25	Number of Tool	#01
Supplier's Remarks		Quantity Delivered per Cavity	5	Number of Cavities	5

Name / Department	Phone & Fax / E-Mail	Date	Signature
Max Mustermann / Quality Management	Phone: 12345 - 9365 Max.Mustermann@sampleproducer.com	29.08.2019	M. Mustermann

Decision

[ ] Release
[ ] Limited Release, Quantity/ until Date .....
[ ] No Release
[ ] New Samples by (Date) .....

[ ] Delivered Quantity Returned

Remarks to decision:

Name / Department	Phone & Fax / E-Mail	Date	Signature

Sample Inspection Report
CQP Check List

B/S/H/

CQP-No.									
Supplier Report No.	X7394	Rev.	1	Supplier	Sample Producer GmbH	Supplier No.	78945	Production location	Germany
Release Plan No.	60100012XY	Rev.	B	Serial No.	8001123456	Part Designation	Sample for Fridge	Drawing No.	5700 0001234567_A 7, 29.08.2019
Report-No.		Rev.		Tool-No.	4569	Cavities	5	Project	NewFridge
								BSH Depository	

QM department

Milestones / Synchronisation points for: **C**

Remark: Independent of the requested items the supplier has to document all applicable records, have to make them available on request and is responsible to ensure the part quality.
Prior to placement of order this document has to be agreed between BSH QM and Supplier.
The signed component qualification planning has to be send to the responsible BSH QM within 2 weeks after receipt without explicit request. This document is part of the release documents.

	Level of Component Q-Qualification				Planned date	Delivery date	Comments
No.	Item	A	B	C			
1	BSH specification	X	X	X	-		
2	Feasibility study	X	X		-		
3	Tooling/ Capacity Planning	X			-		
4	Production Layout	X			-		
5	Process flow chart	X			-		
6	Control Plan	X			-		
7	Preventive Quality Assurance (PQA agreement)	X			-		
8	FMEA Product (Design and System)	E*			-		
9	Design Release	X			-		
10	Qualified laboratory documentation	X			-		
11	Supplier declaration on prohibited or declarable substances (RoHS,REACH)	X	X	X	-		
12	FMEA Process	E*			-		
13	Advanced quality planning (APQP)	X			-		
14	Packaging specification and concept	X			-		
15	List of test/measurement equipment	X			-		
16	Measurement System Analysis (MSA)	X			-		
17	Approval evidence for purchased parts from sub suppliers	X	X		-		
18	Machine capability analysis	X			-		
19	BSH Sample Inspection Report	X	X	X	-		
a	Measuring report / Dimension check	X	X	X	-		
b	Functional report/ Functional test				-		
c	Material report/ Material test	X			-		
d	Haptics/ Acoustics/ Odors				-		
e	Appearance				-		
f	Surface check				-		
g	Reliability test				-		
h	Other:				-		
20	Reference samples				-		
21	Process assessment (Audit) (2DP, Run@Rate)	X			-		
22	Process capability analysis	X	X		-		
23					-		
24					-		
25					-		

additional remark / zusätzliche Bemerkung :

Decision ☐ Release ☐ Limited release until Date: _____ Name (Factory/Dept.): _____

☐ No release Date: _____ Phone: _____

B/S/H/

Sample Inspection Report
Measuring Report

Report-No/Nr.:		Rev.		RP-No./Nr.:	60100012XY	Rev.	B	Page: 1 of	
Supplier:	Sample Producer GmbH	Serial No.:	8001123456			Ordering No.:	60100005347894		
Drawing No.:	5700 0001234567_	Part Designation:	Sample for Fridge			Supplier No.:	78945		
Drawing Status:	A 7, 29.08.2019					Quantity Ordered:	25		
Name / Dept.:	leasure / Measuring Depar	Phone:	12345 / 9999	Date:	29.08.2019	Signature:	M. Measure		

Incoming No.:	Incoming Date:	Incoming Quantity:	Drawing Status:	Date / Name:

Remark

Development department Decision Comment:
- ☐ Release
- ☐ No Release
- ☐ Limited Release until Date _____ Part responsible: _____ Department: _____ date: _____

Quality department Decision Comment:
- ☐ Release
- ☐ No Release
- ☐ Limited Release until Date _____ Responsible: _____ Department: _____ date: _____

Test results Cavity Formnest 1 of 5 Part weight (measured): Teile-Gewicht: 0,1Kg

Item-No.: Drawing Field:	Nominal value	Upper allowed deviation	Lower allowed deviation	Additional Information	Actual value (Supplier) 1	2	3	Actual value (Customer) 1	2	3	Change Drawing	New target value	Correct tool by supplier	Modify tool by BSH	Remarks (e.g. No. of Measured Parts)	Name
1	100	1	-1	3 Parts Measured with caliper	99,5	99,8	99,9								3 Parts Measured with caliper	
2	55	0,7	-0,7	3 Parts Measured with caliper	55	55,1	54,8								3 Parts Measured with caliper	
3	45	0,01	-0,02	3 Parts Measured with caliper	45	45	45								3 Parts Measured with caliper	

B/S/H/

Sample Inspection Report

Report-No/Nr.:		Rev.		RP-No./Nr.:	60100012XY	Rev.	B	Page: 1 of	
Supplier:	Sample Producer GmbH	Serial No.:	8001123456			Ordering No.:	60100005347894		
Drawing No.:	5700 0001234567_	Part Designation:	Sample for Fridge			Supplier No.:	78945		
Drawing Status:	A 7, 29.08.2019	Please select type of test:	**Functional Test**			Quantity Ordered:	25		
Name / Dept.:	;termann / Quality Mar	Phone:	Phone: 12345 - 9365	Date:	29.08.2019	Signature:	M. Mustermann		

Incoming No.:	Incoming Date:	Incoming Quantity:	Drawing Status:	Date / Name:

Remark

Functional Test has been done and is passed

Development department Decision Comment:
- ☐ Release
- ☐ No Release
- ☐ Limited Release until Date _____ Part responsible: _____ Department: _____ date: _____

Quality department Decision Comment:
- ☐ Release
- ☐ No Release
- ☐ Limited Release until Date _____ Responsible: _____ Department: _____ date: _____

Test results Cavity Formnest 1-5 of 5 Part weight (measured): Teile-Gewicht: 0,1 Kg

Item-No.: Drawing Field:	Nominal value	Upper allowed deviation	Lower allowed deviation	Additional Information	Actual value (Supplier) 1	2	3	Actual value (Customer) 1	2	3	Change Drawing	New target value	Correct tool by supplier	Modify tool by BSH

B/S/H/

Sample Inspection Report
Components List

Report-No/Nr.:		**Rev.**	**RP-No./Nr.:**	60100012XY	**Rev.** B
Supplier:	Sample Producer GmbH	**Serial No.:**	8001123456	**Ordering No.:**	60100005347894
Drawing No.:	5700 0001234567	**Part Designation:**	Sample for Fridge	**Supplier No.:**	78945
Drawing Status:	A 7, 29.08.2019	Appendices:		Quantity Ordered:	25
Name / Dept.:		Phone:		Date:	**Signature:**

Incoming No.:	Incoming Date:	Incoming Quantity:	Drawing Status:	**Date / Name:**

Only to fill out for assembly parts (>1 part)

Part-No.	Description	Serial No.	Drawing No.	Drawing Status	Material	Colour	Paint	No. of cavities	complete by BSH: MPP (Material)	complete by BSH: MPP (Measure)
1.	Plastic Part 1	8001123457	5700 0001234568	A 3 02.07.19	ISO 2580-ABS 1 EGN, 1272/2008	Nature		5		
2.	Plastic Part 2	8001123458	57001234569	B 4 09.08.19	ISO 2580-ABS 1 EGN, 1272/2008	Nature		5		
3.										

B/S/H/

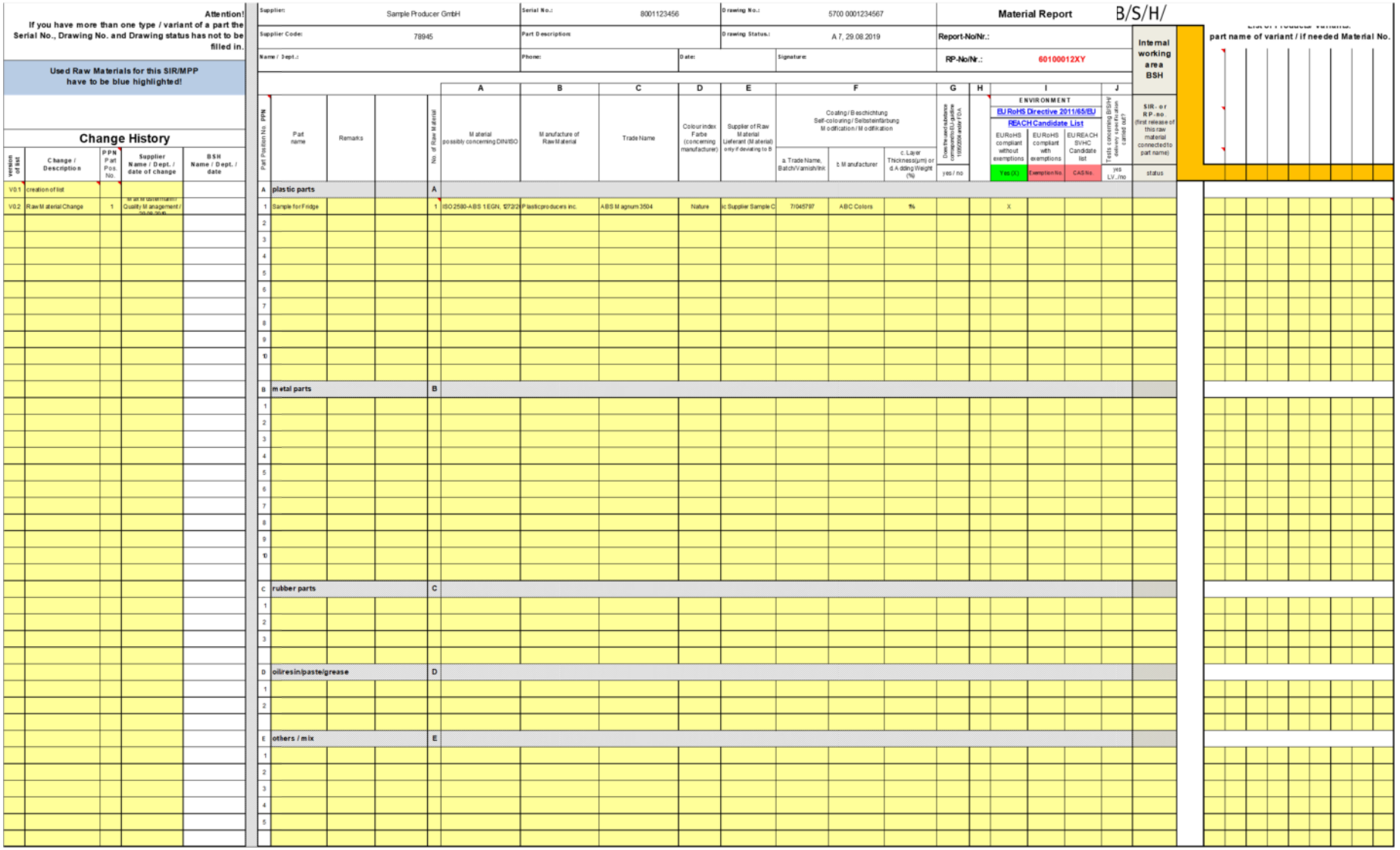
Sample Inspection Report
Process Capability Study

Report-No/Nr.:		**Rev.**	**RP-No./Nr.:**	60100012XY	**Rev.** B
Supplier:	Sample Producer GmbH	**Serial No.:**	8001123456	**Ordering No.:**	60100005347894
Drawing No.:	5700 0001234567	**Part Designation:**	Sample for Fridge	**Supplier No.:**	78945
Drawing Status:	A 7, 29.08.2019	Appendices		Quantity Ordered:	25
Name / Dept.:		Phone:		Date:	**Signature:**

Incoming No.:	Incoming Date:	Incoming Quantity:	Drawing Status:	**Date / Name:**

Results supplier of process capability

Item No.:	Parameter	Quantity / Conditions	Process Stable: yes	Process Stable: no	Capability Index: cmk	Capability Index: ppk	Capability Index: cpk	Remark
A3	Outside diameter(Left and right)_92±0.5	25	X				0.84	vernier caliper
A3	Outside diameter(Upper and lower)_92±0.5	25	X				1.38	vernier caliper
F1-2	Hight_2_32+0.5/-0.2	25	X				1.65	vernier caliper



Attention!
If you have more than one type / variant of a part the Serial No., Drawing No. and Drawing status has not to be filled in.

Used Raw Materials for this SIR/MPP have to be blue highlighted!

Change History

version of list	Change / Description	PPN Part Pos. No.	Supplier Name / Dept. / date of change	BSH Name / Dept. / date
V0.1	creation of list			
V0.2	Raw Material Change	1	Martin Mustermann / Quality Management / 29.05.2015	

Supplier:	Sample Producer GmbH	Serial No.:	8001123456	Drawing No.:	5700 0001234567	Material Report	B/S/H/
Supplier Code:	78945	Part Description:		Drawing Status.:	A 7, 29.08.2019	Report-No/Nr.:	
Name / Dept.:		Phone:		Date:		Signature:	
						RP-No/Nr.:	60100012XY

Internal working area BSH

part name of variant / if needed Material No.

Part Position No. PPN	Part name	Remarks		No. of Raw Material	A Material possibly concerning DIN/ISO	B Manufacturer of Raw Material	C Trade Name	D Colour index Farbe (concerning manufacturer)	E Supplier of Raw Material Lieferant (M aterial) only if deviating to B	F Coating / Beschichtung Self-coloring / Selbstenfärbung Modification / Modifikation: a. Trade Name, Batch/Varnish/Ink	F: b. Manufacturer	F: c. Layer Thickness(µm) or d. Adding Weight (%)	G Does the used substance corresponds EU-guideline 2002/95/EG (RoHS)	H	I ENVIRONMENT: EU RoHS Directive 2011/65/EU compliant without exemptions	I: EU RoHS compliant with exemptions	I: EU REACH SVHC Candidate list	J Tests concerning (SIR/MPP delivery specification carried out?	SIR- or RP-no. (first release of this raw material connected to part name)
													yes / no		Yes (X)	Exemption No.	CAS No.	yes LV-/no	status
A	plastic parts			A															
1	Sample for Fridge			1	ISO 2580-ABS 1 EGN, 27/22/2	Plasticproducers inc.	ABS Magnum 3504	Nature	ic Supplier Sample C	7/045787	ABC Colors	%			X				
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
B	metal parts			B															
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
C	rubber parts			C															
1																			
2																			
3																			
D	oil/resin/paste/grease			D															
1																			
2																			
E	others / mix			E															
1																			
2																			
3																			
4																			
5																			