





IATF16949

Finehope IATF16949 2021 50

2007 Finehope Caterpillar Finehope 5 Caterpillar SPC MSA FMEA APQP PPAP

1

Finehope PU

Finehope 500



2

PU

2002FinehopePU

Finehope

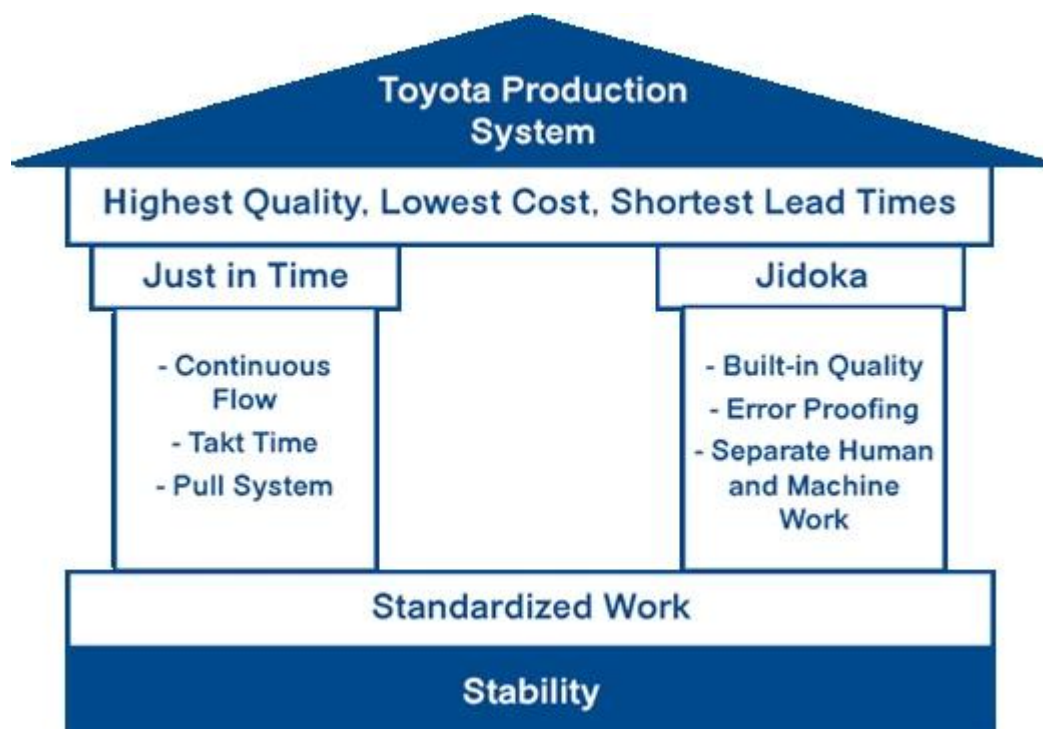


3.

Finehope

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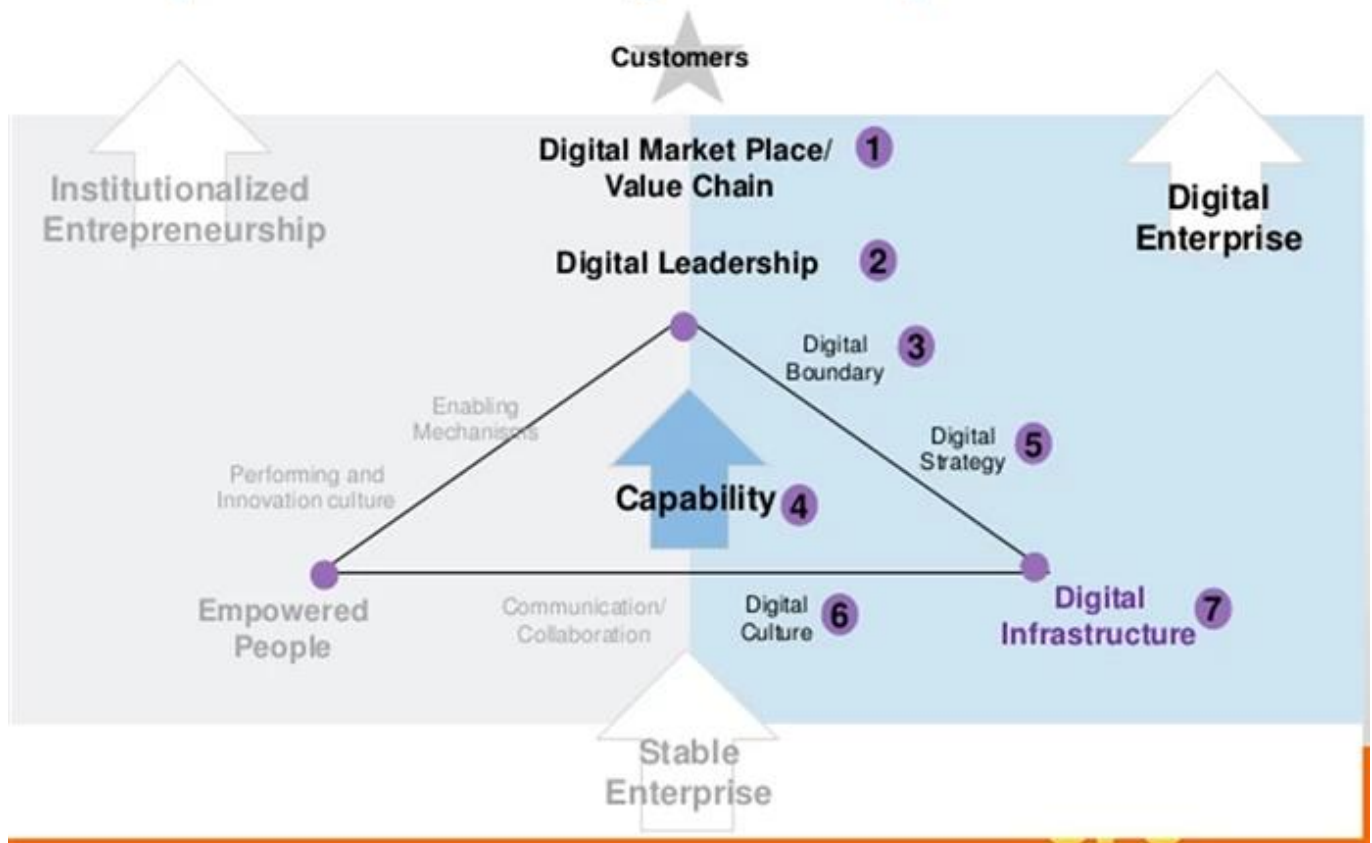
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7 Aspects Define a Digital Enterprise



Famous customer

Cooperation experience



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1. Finehope

Finehope PU 12 R&D

2. Finehope

- 1
- 2
- 3 Finehope
- 4
- 5
- 6 PU
- 7 Finehope

3. Finehope

- 1 APQP
- 2 Finehope
- 3
- 4
- 5

4. Finehope

- 1

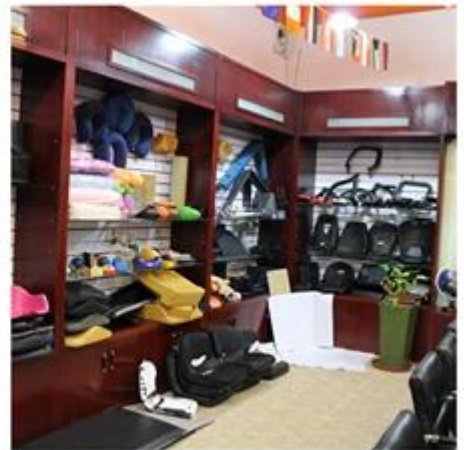
- 2. 2019年10月
- 3. 2019年10月
- 4. 2019年10月

5. 5. PU 2019年10月

2019年10月



2019年10月



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Alibaba

2007 Finehope TUV Alibaba

Merchanti '



Finehope Finehope

2019年FinehopeHAS 5年有效期
FinehopeA



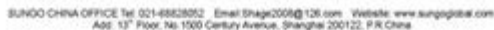
2020-2022年度
厦门市专精特新中小企业
Xiamen Specialized, Refining, Differentiate, Innovative SMEs
厦门市工业和信息化局
Xiamen Municipal Bureau of Industry and Information Technology
二〇二〇年八月
August 2020



Finehope Xiamen Specialized Aging Difference Innovative Smes

finehope

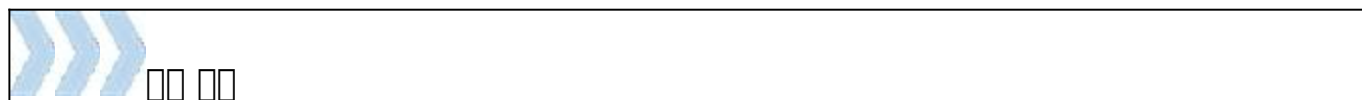
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1906 FDA 1938 FDA

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Finehope 2018 FDA FDA Finehope CFG





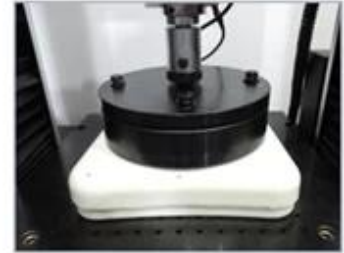
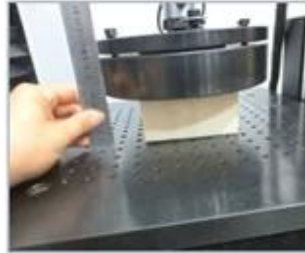
Tensile Test



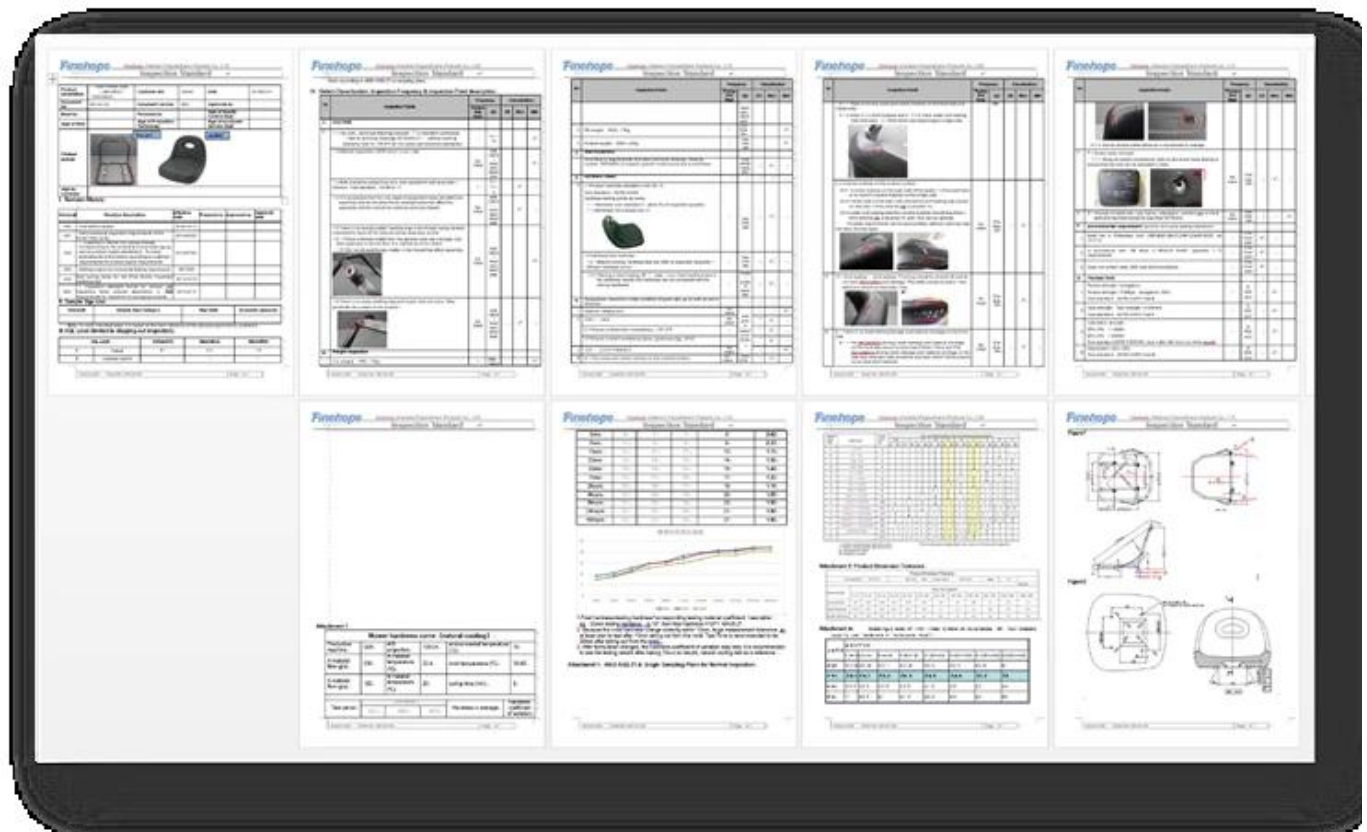
Tear Resistance Test



Compressive Strength



Indentation Force Deflection



Finehope

Test Report No. CE001457201

Customer: CUSTOMER SERVICE DEPARTMENT

The following samples were tested:

Sample Description: 1.1

Specimen No.: 1.2

Other Info: 1.3

Sample Processing Date: 1.4

Testing Period: 1.5

Test Method: 1.6

1.1) A01

1.2) A01

1.3) A01

1.4) A01

1.5) A01

1.6) A01

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Test Report No. CE001457201

Customer: CUSTOMER SERVICE DEPARTMENT

Test Result:

No.	Test Item	Unit	Test Standard	Test Result
1	Thickness	mm	A01	0.040-0.045mm
2	Hardness	HS	A01	0.040-0.045mm
3	Specific Gravity	g/cm ³	A01	0.040-0.045mm
4	Tensile	MPa	A01	0.040-0.045mm
5	Strength	%	A01	0.040-0.045mm
6	Impact	kJ/m ²	A01	0.040-0.045mm
7	Resilience	%	A01	0.040-0.045mm

PS:

1. In order to make the strength of two of thickness (about 0.04mm) and have also in one

2. For the specific gravity value in the above actual value of the whole sample

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Test Report No. CE001457201

Customer: CUSTOMER SERVICE DEPARTMENT

Test Result:

1.1) A01

1.2) A01

1.3) A01

1.4) A01

1.5) A01

1.6) A01

Finehope

Test Report No. CE001457201

Customer: CUSTOMER SERVICE DEPARTMENT

Test Result:

1.1) A01

1.2) A01

1.3) A01

1.4) A01

1.5) A01

1.6) A01

Finehope

Test Report No. CE001457201

Customer: CUSTOMER SERVICE DEPARTMENT

Test Result:

1.1) A01

1.2) A01

1.3) A01

1.4) A01

1.5) A01

1.6) A01

APQP

APQP Finehope

Finehope

Advanced Product Quality Planning

Date: 01-Oct-17

Customer

Location New Zealand

Customer Code G1019

Risk Assessment

New: Site ☐ Technology ☐ Process ☐

Other Risks ☐

Project

Finehope Contact Wendy Yang

Part No.

Part Name G1019Y04

Change Level/Date

User Plant(s) Finehope

Core Team Members

Core Team Members	Company/Title	Phone/Fax/E-Mail
Tiger Xu	G.M.	
Yibin Lim	Vice G.M.	
Cindy Wu	Sales Manager	cindy@finehope.com
Liangquan Wan	Project Manager	
Wendy Yang	Sales	wendy@finehope.com

Build Level

Material Required Date

Quantity

No. Concurred

SRCs

Majors

APQP Deliverable	Finehope APQP Reference Only	G Y R	Project Need Date	Supplier Timing Date	Actual Closure Date	Supplier Lead Resp Initials	Finehope Acceptance Complete	Remarks or Assistance Required
AIAG APQP Phase 2 - Product Design and Development								
1. Project Timeline (Synchronized w/Production Time Plan)	2030	G	20-Jun-21	21-Jun-21	21-Jun-21	22-Jun-21	23-Jun-21	/
2. Customer Inputs / Requirements	2030	G	23-Jun-21	24-Jun-21	24-Jun-21	25-Jun-21	26-Jun-21	/
3. Warranty & Quality Mitigation Plan	2030	G	24-Jun-21	25-Jun-21	25-Jun-21	26-Jun-21	27-Jun-21	/
4. Customer Specific Requirements	2030	G	25-Jun-21	26-Jun-21	26-Jun-21	27-Jun-21	28-Jun-21	/
5. Design FMEA	2030	G	26-Jun-21	27-Jun-21	27-Jun-21	28-Jun-21	29-Jun-21	/
6. Preliminary Bill of Materials (BOM)	2030	G	27-Jun-21	28-Jun-21	28-Jun-21	29-Jun-21	30-Jun-21	/
7. Prototype Control Plans	2110	G	28-Jun-21	29-Jun-21	29-Jun-21	30-Jun-21	1-Jul-21	/
8. Prototype Builds	2110	G	29-Jun-21	30-Jun-21	30-Jun-21	1-Jul-21	2-Jul-21	/
9. Design Verification Plan & Report (DVP&R)	2120	G	30-Jun-21	1-Jul-21	1-Jul-21	2-Jul-21	3-Jul-21	/
10. Design / Process Review	2130	G	1-Jul-21	2-Jul-21	2-Jul-21	3-Jul-21	4-Jul-21	/
11. Team Feasibility Commitment	2130	G	2-Jul-21	3-Jul-21	3-Jul-21	4-Jul-21	5-Jul-21	/
12. APQP Status Sub-Supplier	2130	G	3-Jul-21	4-Jul-21	4-Jul-21	5-Jul-21	6-Jul-21	/
13. Production Drawing & Specifications	2220	G	4-Jul-21	5-Jul-21	5-Jul-21	6-Jul-21	7-Jul-21	/
14. Subcontractor Purchase Orders (Customer Tooling)	2230	G	5-Jul-21	6-Jul-21	6-Jul-21	7-Jul-21	8-Jul-21	/
15. Facilities, Equipment, Tools and Gages	2260	G	6-Jul-21	7-Jul-21	7-Jul-21	8-Jul-21	9-Jul-21	/
AIAG APQP Phase 3 - Process Design and Development								
16. Product/Process and Quality System Review	3030	G	9-Jul-21	10-Jul-21	10-Jul-21	10-Jul-21	11-Jul-21	/
17. Manufacturing Process Flow Chart	3040	G	11-Jul-21	12-Jul-21	12-Jul-21	12-Jul-21	13-Jul-21	/
18. Process FMEA	3100	G	13-Jul-21	14-Jul-21	14-Jul-21	14-Jul-21	15-Jul-21	/
19. Pre-Launch Control Plan	3110	G	15-Jul-21	16-Jul-21	16-Jul-21	16-Jul-21	17-Jul-21	/
20. Process Work Instructions	3120	G	17-Jul-21	18-Jul-21	18-Jul-21	18-Jul-21	19-Jul-21	/
21. Measurement Systems Evaluation	3130	G	19-Jul-21	20-Jul-21	20-Jul-21	20-Jul-21	21-Jul-21	/
22. Packaging Specifications & Approvals	3160	G	21-Jul-21	22-Jul-21	22-Jul-21	22-Jul-21	23-Jul-21	/
23. Manufacturing Team Training	3170	G	23-Jul-21	24-Jul-21	24-Jul-21	24-Jul-21	25-Jul-21	/
AIAG APQP Phase 4 - Product and Process Validation								
24. Subcontractor PPAP Approval	4005	G	9-Jul-21	10-Jul-21	10-Jul-21	10-Jul-21	11-Jul-21	/
25. Production Control Plan	4008	G	11-Jul-21	12-Jul-21	12-Jul-21	12-Jul-21	13-Jul-21	/
26. Production Readiness Review (PRR)	4009	G	13-Jul-21	14-Jul-21	14-Jul-21	14-Jul-21	15-Jul-21	/
27. Production Trial Run (PTR)	4010	G	15-Jul-21	16-Jul-21	16-Jul-21	16-Jul-21	17-Jul-21	/
28. Process Capability Studies	4030	G	17-Jul-21	18-Jul-21	18-Jul-21	18-Jul-21	19-Jul-21	/
29. Production Validation Plan & Report (PV&R)	4090	G	19-Jul-21	20-Jul-21	20-Jul-21	20-Jul-21	21-Jul-21	/
30. Production Part Approval (PPAP)	4110	G	21-Jul-21	22-Jul-21	22-Jul-21	22-Jul-21	23-Jul-21	/
AIAG APQP Phase 5 - Feedback, Assessment and Corrective Action								
31. Initial Production Shipment	5005	G	28-Jul-21	30-Jul-21	30-Jul-21	30-Jul-21	31-Jul-21	/
32. Production Ramp-up Plan	5005	G	31-Jul-21	2-Aug-21	2-Aug-21	2-Aug-21	3-Aug-21	/
33. Full Production Date	5005	G	5-Aug-21	7-Aug-21	7-Aug-21	7-Aug-21	8-Aug-21	/
34. Conduct Lessons Learned	5005	G	8-Aug-21	10-Aug-21	10-Aug-21	10-Aug-21	11-Aug-21	/

1. Project Timeline (Synchronized w/Production Time Plan) 2030 G 20-Jun-21 21-Jun-21 21-Jun-21 22-Jun-21 23-Jun-21 /
 2. Customer Inputs / Requirements 2030 G 23-Jun-21 24-Jun-21 24-Jun-21 25-Jun-21 26-Jun-21 /
 3. Warranty & Quality Mitigation Plan 2030 G 24-Jun-21 25-Jun-21 25-Jun-21 26-Jun-21 27-Jun-21 /
 4. Customer Specific Requirements 2030 G 25-Jun-21 26-Jun-21 26-Jun-21 27-Jun-21 28-Jun-21 /
 5. Design FMEA 2030 G 26-Jun-21 27-Jun-21 27-Jun-21 28-Jun-21 29-Jun-21 /
 6. Preliminary Bill of Materials (BOM) 2030 G 27-Jun-21 28-Jun-21 28-Jun-21 29-Jun-21 30-Jun-21 /
 7. Prototype Control Plans 2110 G 28-Jun-21 29-Jun-21 29-Jun-21 30-Jun-21 1-Jul-21 /
 8. Prototype Builds 2110 G 29-Jun-21 30-Jun-21 30-Jun-21 1-Jul-21 2-Jul-21 /
 9. Design Verification Plan & Report (DVP&R) 2120 G 30-Jun-21 1-Jul-21 1-Jul-21 2-Jul-21 3-Jul-21 /
 10. Design / Process Review 2130 G 1-Jul-21 2-Jul-21 2-Jul-21 3-Jul-21 4-Jul-21 /
 11. Team Feasibility Commitment 2130 G 2-Jul-21 3-Jul-21 3-Jul-21 4-Jul-21 5-Jul-21 /
 12. APQP Status Sub-Supplier 2130 G 3-Jul-21 4-Jul-21 4-Jul-21 5-Jul-21 6-Jul-21 /
 13. Production Drawing & Specifications 2220 G 4-Jul-21 5-Jul-21 5-Jul-21 6-Jul-21 7-Jul-21 /
 14. Subcontractor Purchase Orders (Customer Tooling) 2230 G 5-Jul-21 6-Jul-21 6-Jul-21 7-Jul-21 8-Jul-21 /
 15. Facilities, Equipment, Tools and Gages 2260 G 6-Jul-21 7-Jul-21 7-Jul-21 8-Jul-21 9-Jul-21 /

16. Product/Process and Quality System Review 3030 G 9-Jul-21 10-Jul-21 10-Jul-21 10-Jul-21 11-Jul-21 /
 17. Manufacturing Process Flow Chart 3040 G 11-Jul-21 12-Jul-21 12-Jul-21 12-Jul-21 13-Jul-21 /
 18. Process FMEA 3100 G 13-Jul-21 14-Jul-21 14-Jul-21 14-Jul-21 15-Jul-21 /
 19. Pre-Launch Control Plan 3110 G 15-Jul-21 16-Jul-21 16-Jul-21 16-Jul-21 17-Jul-21 /
 20. Process Work Instructions 3120 G 17-Jul-21 18-Jul-21 18-Jul-21 18-Jul-21 19-Jul-21 /
 21. Measurement Systems Evaluation 3130 G 19-Jul-21 20-Jul-21 20-Jul-21 20-Jul-21 21-Jul-21 /
 22. Packaging Specifications & Approvals 3160 G 21-Jul-21 22-Jul-21 22-Jul-21 22-Jul-21 23-Jul-21 /
 23. Manufacturing Team Training 3170 G 23-Jul-21 24-Jul-21 24-Jul-21 24-Jul-21 25-Jul-21 /

24. Subcontractor PPAP Approval 4005 G 9-Jul-21 10-Jul-21 10-Jul-21 10-Jul-21 11-Jul-21 /
 25. Production Control Plan 4008 G 11-Jul-21 12-Jul-21 12-Jul-21 12-Jul-21 13-Jul-21 /
 26. Production Readiness Review (PRR) 4009 G 13-Jul-21 14-Jul-21 14-Jul-21 14-Jul-21 15-Jul-21 /
 27. Production Trial Run (PTR) 4010 G 15-Jul-21 16-Jul-21 16-Jul-21 16-Jul-21 17-Jul-21 /
 28. Process Capability Studies 4030 G 17-Jul-21 18-Jul-21 18-Jul-21 18-Jul-21 19-Jul-21 /
 29. Production Validation Plan & Report (PV&R) 4090 G 19-Jul-21 20-Jul-21 20-Jul-21 20-Jul-21 21-Jul-21 /
 30. Production Part Approval (PPAP) 4110 G 21-Jul-21 22-Jul-21 22-Jul-21 22-Jul-21 23-Jul-21 /

31. Initial Production Shipment 5005 G 28-Jul-21 30-Jul-21 30-Jul-21 30-Jul-21 31-Jul-21 /
 32. Production Ramp-up Plan 5005 G 31-Jul-21 2-Aug-21 2-Aug-21 2-Aug-21 3-Aug-21 /
 33. Full Production Date 5005 G 5-Aug-21 7-Aug-21 7-Aug-21 7-Aug-21 8-Aug-21 /
 34. Conduct Lessons Learned 5005 G 8-Aug-21 10-Aug-21 10-Aug-21 10-Aug-21 11-Aug-21 /

Design Failure Mode and Effects Analysis (Design FMEA)

FMEA No.:
DFMEA-001

Page: page 1, totally 3 pages

Made: Xiaodong Qiu

FMEA Date: Nov.10th.2015

Project Name: Injection moulding

Procedure responsible dept: Production Dept

Model year/vehicle types: CRV

Soybean Milk Maker

Important date: Nov.10th.2015

People participated: Develop dept:Gaolin Wei

Sales:Haiyan Wu

PC:Jiannan Yan

Technology Dept:Jianyu Zhou

Purchaser:Yuanyuan Gou

Production dept:Shuwen Dong

QC:Bingxiang Zheng

procedure function requirements	Potential failure mode	Potential effects analysis	severity (S)	grade	potential causes/mechanisms of failure	frequency (O)	Current prevention process control	Current detection process control	detection (D)	RPN	recommended measures	Responsibility and target completion date	action results
scyphus	size changes of handle	handle cover fall off	6	A	PP size change	6	By adjusting the product of the injection molding process, and measure or test the clasp of product size	measure and test product size	3	108	Add the number of button bit in handle design, in order to keep the connection strength	Xiaodong Qiu 2015/08/25	By adjusting the product of the injection molding process, and measure or test product size
scyphus	warping of scyphus handle	Poor appearance break	4	C	high handle wall	6	Add the stiffener to handle wall to prevent deformation	measure and test product size	2	48	If this problem appears, make improvement by Adding the stiffener	Xiaodong Qiu 2015/09/30	Add the stiffener to handle wall to prevent deformation
scyphus	Deformation of cup-mouth	Micro switch without power	8	A	PP material deformation. Resulting in a perpendicular direction to connect the cup and handle inward deformation. So that both sides of the tilt, the micro switch column opposite sink, and	3	Adjust the injection molding process, to prevent extrusion	measure and test cup-mouth size	3	72	in the cup packing control the direction of the lateral dimension of no force, stipulate the way of packing	Xiaodong Qiu 2015/09/10	stipulate the cup use egg cell methods to put the packing which do not squeeze each other

H-R-P-001-1

Process Failure Mode and Effects Analysis (PFMEA)

FMEA No.FMEA20150325-01

Page 3

Maker:Wenrong-Huang

FMEA Date (Original):2015.03.25

Item:Welding Improvement

项目:焊接改善

Process Responsibilities: Production welding group

过程职责: 生产组焊接组

Model year/project

型号年/项目

Key Dates

关键日期

Item 项目	Potential failure mode 潜在失效模式	Potential consequences of failure modes 失效的后果/潜在后果	Severity 严重度	Grade 等级	Potential causes of failure 失效的潜在原因	Occurrence degree 发生度	Current process control and Prevention 现行过程控制/预防	Current process control detection 现行过程控制检测	Detection rate 检测率	RPN	Suggest measures 建议措施	Responsibility and target completion date 职责及目标/完成日期	Measure results 措施结果
Clamping (clamping required is in place, no missing or wrong loaded) 锁紧 (锁紧需到位, 无漏装, 错装)	Clamping is not in place 锁紧不到位	Size NG 尺寸NG	6	B	● Staff negligence 人员作业疏忽 ● Fixture for bad 夹具定位不良	4	● Make the operation standard book 制定作业标准书 ● Make maintenance standards, regular maintenance 制定保养标准, 定期保养, 维护	● Visual inspection 目视检查 ● Finished 100% full inspection 完成100%全检	6	144	● Pre-service training of staff 人员岗前培训 ● Regular maintenance 工器具定期维护		6 3 4 72
	Welding error, leak, deviation, affect the assembly or use function 焊接错误, 漏装, 偏差, 影响装配或使用功能		8	A	● Staff negligence 人员作业疏忽 ● Fixture for bad 夹具定位不良 ● Fixture inaccurate 夹具定位不准确	4	● Make the operation standard book 制定作业标准书 ● Make maintenance standards, regular maintenance 制定保养标准, 定期保养, 维护 ● Regular checking of fixture 对夹具定期点检	Visual inspection 目视检查	6	192	● Pre-service training of staff 人员岗前培训 ● Regular maintenance 工器具定期维护 ● Make inspection checklist for fixture 制定夹具点检表		8 3 4 96
	Attachment missing 附件漏装	Affect product strength or influence the assembly 影响产品强度或影响装配	8	A	Staff negligence 作业人员疏忽	3	Make the operation standard book 制定作业标准书	Visual inspection 目视检查	4	96	Final inspection personnel do 100% full inspection for each bead with mark 最终人员100%全检, 并做标识		8 2 2 32
	Attachment error 附件错装	Influence assembly 影响装配	7	A	No mistake proofing fixture 并无防错装置	3	Make the operation standard book 制定作业标准书	Visual inspection 目视检查	5	126	● Increase the mistake proofing devices 增加防错装置 ● Inspection for final inspection tools 对最终检验工具		7 2 4 56
False welding 假焊	Lack of strength, affect the use of function 强度不足, 影响使用功能		9	A	Current, voltage, welding angle, speed setting is not reasonable 电流, 电压, 焊接角度, 速度设定不合理	4	● Welding process guidance making 制作焊接工艺指导书 ● Condition confirmation check 加工条件确认表 ● Confirm the failure test on a regular basis. 定期进行失效条件确认	Destructive testing 破坏性试验检测	8	288	After the procedure is set up to confirm the processing conditions, the execution and marking of the failure test is performed. 流程设置完成后需确认加工条件, 并做失效条件确认		9 3 4 108

Production Device



Reaction Injection Molding (RIM)
High Pressure Machine
KRAUSS MAFFEI
Made in Germany!



Krauss Maffei

Finehope Kraussmaffei 2010



□□□□ □□□□□□□□

Finehope □□□□□□□□PU□□□□□□□□□ 2010□□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□

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Page 10 of 10

- Strictly follow SA8000
- public-spirited



Voluntary tree planting after Super Typhoon Meranti 2016

NS □□□□□□□□

