



**DMF/ A  
report**

**FREE**

**Mould**

**3D Design**

**Product Inspection  
Standard Setting**

**Free Product Inspection Standard Setting:**  
In addition to the usual quantification of product physical properties and appearance standards, we will add REACH, RoHS, FDA, CA-65, or CFC Free to the standards according to customer needs.

**Free Mould Opening:**  
Large order quantity with mould cost free.

**Free 3D Design:**  
Finehope help customer design the desired product or modify the design for free.

**Free DFM/A Report:**  
Finehope will show details and solutions of manufacturability and assemblability through PPT to help customers reduce trouble.

**Finehope**





Finehope 2003 年通过了 ISO 9001 质量管理体系认证

IATF16949 认证:  
Finehope 于 2021 年通过了 IATF16949 质量管理体系认证, 认证范围覆盖 50 余种汽车零部件的生产。2007 年, Finehope 通过了 Caterpillar 质量管理体系认证, 认证范围覆盖 SPC、MSA、FMEA、APQP、PPAP 等五大工具。Finehope 还通过了 Caterpillar 的 PPAP 认证, 认证范围覆盖 - 汽车零部件的生产。

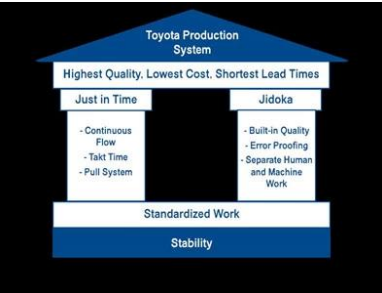
# Our Advandages



2002 年, Finehope 通过了 PU 质量管理体系认证, 认证范围覆盖 PU 产品的生产。



Finehope 通过了 ISO 9001 质量管理体系认证, 认证范围覆盖 50 余种汽车零部件的生产。Finehope 还通过了 Caterpillar 的 PPAP 认证, 认证范围覆盖 - 汽车零部件的生产。



2002 年, Finehope 通过了 PU 质量管理体系认证, 认证范围覆盖 PU 产品的生产。



Finehope 通过了 ISO 9001 质量管理体系认证, 认证范围覆盖 50 余种汽车零部件的生产。Finehope 还通过了 Caterpillar 的 PPAP 认证, 认证范围覆盖 - 汽车零部件的生产。



2) □□□□□□□□

3)

4)

**5. PU**



## About us













2007年，公司通过了ISO9001:2008质量管理体系认证，并获得了TUV莱茵Alibaba Verified Supplier认证。

2007年，公司通过了ISO9001:2008质量管理体系认证，并获得了TUV莱茵Alibaba Verified Supplier认证。



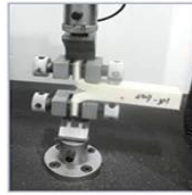
## Quality Assurance



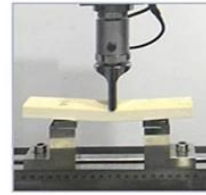
UNIVERSAL TESTING MACHINE(UTM)



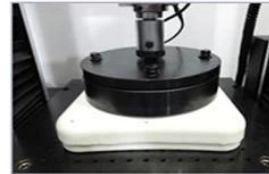
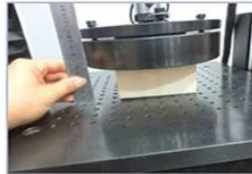
Tensile Test



Tear Resistance Test

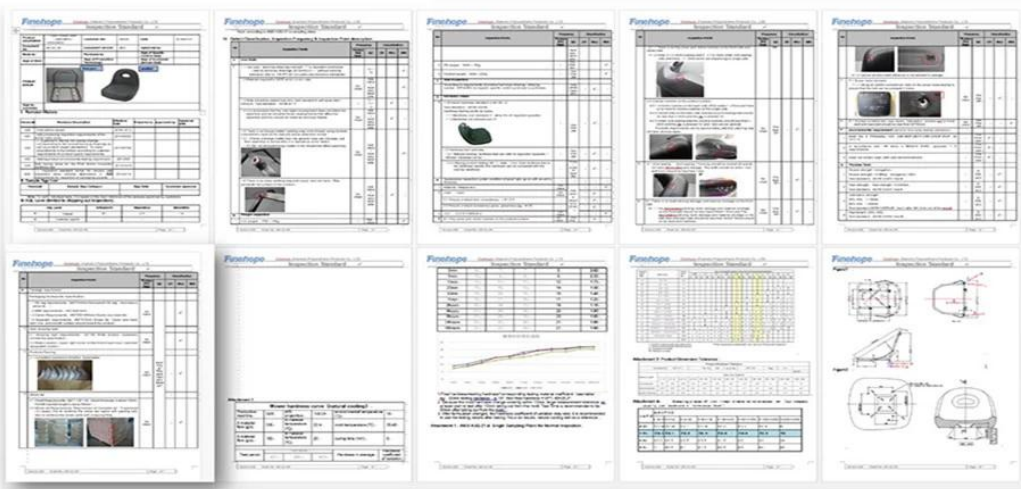


Compressive Strength

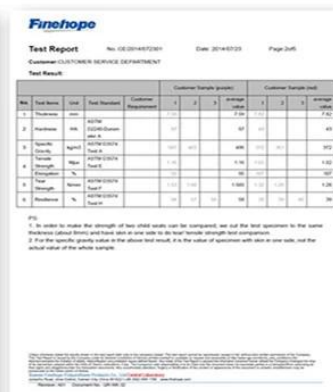


Indentation Force Deflection

## INSPECTION STANDARD



## MATERIAL PERFORMANCE TEST REPORT



<b>Customer</b>			
<b>Location</b>	New Zealand		
<b>Customer Code</b>	G1019		
<b>Risk Assessment</b>	New: Site <input type="checkbox"/> Technology <input type="checkbox"/> Process <input type="checkbox"/> Other Risks <input type="checkbox"/>		

<b>Project</b>			
<b>Finehope Contact</b>	Wendy Yang		
<b>Part No.</b>			
<b>Part Name</b>	G1019Y04		
<b>Change Level/Date</b>			
<b>User Plant(s)</b>	Finehope		

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. Concurrent	
			SRCs	Majors
Product Design and Development	21-Jun-21	10		
Product and Process Validation	25-Jun-21	15		

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
<b>AIAG APQP Phase 2 - Product Design and Development</b>								
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	2080	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)	2220	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	
<b>AIAG APQP Phase 3 - Process Design and Development</b>								
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	
<b>AIAG APQP Phase 4 - Product and Process Validation</b>								
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	
<b>AIAG APQP Phase 5 - Feedback, Assessment and Corrective Action</b>								
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

Product 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/mechanism of failure	frequency (O)	Current prevention process control	Current detection process control	detection (D)	RPN	recommended measures	Responsibility and target completion date	Action Taken	severity (S)	frequency (O)	difficult to check (D)	RPN
scaphus	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	6	1	1	6
scaphus	warping of scaphus 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	4	2	1	8
scaphus	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 bit, 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 packing control the direction of the lateral dimension of no force, stipulate the way of packing	8	1	3	24

H-R-P-001-1

## Process Failure Mode and Effects Analysis

### (PFMEA)

#### 潜在失效模式及后果分析

FMEA No.FMEA20150325-01

Page 3

Maker:Wenhong-Huang

FMEA Date (Original):2015.03.25

Item:Welding Improvement

Process Responsibilities: Production welding group

Model year/project

Key Dates

Item	Potential failure mode	Potential consequences of failure modes	Severity	Grade	Potential causes of failure	Occurrence degree	Current process control and Prevention	Current process control detection	Detection rate	RPN	Suggest measures	Responsibility and target completion date	Measure results	Severity	Incidence rate	Detection degree	RPN
Request	Size/NG	Size/NG	6	B	●Staff negligence ●Future for bad ●Future for bad	4	●Make the operation standard book ●Make maintenance standards, regular maintenance ●Regular checking of future	●Visual inspection ●Finished 100% full inspection ●Visual inspection	6	144	●Pre-service training of staff ●Regular maintenance ●Regular maintenance			6	3	4	72
Clamping is not in place	Welding error, leak welding, affect the assembly or use function	Welding error, leak welding, affect the assembly or use function	8	A	●Staff negligence ●Future for bad ●Future inaccurate	4	●Make the operation standard book ●Make maintenance standards, regular maintenance ●Regular checking of future	Visual inspection	6	192	●Pre-service training of staff ●Regular maintenance ●Make inspection checklist for future			8	3	4	96
Attachme nts missing	Affect product strength or influence the assembly	Affect product strength or influence the assembly	8	A	Staff negligence	3	Make the operation standard book	Visual inspection	4	96	Final inspection personnel do 100% full inspection for each bead with man			8	2	2	32
Attachme nt error	Influence assembly	Influence assembly	7	A	No mistake proofing future	3	Make the operation standard book	Visual inspection	6	126	●Increase the mistake proofing devices ●Inspection for final inspection tools			7	2	4	56
False welding	Lack of strength, affect the use of function	Lack of strength, affect the use of function	9	A	Current, voltage, welding angle, speed setting is not reasonable	4	●Welding process guidance ●Condition confirmation check ●Confirm the failure test on a regular basis	Destructive testing	8	288	After the procedure is set up to confirm the processing conditions, the execution and marking of the failure test is performed			9	3	4	108

## Production Device

### KRAUSS MAFFEI

Finehope has successively introduced many of the world's most advanced German KraussMaffei high-pressure injection machines since 2010.



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



### Self-invented fully automatic production line

Finehope has independently developed a number of fully automatic P-U injection production lines since 2010. These production lines reduce production costs and meet customer delivery requirements.



### Welding Robots



Since 2016, Finehope has continued to purchase welding robots and automatic fixture turntables for welding metal parts. The independent processing of accessories saves the waiting time and procurement cost of outsourcing processing.

### CNC Machine

Finehope has continued to purchase CNC equipment since 2016. CNC (Computer Numerically Controlled) machining is a manufacturing process in which pre-programmed computer software dictates the movement of factory tools and machinery. Using this type of machine versus manual machining can result in improved accuracy, increased production speeds, enhanced safety, increased efficiency and most importantly, help customers save costs and improve product quality.



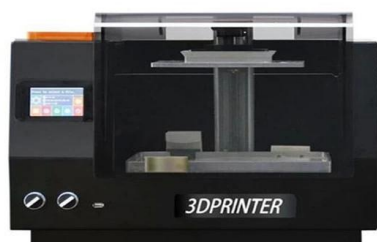
### Mould Release Agent Painting Robot



Since 2019, Finehope has purchased robots for spraying water-based release agents to improve the working environment, improve spraying quality and material utilization, and reduce labor costs.

### 3D printer

Finehope started to purchase 3D printers in 2015. 3D printing can realize rapid proofing of new product prototypes and templates for resin molds, and can also be used for faster and cheaper small batch production.





## Social Responsibility

- **Audited by Sedex**

( Supplier business ethics information  
exchange )

Labor standard · health and safety · Environmental  
protection · Business ethics practice

- **Public-spirited**



Voluntary tree planting after Super Typhoon Meranti in 2016

## A VALUE-BASED COMPANY

CUSTOMER FIRST

TEAMWORK

EMBRACE CHANGES

PASSION

INTEGRITY

COMMITMENT



