组装半成品成品检验流程

Specification for Inspection of Assembled Semi-finished Products and Finished Products

审批和会签记录 **Approval and countersign record**

制定 Author			审核 Verify		
批准 Approve					
部门会签 discussion and review of all department					
部门 Department	签名 Signature	日期 Date	部门 Department	签名 signature	日期 date
☐APD			☐SPD		
☐AENG			☐SENG		
☐AEM			☐SEM		
☐QM			☐PMC		
☐HR			☐ADM		
☐STE					
收文单位 File distribution range	APD/AENG/AEM/PMC/QM				

文件修订记录 Document revision resume

序号 SN	版本 Version	修订日期 Revision date	修订内容 revise contents	修订人 Reviser
1	1.0	2021.10.13	首次发行 Initial release	Titus

1. 目的 purpose

规范各阶段的半成品、成品的检验流程，及时发现品质异常，快速消除质量隐患，保证产品品质。

Standardize the inspection process of semi-finished products and finished products at all stages, discover quality abnormalities in time, quickly eliminate quality hazards, and ensure product quality.

2. 适用范围 Range of application

本流程适用于公司组装各制造过程的半成品、成品的检验。

This process is applicable to the inspection of semi-finished products and finished products in each manufacturing process of the company's assembly

3. 权责 Duty

流程主导 The leader of the process leading		
责任部门 Responsible Dept	目标及职责 AIM & Responsibility	责任人 Person in charge
质量部 Quality Department	1. 对组装一检二检产品进行检验，数据记录及反馈； Perform inspection, data recording and feedback on assembled products with first inspection and second inspection; 2.对包装线体的产品进行检查。 Check the products of the packaging line.	QC
主要业务场景 The Main Scenario		
责任部门 Responsible Dept	目标及职责 AIM & Responsibility	责任人 Person in charge
PMC	负责各阶段的半成品、成品的入库保存。 Responsible for the storage and storage of semi-finished products and finished products at various	仓管员 Warehouse Clerk

	stages.	
质量部 Quality Department	负责标准的制定维护、风险评估、异常处理。 Responsible for the formulation and maintenance of standards, risk assessment, and exception handling.	QE
生产部 Production Department	1. 按计划进行生产并按要求送产品给质量部进行检验； Carry out production as planned and send products to the quality department for inspection as required; 2. 对检验过程中发现异常的产品进行返工返修处理； Rework and repair the products found to be abnormal during the inspection process; 3.负责生产过程中半成品、成品的自检互检，数据记录及反馈。 Responsible for self-inspection and mutual inspection, data recording and feedback of semi-finished and finished products in the production process.	作业员/生产拉长 Operator/Produce Line-leader

4. 定义 Definition

无 None

5. 工作程序 Working Procedure

5.1. 组装一检 Assembly inspection

5.1.1 组装结束后，由生产部将合格的产品送到一检 QC 处。

After the assembly is completed, the production department will send the qualified products to the QC of the first inspection.

5.1.2 一检 QC 功能检测：根据《组装测试作业指导书》对单机头 100%进行功能检验。

QC functional inspection: 100% functional inspection of the single product according to the "Assembly and Testing Operation Guide".

5.1.3 功能检测完成后每台机由 QC 录入 MES 系统，合格的在录 MES 系统后流转到音频/耦合测试

工序进行检测，不合格的记录在《检验日报表》中，并在 MES 系统中扫入黑名单由生产部按《组包返工/返修规范》处理；

After the functional inspection is completed, each machine is entered into the MES system by QC, and the qualified ones are recorded in the MES system and then transferred to the audio/coupling test process for inspection. The unqualified ones are recorded in the "Inspection Day Report" and scanned in the MES system. The list will be processed by the production department in accordance with the "Assembly and packaging repair specification";

5.1.4 音频/耦合测试后不合格的产品记录在《检验日报表》中，由生产部按《组包返工/返修规范》处理，合格的则流转去 RQC1。

After the audio/coupling test, the unqualified products are recorded in the "Inspection Day Report" and processed by the production department in accordance with the "Assembly and packaging repair specification", and the qualified products will be transferred to RQC1.

5.1.5 RQC1 根据《RQC1 检验作业指导书》和《移动电话检验标准》对机头进行检验。检验完成后将机头 SN 录入 MES 系统，合格的在录 MES 系统后直接装箱，贴“箱标”并盖章由生产部送到老化房老化；不合格的记录在《检验日报表》中，并在 MES 系统中扫入黑名单由生产部按《组包返工/返修规范》处理。

RQC1 inspects the machine according to "RQC1 Inspection Operation Guide" and "Mobile Phone Inspection Standard". After the inspection is completed, enter the SN of the machine head into the MES system, and the qualified ones will be directly packed in the box after the MES system is recorded, and the "box label" will be attached and stamped, and the production department will send it to the aging room for aging; unqualified records will be recorded in the "Inspection Day Report" , And swept into the blacklist in the MES system and processed by the production department in accordance with the "Packaging Rework/Rework Specification".

5.1.6 检验过程中发现质量异常参照《不合格品控制程序》和《质量异常处理流程》处理。

The quality abnormality found during the inspection shall be handled with reference to the "Non-conforming Product Control Procedure" and the "Quality Abnormality Handling Process".

5.2. 组装二检 Assembly second inspection

5.2.1 老化结束后，由生产部将老化合格的产品送到二检 QC 处。

After the aging is over, the production department will send the qualified aging products to the second inspection QC.

5.2.2 二检 QC 功能检测：根据《组装测试作业指导书》对机头 100%进行功能检验。

Second inspection QC function inspection: 100% functional inspection of the machine according to the "Assembly and Test Operation Guide".

5.2.3 写码、对码：二检 QC 功能检验完成后流转到写码岗位；为防止标签码段异常、IMEI 等问题，写码对码过程中发现的异常，第一时间反馈测试拉长处理；对码完成后流转至镭雕工位。

Code writing and code matching: After the second inspection QC function inspection is completed, the flow will be transferred to the code writing position; in order to prevent label code segment abnormalities, IMEI and other problems, the abnormalities found in the process of writing code and code, the first time feedback test lengthening processing; After the code is completed, it is transferred to the laser carving station.

5.2.4 镭雕完成后，需确认镭雕信息是否与机标 IMEI1 一致、镭雕偏位等问题，发现重新更换卡托进行镭雕，良品续流至贴膜工位。

After the laser engraving is completed, it is necessary to confirm whether the laser engraving information is consistent with the machine standard IMEI1, and the laser engraving is offset. It is found that the tray is replaced for laser engraving, and the good products continue to flow to the filming station.

5.2.5 外观检查：贴好保护膜的机头流转给 RQC2 进行外观全检，RQC2 根据《RQC2 检验作业指导书》和《移动电话检验标准》对机头进行外观检查，完成后每台机由 QC 录入 MES 系统，合格的在 MES 系统中过 RQC2 站点，然后由 QC 装箱并将 RQC2 的箱标贴于箱外，盖章后由生产部入库；不合格的则记录在《检验日报表》中，并在 MES 系统中扫入黑名单由生产部按《组包返工/返修规范》处理。

Appearance inspection: The machine head with the protective film will be transferred to RQC2 for appearance inspection. RQC2 will perform appearance inspection on the machine head according to the "RQC2 Inspection Operation Guide" and "Mobile Phone Inspection Standards".

After completion, each machine will be entered by QC into MES System, the qualified ones go through the RQC2 site in the MES system, and then the QC packs the boxes and the RQC2 box labels are affixed to the outside of the box, and the production department enters the warehouse after being stamped; the unqualified ones are recorded in the "Inspection Day Report", The blacklist is scanned in the MES system and processed by the production department in accordance with the "Packaging Rework/Rework Specification".

5.2.6 检验过程中发现质量异常参照《不合格品控制程序》和《质量异常处理流程》处理。

The quality abnormality found during the inspection shall be handled with reference to the "Non-conforming Product Control Procedure" and the "Quality Abnormality Handling Process".

5.3. 包装 Package

5.3.1 生产部根据计划对包装盒、包装配件进行加工。

The production department processes the packaging boxes and packaging accessories according to the plan.

5.3.2 OQC 在线整机抽检：OQC 在流水线上依据《OQC 检验作业指导书》进行抽样（覆盖率 10%以上），抽检先检查彩盒外观和标签、再检查配件符合性及功能、最后检查单机头外观及功能，检查完成后在 MES 系统中录入检查信息，合格则正常流转，不合格的则反馈 QE 参照《不合格品控制程序》和《质量异常处理流程》处理。

OQC online whole machine sampling inspection: OQC conducts sampling in accordance with the "OQC Inspection Operation Guide" on the assembly line (coverage rate is more than 10%). The sampling inspection first checks the appearance and label of the color box, then checks the compliance and function of the accessories, and finally checks the appearance of the single head And function, after the inspection is completed, enter the inspection information in the MES system. If it is qualified, it will flow normally, and if it is unqualified, it will be fed back to QE with reference to "Non-conforming Product Control Procedure" and "Quality Exception Handling Process".

5.3.3 装箱：整机抽检 OK，由生产部对包装好的产品进行塑封和装箱，打印 IMEI 清单放入卡通箱，并打印箱标等进行粘贴。

Packing: The whole machine is selected for random inspection. The production department will plastic seal and pack the packaged products, print the IMEI list and put it into the cartoon box, and print the box label for pasting.

5.3.4 IPQC 卡通箱检查：IPQC 根据《成品检验作业指导书》巡检时每 2 小时抽检 4 箱，每箱抽检 2PCS 核对 IMEI 号是否与箱标一致，同时确认是否符合包装规范，是否有错漏混等问题，在卡通箱检查时没有异常则盖“OQC PASS”章由生产部入库，若发现不合格则反馈 QE 按《不合格品控制程序》和《质量异常处理流程》处理。

IPQC cartoon box inspection: IPQC randomly inspects 4 boxes every 2 hours according to the "Product Inspection Operation Guide", and 2PCS for each box to check whether the IMEI number is consistent with the box label. At the same time, confirm whether it meets the packaging specifications and whether there are any problems such as mistakes and omissions. If there is no abnormality during the inspection of the cartoon box, the “OQC PASS” chapter shall be affixed to the storage by the production department. If unqualified, the QE shall be reported to be handled in accordance with the "non-conforming product control procedure" and the "quality abnormality handling process".

6. 相关文件和记录 Relevant documents and records

6.1. 生成记录 Generated records

序号 SN	文件/表单名 Document/form name	文件/表单编号 Document/form No
1	《检验日报表》 "Inspection Day Report"	TK-P-QM-012-01A

6.2. 引用记录 Reference records

无 None

6.3. 相关文件 Relevant documents

6.3.1《不合格品控制程序》

“Nonconforming product control procedure”

6.3.2《质量异常处理流程》

"Quality Exception Handling Process"

6.3.3《RQC1 检验作业指导书》

"RQC1 Inspection Work Instructions"

6.3.4《OQC 检验作业指导书》

"OQC Inspection Work Instructions"

6.3.5《组装测试作业指导书》

"Assembly Test Operation Guide"

6.3.6《RQC2 检验作业指导书》

"RQC2 Inspection Work Instructions"

6.3.7《组包返工/返修规范》

"Package Rework/Rework Specification"

6.3.8《成品检验作业指导书》

"Finished Product Inspection Work Instructions"

6.3.9《移动电话检验标准》

"Mobile Phone Inspection Standards"

7. 流程图 Flow Chart

7.1. 无 None