制程检验标准

Process Inspection Standard

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1.目的: 为检验员制程检验提供检验依据

Purpose: to provide inspection basis for inspector process inspection

2.适用范围: 所有的连接器及焊线束

Scope of application: All connectors to wire harnesses

3.抽样方法

Sampling method

3.1.IPQC 检验时,根据本检验指导书的第 5 点的要求进行检验;

At IPQC inspection, the inspection is performed in accordance with point 5 of this inspection instruction;

3.2.IPQC 检查产品的外观时根据产品抽样计划及允收水准（AQL）表，单次抽样，一般水平Ⅱ级，(AQL: Cr=0.01, Maj=0.65, Min=1.5)进行抽样，其他检验项目根据本检验指导书的第 6 点的要求进行检验；接收水准为收 0 退 1。

IPQC inspection of the appearance of products according to the product sampling plan and acceptance level (Aql) table, a single sampling, general level II, (AQL: CR = 0.01, Maj = 0.65, min = 1.5) sampling, other inspection items shall be inspected in accordance with the requirements of Point 6 of this inspection instruction; the acceptance level shall be 0/1.

3.3.当客户有特殊要求时，依照客户的抽样方法进行检查。

When the customer has special requirements, follow the customer's sampling method.

4.不良处理: 不良品通知生产部和技术部，由品质主管跟踪处理方案及改善结果。

Poor management: defects are notified to the production department and the Technical Department, and the quality supervisor follows up the treatment plan and improvement results.

5.检测条件: 检验区域的亮度是 1000LUX±100，30~40 瓦的灯源；人眼与被检验产品表面的距离为 30~40 厘米, 检验产品时旋转零件，使眼睛的视线与被检产品表面夹角成 10-90 度的范围，每个面检查的时间不超过 10 秒。

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Test conditions: the luminance of the inspection area is 1000 lux ± 100,30 ~ 40 watt light source, the distance between the human eye and the surface of the product being examined is 30 ~ 40 cm, the part is rotated during the inspection, make the eye line of sight and the product surface angle into 10-90 degrees range, each surface inspection time does not exceed 10 seconds.

6.检验项目和标准

Test items and standards

序号 S/N	检验项目 Inspection	检测标准/内容 Test criteria/content	方法/工具 Methods/tools	抽样数 Sample size
6.1	物料 Materials	物料型号与图纸、BOM 一致，无混料 Material model is consistent with drawing and Bom, no mixing	目测 Visual inspection	每款 10PCS 10 pcs each
6.2	压针 Pressure the contacts	绝缘体移印完整 、清晰 Insulator pad printing complete and clear	目测 Visual inspection	FAI: 1PCS/批 FAI: 1 pcs/lot IPQC:3PCS/小时 IPQC: 3PCS/h
		压绝缘体针时是否有大头针/压偏/深浅等不良现象 Whether there is any pin/bias/depth when pressing the insulator needle		
		绝缘体表面无黑点、无开裂、无移印不清错位 Insulator surface without black spots, no cracking, no transfer printing unclear dislocation		
6.3	外壳点漆 Coat dot paint	外套是否有电镀不良 If the coat has poor plating	目测 Visual inspection	FAI:1PCS/批 FAI: 1 pcs/lot IPQC:3PCS/小时 IPQC: 3PCS/h
		外套是否有碰伤及其它结构缺陷 Whether the coat has bruises and other structural defects		
		点漆是否在点漆内、无缺、溢等现象，颜色符合要求 Whether the paint is in the paint, no defect, overflow and other phenomena, color meet the requirements		
6.4	压接壳体与绝缘体组件 Housing and insulator assemblies	绝缘体移印完整 、清晰 Insulator pad printing complete and clear	目测 Visual inspection	FAI: 1PCS/批 FAI:1 pcs/lot 3PCS/小时 3PCS/h
		压绝缘体针时是否有大头针/压偏/深浅等不良现象 Whether there is any pin/bias/depth when pressing the insulator needle		

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		绝缘体表面无黑点、无开裂、无移印不清错位 Insulator surface without black spots, no cracking, no transfer printing unclear dislocation		
6.5	外壳点漆 Coat dot paint	外套是否有电镀不良 If the coat has poor plating 外套是否有碰伤及其它结构缺陷 Whether the coat has bruises and other structural defects 点漆是否在点漆内、无缺、溢等现象，颜色符合要求 Whether the paint is in the paint, no defect, overflow and other phenomena, color meet the requirements	目测 Visual inspection	FAI: 1PCS/批 FAI: 1 pcs/lot 3PCS/小时 3PCS/h
6.6	压接壳体与绝缘体组件（插座） Housing and insulator assemblies (sockets)	检查插座壳体、接地弹簧与绝缘体组件符合 BOM 要求 Check socket shell, grounding spring and insulator components to meet BOM requirements 检查压接后绝缘体不可晃动 Check that the insulator can not shake after crimping 与对应插头互配顺畅 Match with the corresponding plug smoothly	目测/徒手 Visual/unarmed	FAI: 1PCS/批 FAI: 1 pcs/lot 3PCS/小时 3PCS/h
6.7	裁线 Thread Cutting	尺寸符合图纸要求 The dimensions meet the requirements of the drawing 外观无破损、脏污、毛边 No damage, dirt, or rough edges	卷尺 Tape measure	3PCS/小时 3PCS/h
6.8	剥芯线 Core stripping wire	剥线长度符合要求 The strip length meets the requirements 热剥机的压力、温度符合要求 The pressure and temperature of the thermal stripping machine meet the requirements	目测/卡尺/直尺 Visual/caliper/ruler	3PCS/小时 3PCS/h
6.9	焊接 1 Welding 1	设备参数是否正常 Whether the equipment parameters are normal 焊点要激饱满、圆润，无开路、短路 Solder points should be full and round without open or short circuit 焊接线序符合要求 The welding sequence meets the requirements	点温计/目测 Point thermometer/visual inspection	3PCS/小时 3PCS/h
6.10		打胶机参数是否正常 Is the glue dispenser working correctly		

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	点胶 Dispensing glue	胶水型号是否符合要求 Whether the glue model meets the requirements	目测 Visual inspection	3PCS/小时 3PCS/h
6.11	组装插头组件 Assemble the plug assembly	型号符合要求 The model meets the requirements	目测 Visual inspection	3PCS/小时 3PCS/h
		外观无刮花、碰伤 No scratches or scratches on the outside		
6.12	成型 1 Molding 1	成型材料是否符合图纸要求 Whether the molding material meets the requirements of the drawing	目测 Visual inspection	3PCS/小时 3PCS/h
		成型模具编号是否符合图纸要求 Whether the molding die number meets the requirements of the drawing		
		成型后是否有变开形缩水缺胶花等不良 Whether there is after the formation of deformation shrinkage glue flower, etc.		
6.13	电性能测试 Electrical performance test	电性能测试参数是否与图纸一致 Whether the electrical performance test parameters are in accordance with the drawings	目测/线材测试综合仪 Visual test/wire test synthesizer	3PCS/小时 3PCS/h
		测试无异常 The test was normal		
		不良品有标识、与良品区分开 Defective products are labeled and separated from the good ones		
6.14	焊接 2 Welding 2	设备参数是否正常 Whether the equipment parameters are normal	目测 Visual inspection	3PCS/小时 3PCS/h
		焊点要激饱满、圆润，无开路、短路 Solder joints should be full and round without open or short circuit		
		焊接线序符合要求 The welding sequence meets the requirements		
6.15	成型 2 Molding 2	成型材料是否符合图纸要求 Whether the molding material meets the requirements of the drawing	目测 Visual inspection	

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		成型模具编号是否符合图纸要求 Whether the molding die number meets the requirements of the drawing		3PCS/小时 3PCS/h
		成型后是否有变开形缩水缺胶花等不良 Whether there is after the formation of deformation shrinkage glue flower, etc.		
6.16	打端子 Play the terminal	端子型号与图纸一致 The terminal model is the same as the drawing	目测/拉力机 Visual inspection/tension machine	3PCS/小时 3PCS/h
		打端子后是否有变形、压伤、压线皮等不良 Play terminal deformation, crush, pressure line skin, etc.		
		端子线芯线间的拉力是否符合要求 Whether or not the tension between the core wires meets the requirements		
6.17	端子装进胶壳 The terminal is put into the glue shell	胶壳型号与图纸一致 The model of the rubber case is the same as the drawing	目测/徒手 Visual/unarmed	3PCS/小时 3PCS/h
		端子与胶壳是否装到位 Are the terminals and the housing in place		
		线序是否与图纸一致 The line sequence is consistent with the drawing		
6.18	气密测试 Air tightness test	气密设置参数是否附合要求 Whether the air-tightness setting parameters conform to the requirements	目测/气密测试仪 Visual/air tightness tester	3PCS/小时 3PCS/h
		气密没试无异常 The air-tight test was normal		
		测试的良品/不良品产品标识分开 Good/bad product labels are separated for testing		
6.19	成品检验 Inspection of finished products	成品尺寸结构是否符合图纸要求 Whether the finished product size and structure meet the requirements of the drawings	目测/线材 试插工装 Visual/wire test integration/test plug-in kit	3PCS/小时 3PCS/h
		成品外观是否有碰伤、缺损、毛边、变压、鼓包等不良 The finished product appearance whether there are bruises, defects, burrs, transformers, bulging and other defects		
		与工装试插顺畅、自锁自脱正常 Smooth insertion and self-locking with tooling		

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		电性能测试参是否与图纸一致 Electrical performance test parameters are in accordance with drawings		
		全检后不良品有无做好标示 Whether the defective product has been marked after inspection		
		弯折测试，符合图纸要求 Bend test, meet drawing requirements	弯折测试机 Bending tester	1 次/月 Once a month
		恒温恒湿测试，符合图纸要求 Constant temperature and humidity test, in accordance with the requirements of the drawings	恒温恒湿实验箱 Constant temperature and humidity experiment box	1 次/月 Once a month
		插拔次数测试，符合图纸要求 Insert and UNPLUG Times Test, meet the requirements of the drawings	插拔试验机 Plug and pull tester	1 次/月 Once a month
6.20	5S 5s	各工位“5S”有无做好，(车间所有物品的摆放是否做到位) Whether the“5s” of each work station is done well -LRB-whether all the items in the workshop are put in place)	目测 Visual inspection	

备注 Note:

FAI: First article inspection 产品首件检验

IPQC：In-process Quality control 生产过程检验

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