



| <b>FREE</b>                                                                                                                    |                                                                                  |                                            |                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DFM/A Report</b>                                                                                                            | <b>Free 3D Design</b>                                                            | <b>Free Mould Opening</b>                  | <b>Free Product Inspection Standard Setting</b>                                                                                                                                                 |
| Finehope will show details and solutions of manufacturability and assemblability through PPT to help customers reduce trouble. | Finehope help customer design the desired product or modify the design for free. | Large order quantity with mould cost free. | 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. |



## ISO 9001 Certificate

Finehope has obtained ISO 9001 certificate continuously since 2003.



Finehope's ability to continuously reduce costs and innovate products can help customers bring greater value. Therefore, it is a reliable long-term partner of many Fortune 500 companies and leading companies in the industry.



2

### **PU raw material research and development capabilities**

Since 2002, Finehope has been committed to the design and manufacture of PU moulded foam products. Independent research and development of formula materials and stable production capacity are the basis for quality assurance.

Finehope can adjust the product formula at any time according to the customized needs of customers' personalized products, such as the requirements for hardness, elasticity, support, feel, density, color and other physical and chemical properties, and can make formulation requirements in compliance with the laws and regulations of various countries. Of course, a good formula must also consider the best cost performance. For new projects, the ability to develop PU formulations is a key condition for ensuring product development quality, delivery time and cost.



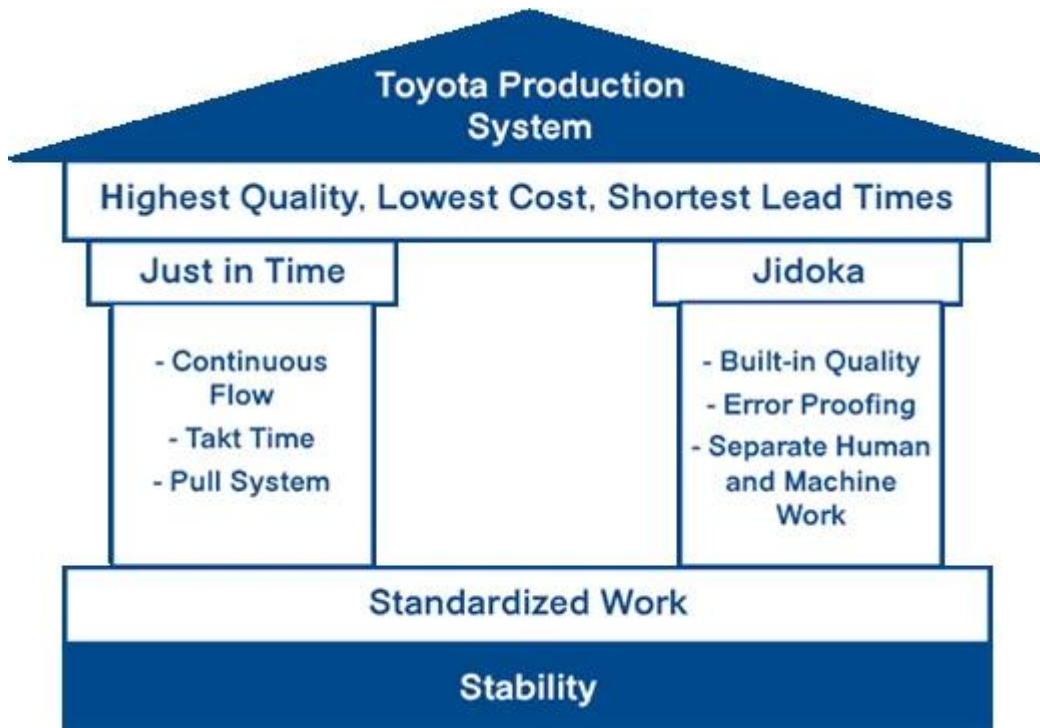
### 3

#### **Scientific management ability**

Finehope emphasizes the importance of the Toyota Production System and Corporate Coaching Model to optimize management efficiency. Continuous improvement the efficiency and quality of all employees, management and production personnel have been effectively and continuously improved, management and production costs have been continuously reduced, but more important than efficiency and cost is the cultivation of employee growth through continuous improvement, Because this is the core of corporate sustainable development.

Finehope's refinement reduces the trouble for customers, because it reduces the negligence on the human process system and the ability to continuously accumulate professional experience, which can ensure that all new projects are completed in the shortest time.





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Finehope has invested heavily in the research and development of software systems to digitize business process management and industrial manufacturing. Digital transformation allows Finehope to use new technologies to enable customers to have a more positive experience, while reducing the workload of the company's employees and ultimately reducing costs.

## 7 Aspects Define a Digital Enterprise



## Famous customer

### Cooperation experience



## FAQ

### 1. Why you choose Finehope?

Finehope is the most professional PU manufacturer in China, which has a professional R&D team, advanced PU production equipment, professional testing equipment and perfect quality management system. We have 12-year cooperation experience with CAT, FIAT, TVH, GGP and other famous enterprises. We provide them with one-step service from R&D to production to satisfy their customization needs.

### 2. What are the advantages of choosing Finehope?

- 1) Product quality assurance, delivery guarantee, good after-sales service.
- 2) Cost-effective, fast development efficiency, professional operation with integrity.
- 3) Finehope will conduct all testing analysis and then work out testing standards to reduce quality standard dispute between customers and manufacturers.
- 4) Lean production management mode.
- 5) Help customers to develop and design new products.
- 6) Has rich experience in the design and processing of PU products.
- 7) Finehope is a high-tech enterprise in China with domestic and have international invention patents technology and intellectual property.

### 3. What are the difference between Finehope and domestic peers?

- 1) Quality assurance: advanced quality planning (APQP).
- 2) Finehope has rich experience in serving international large enterprises.

- 3) Has professional scientific research team of polyurethane material.
- 4) Has independent design, manufacturing and innovation ability of production equipment and molds.
- 5) Has engineer team who is responsible for the quality assurance system and quality control.

#### 4. What are the differences between Finehope and European and U.S peers?

- 1) Has perfect and mature supporting supply chain.
- 2) Lower mold costs.
- 3) High efficiency of development and design ability and short process time.
- 4) Cost advantage and good service attitude.

#### 5. What are the applications of PU products?

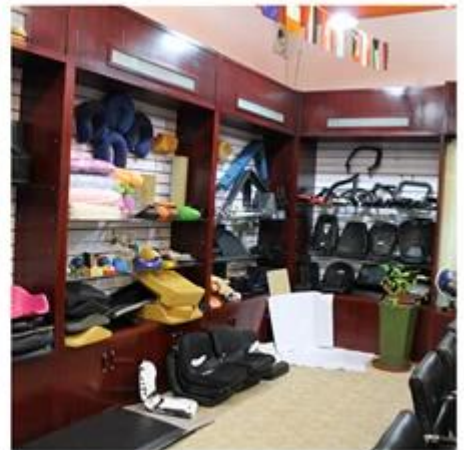
Car, engineering machinery, sports fitness equipment, medical machinery and daily household items and so on.

## About us



Office





**Sample room**



**Activity**

## **Our Certification**



### **Alibaba Verified Supplier Certificate**

Since 2007, Finehope has continuously passed TUV certification and has become an Alibaba Verified Supplier.

Verified Supplier is a high-quality supplier verified by the authoritative strength of Alibaba platform. Through online and offline on-site audits, the merchants' corporate qualifications, product qualifications, corporate capabilities, and other comprehensive strengths are reviewed and verification.



## Integration of Informationization and Industrialization Management System Certificate

The certificate is assessed by the Xiamen Municipal Government and issued by the Shanghai Academy of Quality Management Science. This certificate reflects the level of Finehope's in-depth integration of informatization and industrialization. Finehope will continue to take a new path of industrialization; use information technology as the support to transform and upgrade traditional kinetic energy, cultivate new kinetic energy, and pursue a sustainable development model.





### **Xiamen Growth-oriented Micro, Small & Medium Enterprises**

Finehope has been rated as “Xiamen Growth-oriented Micro, Small & Medium Enterprises” since 2019. It is the scoring result of the Xiamen Municipal Government based on Finehope’s various comprehensive indicators, growth models, brand strength in the industry, and good corporate reputation, then issue this certificate. It is a proof that Finehope stands out among thousands of small and medium-sized enterprises in the city.



## Work Safety Standardization Certificate

Manufacturing safety is important to prevent or lessen the risk of workplace injury, illness, and death.

Finehope General Manager Tiger Side: "Only those manufacturing facilities which continue to emphasize safety as a top-level issue will remain highly productive and competitive in today's marketplace."

Finehope must be proactive about employee safety. Without a focus on safety, can place their employees at risk, cause fire and face expensive property damagend and affect delivery.



## Xiamen Science And Technology Little Giant Leading Enterprise

Since 2019, Finehope has been selected as the leading company of Xiamen Science and Technology Little Giant. This certificate was jointly issued by five departments of the Xiamen Municipal Government. The selection criteria focus on strategic emerging industries such as new generation information technology, high-end equipment, new materials, new energy, biology and new medicine, energy saving and environmental protection, and marine high-tech. Winning this honor shows that Finehope is at the forefront of the industry in new information technology and new materials.



## Fujian Province Pollution Discharge Permit

Pollution discharge permits are the "identity cards" of all entities involved in the discharge of pollutants and are issued by the Xiamen Municipal Environmental Protection Bureau.

General Secretary Xi Jinping emphasized that "the ecological environment should be protected like the eyes, and the ecological environment should be treated like life." Premier Li Keqiang said: "Environmental pollution is a hazard to the people's livelihood and the pain of the people's hearts. It must be dealt with an iron fist." The Chinese government's determination to improve the environmental quality of the atmosphere, water bodies, and soil cannot be ignored. Pollution permits are an important factor that must be considered in international procurement. Otherwise, the factory has hidden dangers and will be ordered to stop production, which will affect the delivery

date.

It can be seen that Finehope is a manufacturer with long-term cooperation and stable delivery.



### **Xiamen Specialized, Refining, Differentiate, Innovative SMEs**

Finehope has been rated as "Xiamen Specialized, Refining, Differentiate, Innovative SMEs" since 2020. "Specialized, Refining, Differentiate, Innovative" refers to SMEs with outstanding main business, strong professional capabilities, strong R&D and innovation capabilities, and development potential. Mainly concentrated in the new generation of information technology, high-end equipment manufacturing, new energy, new materials, biomedicine and other mid-to-high-end industries.

Leading in the same industry in terms of market, quality, efficiency or development, with advanced and exemplary.

Through this certificate, the government emphasizes and recognizes finehope's "specialization, special innovation" is to encourage innovation and achieve specialization, reform, and specialization.

Finehope should continue to take "specialization, special innovation" as the direction, focus on their main business, practice hard work, strengthening innovation, and build the company into a "single champion" or "supporting expert" with unique skills.





Fiscal Year 2020

## CERTIFICATION OF REGISTRATION

This certifies that:

**Finehope (Xiamen) New Material Technology Co., Ltd.**  
NO. 466 Jiu-tian-hu Road Ninglin , Jimei, XIAMEN, Fujian, 361022,  
CHINA  
has completed the FDA Establishment Registration (as manufacturer , foreign exporter,  
contract manufacturer ) and Device Listing with the US Food & Drug Administration,  
through

U.S. Agent for FDA Communications: SUNGO TECHNICAL SERVICE INC.  
6050 W EASTWOOD AVE APT 201, CHICAGO,  
ILLINOIS 60630, USA  
Telephone: +1 455-957-7779 / E-mail: [sungogroup@yahoos.com](mailto:sungogroup@yahoos.com)

Registration Number: **3014535570**

Device Listing#: See annex

*SUNGO Technical Service Inc. will confirm that such registration remains effective upon request and presentation of this certificate until the end of the calendar year stated above, unless said registration is terminated after issuance of this certificate. SUNGO Technical Service Inc. makes no other representations or warranties, nor does this certificate make any representations or warranties to any person or entity other than the named certificate holder, for whose sole benefit it is issued. This certificate does not denote endorsement or approval of the certificate-holder's device or establishment by the U.S. Food and Drug Administration. SUNGO Technical Service Inc. assumes no liability to any person or entity in connection with the foregoing.*

*Pursuant to 21 CFR 807.39, "Registration of a device establishment or assignment of a registration number does not in any way denote approval of the establishment or its products. Any representation that creates an impression of official approval because of registration or possession of a registration number is misleading and constitutes misbranding." The U.S. Food and Drug Administration does not issue a certificate of registration, nor does the U.S. Food and Drug Administration recognize a certificate of registration. SUNGO Technical Service Inc. is not affiliated with the U.S. Food and Drug Administration.*



Executive Director  
Issued: Dec. 19 2019  
Cert. No.: 2006U8756529  
Expiration Date: Dec. 31 2020

SUNGO CHINA OFFICE Tel: 021-68628522 Email: [Shago2006@126.com](mailto:Shago2006@126.com) Website: [www.sungoglobal.com](http://www.sungoglobal.com)  
Add: 13<sup>th</sup> Floor, No.1000 Century Avenue, Shanghai 200122, P.R.China

## FDA certification

Food and Drug Administration (FDA) established in 1906 is a government agency under the passage of the Federal Food and Drugs Act. The FDA Certification is mandatory for placing the products in the USA.

This major responsibility of FDA is protecting and managing public health and related authorities by assuring the safety and security of human and biologically generated product. The FDA regulates products including biological products, medical services, cosmetics, prescription drugs and non-prescription drugs, veterinary drugs, tobacco and other radiation emitting products.

Finehope has passed FDA certification every year since 2018. FDA approval means that the products produced by Finehope have obtained foreign government certificates (CFG) and can enter the global market smoothly.



## Quality Assurance



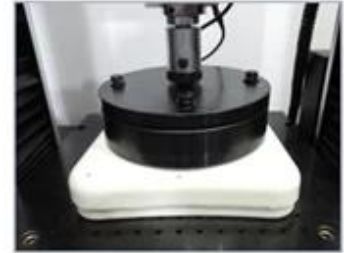
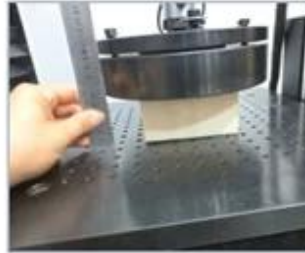
### Tensile Test



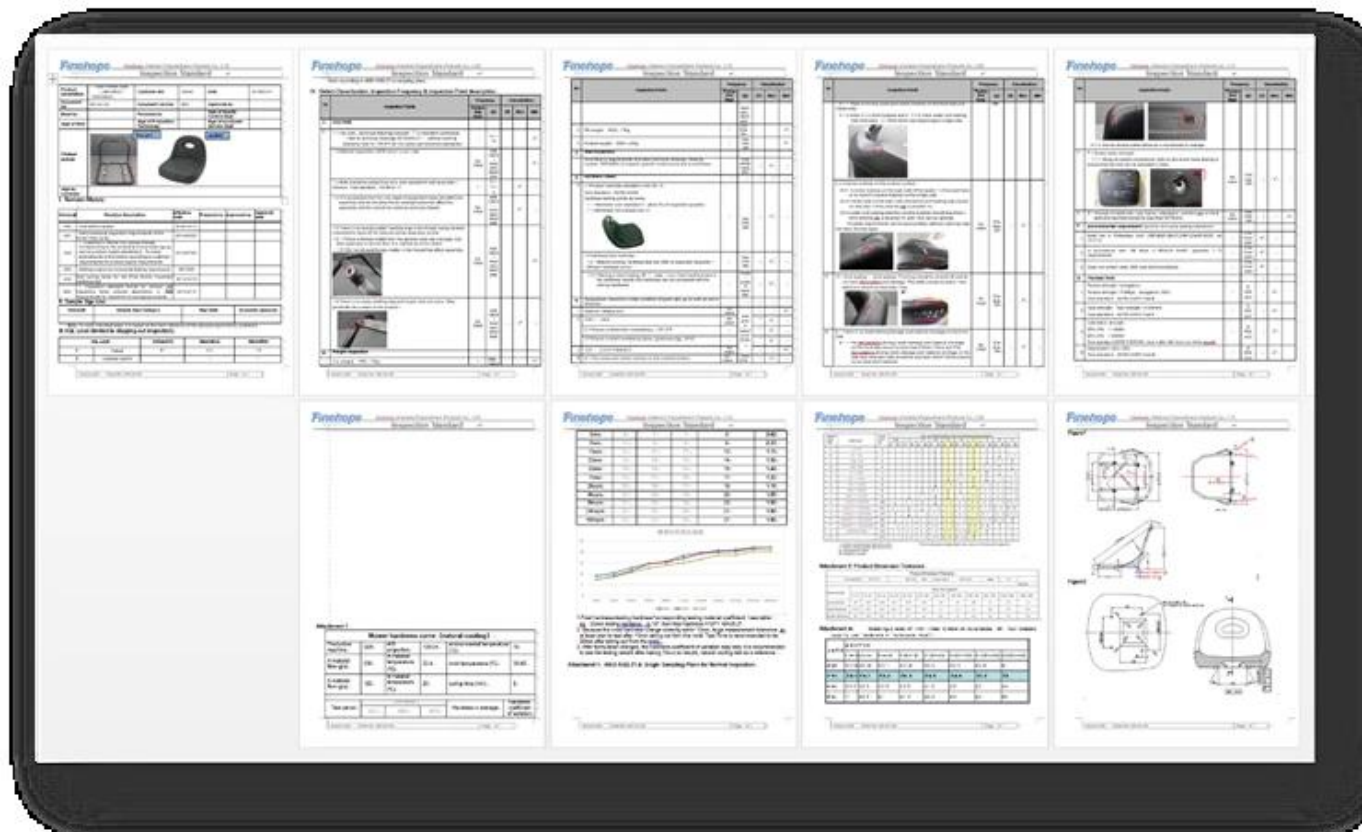
### Tear Resistance Test



### Compressive Strength



### Indentation Force Deflection



**Finehope**

**Test Report** No. CE001457201

Customer: CUSTOMER SERVICE DEPT

The following samples were tested:

Sample Description: 1

Style/Part No.: 2

Other Info: 3

Sample Processing Date: 4

Testing Period: 5

Test Method: 6

1) A01

2) A02

3) A03

4) A04

5) A05

6) A06

7) A07

8) A08

9) A09

10) A10

**Finehope**

**Test Report** No. CE001457201

Customer: CUSTOMER SERVICE DEPT

Test Result:

| No. | Test Item        | Unit  | Test Standard          | Test Result |
|-----|------------------|-------|------------------------|-------------|
| 1   | Thickness        | mm    | ASTM D2240-Durameter A |             |
| 2   | Hardness         | HA    | ASTM D2240-Durameter A |             |
| 3   | Specific Gravity | g/cm³ | ASTM D1535-Test A      |             |
| 4   | Tensile          | MPa   | ASTM D1535-Test E      |             |
| 5   | Strength         | %     | ASTM D1535-Test E      |             |
| 6   | Impact           | kJ/m² | ASTM D1535-Test E      |             |
| 7   | Resilience       | %     | ASTM D1535-Test E      |             |

PS:

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

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

**Finehope**

**Test Report** No. CE001457201

Customer: CUSTOMER SERVICE DEPT

Test Result:

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

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

**Finehope**

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**Finehope**

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Customer: CUSTOMER SERVICE DEPT

Test Result:

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

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

## Advanced Product Quality Planning Process (APQP)

The APQP process provides consistency across the automotive industry and allows all tier suppliers to speak the same language during the development process. Without a common language Finehope designs would not be as efficient and we would be bogged down with numerous meetings trying to explain our work and what is needed. The APQP process gives Finehope the common tools and procedures we need to fully develop and launch a product with the automotive industry and meet all government requirements.

**Finehope**

**Advanced Product Quality Planning**

Date: 01-Oct-17

|                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Customer</b></p> <p><b>Location</b> New Zealand</p> <p><b>Customer Code</b> G1019</p> <p><b>Risk Assessment</b></p> <p><b>New:</b> Site <input type="checkbox"/> Technology <input type="checkbox"/> Process <input type="checkbox"/></p> <p><b>Other Risks:</b> <input type="checkbox"/></p> | <p><b>Project</b></p> <p><b>Finehope Contact</b> Wendy Yang</p> <p><b>Part No.</b></p> <p><b>Part Name</b> G1019Y04</p> <p><b>Change Level/Date</b></p> <p><b>User Plant(s)</b> Finehope</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| 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<br>Y<br>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                                                        | 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                     | /                              |
| <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                    | /                              |

Many customers choose Finehope to be their partner because Finehope follows the APQP process, allowing them to participate in the project throughout the entire process, always seeing the progress of the project, and the quality assurance of each link.

## Failure Mode and Effects Analysis (FMEA).

The FMEA is used by both design and production engineers (DFMEA and PFMEA) to look at potential issues with a design or process determine the severity of the issue, the frequency it can occur and whether or not the issue can be detected and applying scores to each one. When the FMEA analysis is completed the high scoring issues are then reviewed and either corrected or steps are made to mitigate those risks.

Finehope project manager Wan said: "FMEA help the project avoid many mistakes and helped customers save the new project development cycle".



## 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)

潜在失效模式和后果分析

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

## Production Device



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



### KRAUSS MAFFEI

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



### **Self-invented fully automatic production line**

Finehope has independently developed a number of fully automatic PU 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**

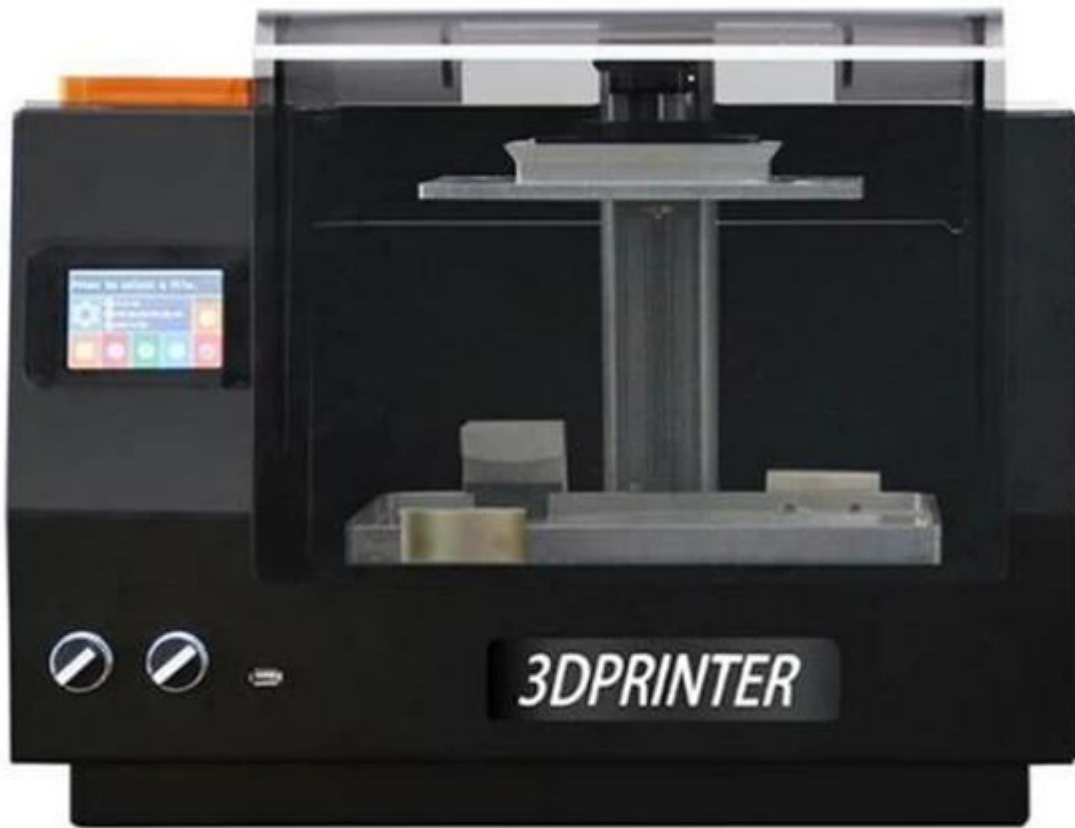
Finehope has continued to purchase CNC equipment since 2016. CNC (Computer Numerically Controlled) machining is a manufacturing process in which pre-programmed computer software dictates the movement of factory tools and machinery. Using this type of machine versus manual machining can result in improved 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.

### **IN ADDITION**

In addition to the above, we also have more powerful 19-year supply chain management capabilities, with supporting processing equipment and capabilities which not listed above. We have strict regulations and requirements for their qualification review, quality control plan and incoming quality batch management.

We can do carbon fiber, glass fiber, wood products, hardware, etc. In large quantities, we have suppliers with stable quality and output to cooperate.

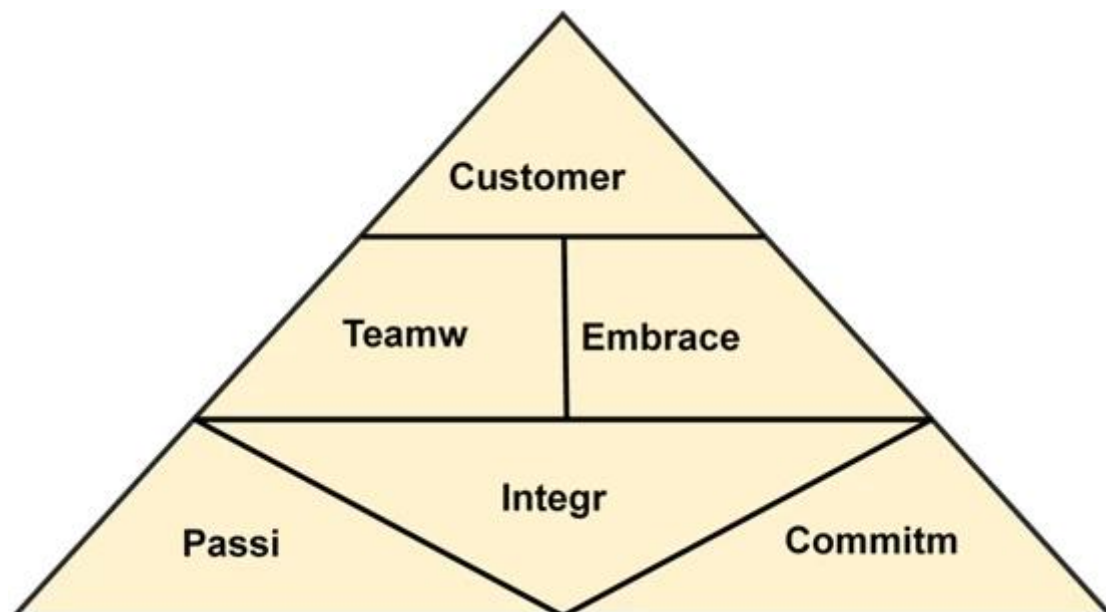
## Social Responsibility

- Strictly follow SA8000
- public-spirited



Voluntary tree planting after Super Typhoon Meranti 2016

## A Value-based Company



Polyurathane foam products need, welcome contact us.

Amanda



Finehope (Xiamen) New Material Technology Co., Ltd.  
No. 466 Jiutianhu Road, Xingbei Industry Area, Jimei District, Xiamen, China  
Post code:361022  
Email:Amada@finehope.com  
Tel: 86-592-66617667  
Mob:86-18050099072