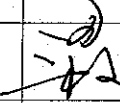
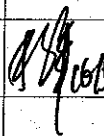
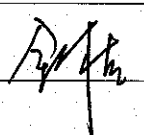
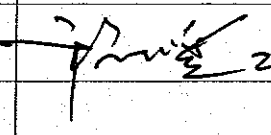


E&Q SYSTEM PROCEDURE TITLE: 工装夹具管理程序 Tooling Management Procedure	DOC. NO. : NVD-QSP-017
	REV. : F
	ISSUE DATE : Mar 12,2013
	EFFECTIVE DATE: Mar 15,2013
PAGE : 1 OF 6	

版本变化 Revision History

版本 Rev.	修改内容 Change content	起草人 Originator	修订人 Reviser	日期 Issue Date
A	First time issue	MS Ran		Sep 1,2004
B	Add English Revision & change the company name		Sally Liu	Jul 3,2007
C	Re-organize the document		Tom Zeng	Jan 30, 2008
D	Change Company Name		Gladys Guo	Oct 21,2009
E	Change Company Logo		David Liang	Feb 16,2011
F	Change Logo		HuiJuan Feng	Mar 12,2013

	DEPARTMENT	SIGNATURE/DATE		DEPARTMENT	SIGNATURE/DATE
<input checked="" type="checkbox"/>	QS	 Mar 15, 2013	<input type="checkbox"/>	DESIGN	
<input type="checkbox"/>	MATERIAL		<input type="checkbox"/>	PURCHASING	
<input checked="" type="checkbox"/>	MANUFACTURING	 Peter Dmi 2013.5.16	<input type="checkbox"/>	PROGRAM	
<input type="checkbox"/>	HR		<input type="checkbox"/>	PROCESS	
<input type="checkbox"/>	IT		<input type="checkbox"/>	FINANCE	
<input checked="" type="checkbox"/>	EQUIPMENT	 2013. 4. 30	<input checked="" type="checkbox"/>	QUALITY/MR	 22/3/13
<input type="checkbox"/>	FACILITY		<input type="checkbox"/>	GM	

E&Q SYSTEM PROCEDURE	DOC. NO. : NVD-QSP-017
	REV. : F
TITLE: 工装夹具管理程序 Tooling Management Procedure	ISSUE DATE : Mar 12,2013
	EFFECTIVE DATE: Mar 15,2013
	PAGE : 2 OF 6

1. 目的 Purpose

优化公司生产流程，提高生产效率，提升产品品质，达到客户要求。

To optimize company's production flow, enhance production efficiency, and improve product quality, to meet customer requirements

2. 范围 Scope

本公司所有从事于生产、检测使用与工装夹具均属之。

Suitable for all the production and test tooling in company

3. 定义 Definition

3.1 工装夹具：在生产过程中,对产品的生产工艺起辅助作用的夹、模具、测试架、气动架、免校正测试机等，统称为工装夹具

Tooling jig is the tool which has auxiliary effect to production process, such as jigs, moulds, testers, pneumatic tools, and testers that need not be calibrated, in the production process.

4. 参考文件 Reference Document

4.1 WI-E1A-0173 《工装夹具验证程序》 Tooling Verification Procedure

4.2 WI-E1A-0148 《工装夹具制作，使用和管理程序》 Tooling Making, Using and Management Procedure

4.3 WI-E1M-0182 《工装夹具预防性保养和维修程序》 Tooling Preventive Maintenance and Repair Procedure

5. 职责 Responsibility

5.1 工装夹具的管理及工装夹具之设计、制作、维护：设备工程部。检查、保养：夹具使用部门负责。(LCD)

EE team is responsible for the management and the design、manufacturing and maintenance of tooling. The use department is responsible for checking and maintaining the jigs. (LCD)

5.2 工装夹具的设计、安装及调试由工艺负责，制作、维护与保养由设备工程部负责。(LCM)

PE team is responsible for the design 、installation and debugging of the tooling, EE team is responsible for manufacturing and maintaining them. (LCM)

5.3 工装夹具的策划：各相关部门。

Planning of tooling is charged by each related departments.

6. 程序 Procedure

6.1 设施、设备过程策划 Planning of tooling equipments procedure.

6.1.1 当在实施新产品生产规划时，应当由研发、工艺（或工程）、生产及设备工程部门经过仔细周密的研讨，得到相关新产品所需的设施、设备、工装夹具等。制定成全面合理的最佳计

E&Q SYSTEM PROCEDURE	DOC. NO. : NVD-QSP-017
	REV. : F
TITLE: 工装夹具管理程序 Tooling Management Procedure	ISSUE DATE : Mar 12,2013
	EFFECTIVE DATE: Mar 15,2013
	PAGE : 3 OF 6

划安排并制作出平面分布图。

Before the new production planning is implemented ,the departments of R&D, Engineering, Production and EE must get the tooling for new products after careful discussion, and make the best and reasonable plan and layout the floor.

- 6.1.2 各项计划须将工厂的空间使用、设备配置和添加、原材料消耗、人员配备、运行班次等做出计划安排，以达到最佳的合理状态。

Each plan should arrange the use of floor space, the consumption of raw material, the structure of operators, and the operation shifts to meet the best status.

6.2 工装夹具管理程序 Tooling Management

6.2.1 工装夹具的添新。Adding of tooling

- 6.2.1.1 各相关部门根据各自相应需要，填写《工装夹具（新增）申请表》，工装夹具的设计与制作由设备工程部执行。(LCD)

The related departments fill in <<New Tooling Application Sheet >> according to their requirement, EE department design and make the tooling. (LCD)

- 6.2.1.2 工装夹具的添新由工艺部负责计划、设计、安装调试，由设备工程部制作。(LCM)
PE should plan 、 design 、 install and debug the new adding tooling jigs which is made by EE.(LCM)

6.2.2 工装夹具的使用、维修与管理 The use , repair and management of tooling

- 6.2.2.1 所有工装夹具由设备工程部统一监管，设备工程部负责建立工装夹具的编号系统并标识。(LCD)

All of the tools are supervised by EE, EE is responsible for setting up the number system of the tooling jigs and identify them.(LCD).

- 6.2.2.2 工装夹具由各自的使用部门安排专人负责管理，每月需复核工装夹具的数量和使用情况，并填写《夹具汇总一览表》备案，若出现不良情况填写维修工作申请单给设备工程部处理。(LCD)

The use team should appoint the special person to manage the tolls, and check the quantity and use status of them, then fill in Tooling Summary List for record, if bad status happened, should fill the repair application sheet and pass to EE for handling. (LCD).

- 6.2.2.3 根据工装夹具的种类和使用情况由设备工程部建立工装夹具的检查保养计划，由各相应的使用部门管理员负责执行，并填写《工装夹具定期检查保养表》交由设备工程部备案，以便查验核对(LCD).LCM 夹具保管由设备工程部负责管理。

EE team should prepare the check and maintenance plan for the tools according to the category and use status, the plan will be carried out by related management person of using dept., and fill 《Periodically Tooling Check and Maintenance Sheet》 and send it to EE for record, so as to check (LCD).EE is responsible for the maintenance LCM jigs.

- 6.2.2.4 随产品品种的不同要求，工装夹具长期不用的（六个月以上，应由使用部门填写《工装夹具封存表》，交维修部备案，并由使用部门自行保管；维修保养确认后交使用部门。

E&Q SYSTEM PROCEDURE	DOC. NO. : NVD-QSP-017
	REV. : F
TITLE: 工装夹具管理程序 Tooling Management Procedure	ISSUE DATE : Mar 12,2013
	EFFECTIVE DATE: Mar 15,2013
	PAGE : 4 OF 6

(LCD)

According to different requirements of product kinds, for the tools which is not used for a long time(more than six month), use dept. should fill 《Tooling Sealing up for Keeping Sheet》 and send it to repair team for record, and is kept by the use department; the tools will be pass to use dept after confirming repair and maintenance.

6.2.2.5 生产需再次启用已封装夹具, 使用部门应填写《工装夹具启用申请表》交设备工程部备案, 并由设备工程部保养确认后交使用部门。(LCD)

If production need to use the tools sealing up for keeping should fill in 《Tooling Reusing Application Sheet》 and send it to EE for record, EE pass to use dept after conforming the maintenance.

6.2.3 工装夹具的报废管理 Scrap Management for Tools

6.2.3.1 依据各部门使用情况, 工装夹具不能满足现行生产需要, 由使用部门填写《工装夹具报废申请表》。(LCD)

According to the use status of each dept, if the tool can not meet the current production requirement demand, the use department should fill 《Tooling Scrap Application Sheet》.
(LCD)

6.2.3.2 Multek 由设备工程部填写工装夹具报废申请单, COB 使用<<工装夹具报废申请表>>表格, PCBA 维修使用<<工装夹具报废申请表>>表格。(LCM)

For Multek, EE fill the application form of engineering jigs retirement, COB use 《Tooling Scrap Application Form》, PCBA repair use 《PCBA Tooling Scrap Application Form》

6.2.4 维修、保养以及人员的要求 Qualification of the repair maintenance person

6.2.4.1 维护保养人员要求高中或以上学历。

High school graduate or above

6.2.4.2 维护保养人员至少有一年以上专业维修经验。

One year of special repair experience at least

6.2.5 建立有效设备、设施与工装夹具制造及维修外协支援系统, 在维修活动中合理有效地应用外协资源, 避免因自身技术力量限制, 而导致维修活动时间过长, 影响生产的正常进行。

Establish effective tooling manufacturing and external assist repair system, utilize effectively external assist resource in the course of repair, avoid impact on production caused by long time repair due to technical limitation.

6.3 建立工装夹具编号系统 Establish Numbering System for the Tools

6.3.1 LCD 后部工装夹具编号格式为: MX-XXX.

其中 M 表示 LCD、X 表示夹具类别(液晶槽 A; 玻璃槽 B; 清洗槽架 C; 挤压垫板 D; 电测机架 E; 成型针模 F; 校针器 G; 弯针模 H; 针式电测架 I; 清洗槽片 K; 装针机 J; 贴片推轮 T; 如有新增类别夹具, 分类别按序排列)。

XXX 表示夹具的序列号。(LCD)

The No. format for engineering jigs of LCD back line is : MX-XXX.

E&Q SYSTEM PROCEDURE	DOC. NO. : NVD-QSP-017
	REV. : F
TITLE: 工装夹具管理程序 Tooling Management Procedure	ISSUE DATE : Mar 12,2013
	EFFECTIVE DATE: Mar 15,2013
	PAGE : 5 OF 6

M indicate LCD、X indicate category of jigs (liquid crystal groove A; glass groove B; clean groove shelf C; press gasket board D; electric tester shelf E; pin mould F; calibrating apparatus of pin G; curve pin mould H; pin electric tester I; clean groove sheet K; pin machine J; attachment push wheel T; if has the new kind jigs, arrange it according order)

XXX indicate the series No. of jigs.(LCD)

6.3.2 COB 的工装夹具编号格式参照《工装夹具检查程序》, PCBA 的参照《PCBA 工装夹具管理程序》.

Please refer to Tooling Checking Procedure for the numbering of the tools, refer to Tooling Management Procedure for PCBA.

6.4 对于由客户提供的设备、工装夹具设备工程部应对其进行固定标识,并列出清单。

For the tools provided by customer, EE should identify them and prepare a list of them.

6.5 设备、工装夹具作业前准备: Preparation of the tools before working

6.5.1 工装夹具的转机、调机, 由生产部负责, 工艺部验证。(LCD)

Production department is responsible for the transferring and debugging of the tools, process team is responsible for verifying them.(LCD)

6.5.2 设备、工装夹具的转机、调机, 由设备工程部负责, 工艺部验证。(LCM)

EE is responsible for the transferring and debugging the tools process team is responsible for verifying them.(LCM)

7. 记录 Record

7.1 EE-0009-00 《工装夹具制作申请表》 the application sheet of adding new tooling

7.2 EE-0011-00 《工装夹具定期检查保养表》 Periodically Tooling Check and Maintenance Sheet

7.3 EE-0015-00 《工装夹具封存申请表》 Tooling Sealing up for Keeping Sheet

7.4 EE-0007-01 《工装夹具启用申请表》 Tooling Reusing Application Sheet

7.5 E2D-0002-02 《工装夹具报废申请表》 Tooling Scrap Application Sheet

7.6 E2D-0063-01 《维修记录及验证表》 Maintenance Record and Validate Sheet

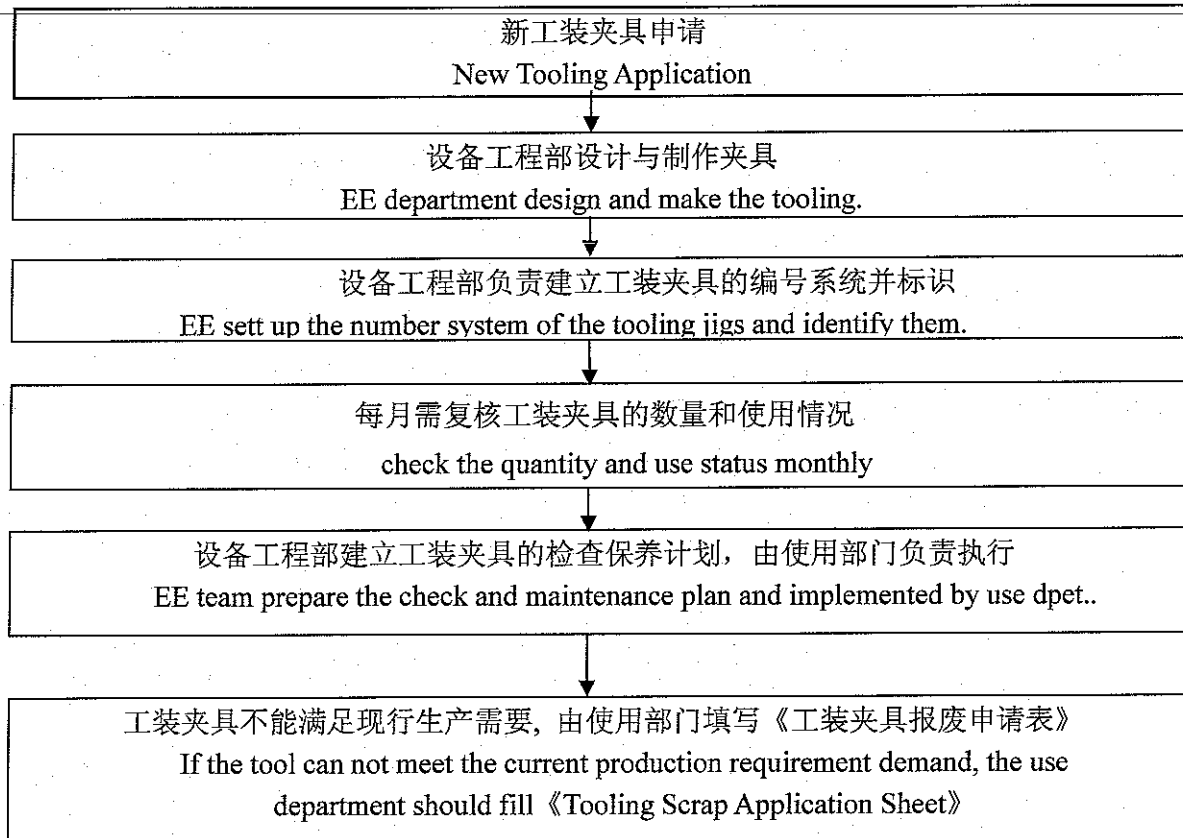
7.7 EIM-D351-00 《测试架制作验证报告》 The Validate Report of adding new tester

7.8 EIM-D352-00 《装配模夹具验证报告》 The Validate Report of installation tooling

7.9 EIM-D353-00 《工装夹具制作精度验证报告》 The Precision Report of adding new tooling

E&Q SYSTEM PROCEDURE	DOC. NO. : NVD-QSP-017
	REV. : F
TITLE: 工装夹具管理程序 Tooling Management Procedure	ISSUE DATE : Mar 12,2013
	EFFECTIVE DATE: Mar 15,2013
	PAGE : 6 OF 6

8. 流程图 Flow Chart



9. 附件 Attachment

无 None