Leaflet on Sampling

1 Contractual basis 合同基础

The drawing, 3D model, technical delivery terms and other technical specifications for the part to be supplied constitute the contractual basis for the initial sample inspection.

要供应的部件的图纸， 3D 模型，技术交付条款和其他技术规格是初始样品检查的合同基础。
The initial sample inspection demonstrates that the part as "initial sample" (definition: manufactured using the final production equipment and tools under series production conditions), including all required documentation, complies with the contractual requirements.
初始样品检查要求初始样品（定义：使用最终生产设备和工具在常规生产条件下生产的）符合合同要求中包含的所有要求文档
In the event of any discrepancies between the requirements defined in the leaflet on sampling and those defined in the Process Requirements, the Process Requirements shall prevail.
如果样品手册中定义的要求与流程要求中定义的要求有任何差异，则以流程要求为准

2 Release as a Prerequisite for Series Delivery 释放是量产交付的前提条件

The initial samples, including the documentation, must be submitted to BSH Hausgeräte GmbH and its affiliates (hereinafter referred to as "BSH") by the agreed sample deadline. Series production and deliveries of products may only begin once the supplier has demonstrated their ability to meet the specified Process Requirements and the BSH Quality Management (hereinafter referred to as "BSH QM") has granted the part release.
初始样品包括其文件应按约定的送样时间提交给博西华家电及其附属机构（以下简称"BSH"）。只有在供应商证明其有能力满足规定的过程要求并且获得 BSH 质量管理部（以下简称"BSH QM"）的批准后，产品才能正常交货。

If, by way of exception, only a limited release can be granted by BSH, deliveries may only be made in accordance with the provisions outlined in the inspection report (conditions, quantity, schedule). If neither a limited nor an unlimited release has been granted, series deliveries are not permitted.
作为例外，如果BSH只能批准限度释放，则只能按照释放报告中规定 (条件，数量，时间表) 进行交付。 没有释放或限度释放的件不允许批量交付。

If the supplier receives a series delivery order although no release has been granted, he must request the release from BSH in a timely manner.
如果部件没有释放，但供应商却收到了量产交货订单，供应商必须及时向BSH申请批准。

With the release of the submitted initial samples, the supplier undertakes to guarantee that the products in series production consistently meet the quality of the approved samples.
部件释放后，供应商要确保量产部件始终符合释放时的部品质量。

3 Component Qualification Planning (CQP) 部件合格策划

With the request for quotation, criteria for the required component qualification planning (CQP, with reference to PPAP/PPF), will be provided to the supplier as part of the Process Requirements document. The aim is to ensure an early involvement of the supplier in BSH`s product development process.

过程要求、部件合格策划(参考 PPAP/PPF)等标准文件在询价时发给供应商,其目的是确保供应商尽早参与 BSH的产品开发流程。
The component qualification planning is intended to provide an overview of the specific BSH requirements, which are mandatory for the part and process qualification.
部件合格策划提供了BSH要求的概括，这些要求对于部件和过程释放是强制性的。

The part classification (A/B/C) is defined by BSH and is based on both the functional relevance of the purchased part in the final product and the complexity of its production process. The part classification defines the scope of required release documentation.
基于最终产品中所需的部件功能以及其生产流程的复杂性，BSH定义了部件的分类 (A/B/C)， 且根据部件类型定义了释放时所需的相关文档。

The supplier must incorporate the requested activities according to the component qualification planning in their internal project planning and comply with the delivery deadlines for required information and release documentation as agreed with BSH QM
供应商必须根据部件合格策划将所有要求纳入其内部项目计划，并按照与BSH QM达成的协议，在规定时间内提交所需的信息和释放所需的文件资料。

With the submission of the offer, the supplier confirms the fulfillment of the requirements for component qualification and the further contractual obligations in section 1.
在提交报价时，供应商需要确认是否能满足部件合格策划要求以及第 1 节中的合同要求。

Any deviations, risks, or further comments regarding the contractual foundations in accordance with section 1 must be indicated through the feasibility study (Feasibility Commitment) and agreed with BSH before conclusion of the contract.
如有与第 1 点合同要求中要求有偏差、风险或其它的意见，必须在可行性研究（“可行性研究承诺”）中明确表明，并且在合同签订之前得到 BSH 的同意。

In the event of changes, the supplier must send an updated Feasibility Commitment document to BSH without prior request.
如果发生变更，供应商须主动向 BSH提交一份更新的可行性承诺。

4 Scope of the Initial Sample Inspection

With the initial sample inspection, the supplier demonstrates the following: 初始样品需满足以下要求

- the part meets the contractual requirements according to section 1 部件需符合合同要求中的第一条
- the part is inspectable and measurable at the supplier 供应商需自测
- the compliance of the used substances and materials with the applicable legal requirements, such as RoHS, REACH, as well as any customer-specific requirements 使用的材料必须符合法规要求，如RoHS,REACH以及客户要求。

Before start of serial production and deliveries, initial samples must be submitted in a timely manner. This applies to the following cases: 在批量交货开始前，初始样品必须及时提交且遵守以下情况

- Any changes to the PRODUCT, particularly any changes to functionally, processing- or safety-relevant product parts (e.g. bought-in parts, material) 产品的任何变更，特别是与功能/过程或安全相关的变更（如外购件、材料）
- Changes to manufacturing processes, equipment, procedures and materials 制造工艺、设备程序和材料的变更
- Change of a sub-supplier 子供应商的变更
- Changes in test procedures, equipment 测试程序/设备的变更
- Relocation or establishment of production sites 生产地址的搬迁或新建
- Other changes where an influence on the quality cannot be excluded 其它不能排除对质量产生影响的变更
- For necessary follow-up sampling due to an expiring limited release由 限度释放到期需要的再次交样

In the event of process changes, or if no deliveries have been made during the last two years, the need for a renewed initial sampling must be clarified with the BSH QM of the respective location. Any deviation from the specifications must be resolved or agreed with BSH before the initial samples are shipped.
如果过程发生变更或者在过去的两年中没有交货，则必须与各自地区的BSH-QM沟通确定重新送样的需求。任何与标准的偏差必

须在初始样品交付前解决或得到BSH认可。

The initial sample inspection of the supplier must be performed with suitable and calibrated measuring equipment.
供应商的初始样品测试必须使用合适的、校准的测量设备进行。

5 Inspection Report of the Supplier 供应商测试报告

The supplier is requested to use the BSH templates for the initial sample presentation and, if available, to include the measurement machine protocol or measurement machine report.

初始样品的测量报告必须使用BSH报告模板, 如果有的话，可提供测量设备的原始报告。

The electronically completed documents, as well as additional documents for the clear assignment of the specified criteria, are to be sent to the email address specified by BSH or uploaded through a BSH-specified portal.
供应商应将填写好的电子文件和明确要求的相关文档发送到BSH指定的电子邮件或者使用 BSH指定的门户网站发送。

If the documents are sent in advance via email, the subject line must include the supplier’ s name and at least one material number.
如果文件通过电子邮件发送，主题栏内容必须包括供应商的名称和至少一个物料号相关信息。

6 Inspection Scope for Special Characteristics

Safety characteristics (former Critical Characteristic (CC)) 安全特性（先前的关键特（CC))

A characteristic is safety-relevant, when already a minimal deviation of the characteristic leads directly to an immediate risk to life and limb. 安全特性是指此特性的最小偏差也会直接导致生命和身体的危害。

For safety characteristics, BSH requires that 100% of the parts comply with the tolerance limits. This always applies to all measurements. 对于安全特性需要100% 测量且符合公差要求

Legal characteristics (former Significant Characteristic (SC)) 法律特性（先前的显著特性（SC))

A characteristic is legally relevant, if the characteristic does directly reflect an individual legal requirement.

如果一个特性与法律要求直接相关，则该特性是法律相关的特性。

For **release of parts**, the machine capability needs to be ensured. The short-term process capability $C_{pk\text{-}ST} \geq 1{,}67$ has to be proven. For **series production**, a risk-based inspection method (e.g. SPC $C_{pk} \geq 1{,}33$, Poka Yoke system, inline detection, OK/NOK…) including the scope of inspection (n and m) must be defined. For details, see following table.

部件释放时要确保设备能力，短期工程能力需要达到$C_{pk\text{-}ST} \geq 1.67$。批量生产时，抽样方法(如SPC $C_{pk} \geq 1{,}33$, 防呆系统 ，在线检测，合格/不合格…) 和范围(数量和批次)需明确定义。细节参见下表。

Functional characteristics (former Significant Characteristic (SC)) 功能特性（先前的重要特性（SC))

A characteristic is functionally relevant, if already a minimal deviation of the characteristic leads to the early, unexpected break down of a product key functionality or of the product itself during the use in the field.

功能特性是该特性如有很小的偏差也会导致产品主要功能或使用在市场上的早期故障。

For **release of parts**, the machine capability needs to be ensured. The short-term process capability $C_{pk\text{-}ST} \geq 1{,}67$ has to be proven. For **series production**, a risk-based inspection method (e.g. SPC $C_{pk} \geq 1{,}33$, Poka Yoke system, inline detection, OK/NOK…) including the scope of inspection (n and m) must be defined. For details, see following table.

部件释放时要确保设备能力，短期工程能力需要达到$C_{pk\text{-}ST} \geq 1.67$。批量生产时，抽样方法(如SPC $C_{pk} \geq 1{,}33$, 防呆系统,在线检测，合格/不合格…) 和范围(数量和批次)需明确定义。细节参见下表。

Inspection characteristics (former Important Characteristic)　　检验特性（先前的重要特性）

Inspection characteristics are not special characteristics but are used to document qualitative product features that have a certain impact on quality and are not critical to safety or legally relevant.

检特征不是特殊特征，而是用于记录对质量有一定影响，对安全不重要或法律上不相关的定性产品特征。

For **release of parts**, the machine capability needs to be ensured. The short-term process capability $C_{pk\text{-}ST} \geq 1{,}67$ has to be proven. For **series production**, the processing of inspection characteristic during ongoing production is contained in the relevant transfer document (e.g. Control Plan) and is a result of the alignment between the supplier and the BSH-technical team. For details, see following table.

部件释放时要确保设备能力，短期工程能力需要达到$C_{pk\text{-}ST} \geq 1.67$。批量生产时，检验特征的控制需包含在相关文件中(如 控制计划)，是供应商与 BSH 技术团队协调一致的结果。 细节参见下表。

Manufacturing characteristics　　制造特性

Product characteristics relevant to process control must be documented on the drawing where applicable. These characteristics are used to control or to monitor the process.

与工艺控制相关的产品特性须在图纸上标注(如适用)， 这些特征用于控制或监控流程。

General characteristics (former Relevant Characteristics)　　一般特性（先前的相关特性）

General characteristics are not special characteristics. The category is used for dimensions, which have minor influence on safety, function or manufacturing processes.

一般特征不是特殊特征。 该结构尺寸对安全，功能或制造流程影响不大。

For part release, the parts need to be within specification. For **series production**, the processing of a relevant characteristic during ongoing production is contained in the relevant transfer document (e.g. Control Plan) and is a result of the alignment between the supplier and the BSH-technical team.

部件释放时符合规格要求。批量生产时，检验特征的控制需包含在相关文件中(如 控制计划)，是供应商与 BSH 技术团队协调一致的结果。

Overview Chart

As of 15.07.2024, the notation of special characteristics in BSH has been changed. Existing drawings remain valid, the symbol reference between old and new is shown in the table below.

截至15.07.2024， BSH中特殊特性的符号已经更改。现有图纸仍然有效，新旧图纸之间的符号引用如下表所示。

Inspection measures for characteristics

used until 06/2024		Special characteristics				
	Category	1. Critical characteristics 123,45 ±0,2 CC	2. Significant characteristics 123,45 ±0,2 SC	3. Important characteristics 123,45 ±0,2	4. Relevant characteristics 123,45 ±0,2	

Used from 07/2024		Special characteristic			Additional characteristic		
	Category	Safety characteristic 123,45 ±0,2 S	Legal characteristic 123,45 ±0,2 L	Functional characteristic 123,45 ±0,2 F	Inspection characteristic 123,45 ±0,2 I	General characteristic 123,45 ±0,2	Manufacturing characteristic 123,45 M
	Criterion before series release	Compliance must be ensured for any delivery to BSH!					
	Criterion for restricted series release	Same as criterion during running production	Proof of manufacturability by means of a machine capability analysis must be provided in a suitable form. ($C_{mk} \geq 1,67$)			within tolerance	Relevant tolerances to be defined from process responsible inside the control plan or inspection plan. No general tolerances valid.
	Criterion for unrestricted series release	Same as criterion during running production	Statistical evidence of process capability must be provided in a suitable form. ($C_{pk\text{-}ST} \geq 1,67$)			within tolerance	
	Criterion during running production	A risk-based inspection method (e.g. SPC Cpk ≥ 1,33, Poka Yoke system, inline detection, OK/NOK…) including the scope of inspection (n and m) must be defined for each characteristic in the transfer document (QAP, control plan, inspection plan or similar) and in alignment with the BSH technical team.			according to QAP, control plan, inspection plan or similar in alignment with the BSH technical team		

Applicable to **all special characteristics**: If a risk-based inspection method cannot be applied, a 100% test must be carried out.

适用于所有特殊特征：如果无法应用基于风险的检查方法，则必须执行 100% 测试。

n / m	**n**: Quantity of parts in a row / **m**: Number of representative production lot or batch, representing diverse events (e.g. shifts, material change, make-ready process, etc.) to have all possible influences which affect the manufacturing process. n 表示：一行中部件的数量/ m 表示：代表性的生产批次或批号，代表各种事件（例如，班次、材料变更、准备工艺等），具有影响制造工艺的所有可能的影响。
SPC	Statistical Process Control incl. regularly process capability revalidation, SPC is only applicable, if there is a technical possibility to adjust the process. 统计过程控制，包括定期过程能力确认， SPC 仅适用于有技术可能性可调整优化流程的情况。
C_{mk} Machine capability index	The machine capability needs to be proven (usually with C_{mk} ≥1,67 for 50 parts). The minimum requirement for the number of produced and measured parts are 50 (100 parts would be even more beneficial). If this number can´t be met, the C_{mk}- value increases accordingly. The calculations needs to be done with regards to Bosch Booklet No. 9 and in alignment with the BSH technical team. 设备能力需要得到证明（通常50个部件的 Cmk≥1,67）。对生产和测量的部件数量的最低要求是50个（100个部件将更有利）。如果不能满足这个数量， Cmk值将相应增加。计算需要根据博世手册第9号进行，并与BSH技术团队保持一致。
$C_{pk\text{-}ST}$ Process capability index short-term (former P_{pk})	To use parts in series production the relevant characteristics need to have a proven process capability. For the start a $C_{pk\text{-}ST} \geq 1,67$ has to be proven. If the usual scope of inspection n=5 and m=25 can´t be used for the calculation, a possible suitable scope must be specified with regards to the process, in accordance with Bosch Booklet No. 9 and in alignment with the BSH technical team 批量生产部件的相关特性需要有充分的过程能力。首先要求Cpk-ST≥1,67。如果不能按通常的检验范围 n=5 和 m=25来计算，则必须根据博世手册第9号进行，并与 BSH技术团队协商一致确定合适的过程能力要求。
C_{pk} Process capability index	To use parts in series production the relevant characteristics need to have a proven process capability. Usually, $C_{pk} \geq 1,33$ has to be proven. If the usual scope of inspection n=5 and m=25

	can´t be used for the calculation, a possible suitable scope must be specified with regards to the process, in accordance with Bosch Booklet No. 9 and in alignment with the BSH technical team 批量生产部件的相关特性需要有充分的过程能力。一般要求Cpk≥1,33。如果不能按通常的检验范围 n=5和m=25来计算，则必须根据博世手册第9号进行，并与 BSH技术团队协商一致确定合适的过程能力要求。

7 Contents of the Inspection Report

Together with the initial samples, the supplier must submit an inspection report in the format specified in section 5, covering all characteristics defined in the contractual basis outlined in section 1, which demonstrates:

与初始样品一起，供应商必须以第5条中规定的格式提交检查报告，其中包括第1条所述合同基础中定义的所有特征，这些特征表明：

- Revision status of the drawing and other base documents 工程图和其他基本文件的版本状态
- Indication of the tool as well as cavity nests in multi-cavity tools 模具信息包括多模穴
- Information about sub-suppliers 子供应商信息
- For each characteristic: 对每一个特性
  - Target value with tolerance 数值及公差
  - Actual value 实际值
  - Highlighting the characteristic when actual value is outside the tolerance 标记出实际值超出公差的特性
- For multi-cavity tools: separate inspection protocol for samples from each cavity 对于多模穴：每个穴都需有测量报告
- Clear identification of the samples included in the inspection report to ensure results can be matched 为了将测量值与相应的部件相关联，必须对部件进行清晰的标记
- Sample part weight information in grams or kilograms 部件的重量或公斤
- For special characteristics: 对于特殊特性
  - Sampling scope and sample size 样本范围和样本量
  - Mean and standard deviation (variation) 平均和标准偏差
  - Capability indices 能力指数

The individual values from the respective machine or process capability analyses must be provided.
必须提供来自相应机器或工程能力分析的单个值。

Machine and preliminary process capability, as required according to the characteristic category, must be proven with the initial sample documentation (see description section 6).
根据特性类别的要求，机器和初始工程能力必须通过初始样品文档加以证明 (请参阅描述第 6 条)。

The evidence of long-term process capability is to be submitted to BSH proactively as soon as possible.
长期过程能力的证据将尽快主动提交给 BSH。

8 Shipping and Secure Receipt

The secure and prompt shipment of initial samples with inspection reports is of particular importance, especially in time-critical projects.

基于项目时间的紧要性，快速可靠地提供初始样品和测试报告尤为重要。

- Initial samples must not be delivered together with regular production shipments 初始样品不能与常规货物一起交付
- Delivery in separate containers or packaging with a separate delivery note including the order details

样品必须单独包装并带有自己的发货提单，包括订单的详细信息。

- Adequate protection of the parts against damage and environmental influences
  样品必须充分保护免受损坏和环境因素的影响
- Containers or packaging must be clearly marked with “Sample Shipment” （“Mustersendung”）
  包装上必须清楚地标明“样品”

BSH ‘s forms and guidelines must be used and strictly followed. 必须使用并严格遵守 BSH的表格和要求

Further information on this can be found in the BSH Supplier Quality Assurance Manual:
更多的信息请参见 BSH供应商质量保证手册：
https://ocp.bsh-group.com/en/documents

For any questions, contact the designated BSH QM representative.
如果您有任何问题，请与 BSH- QM相关联系人联系。