

FINEHOPE

FREE

DMF/ A report

3D Design

Mould

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.



Personalização de fábrica de peças de garfo de máquina de engenharia pu de

poliuretano painel de instrumentos

Categoria: peças de máquinas de engenharia PU

Material: Poliuretano PU - espuma rígida

Densidade: 200-250kg/m³

Forma: De acordo com os requisitos do cliente para design de produto e molde personalizado

Cor: preto e outras cores podem ser personalizadas sob consulta.

Embalagem: caixa de papelão

Condições de pagamento: depósito de 30%, pagamento e entrega.

MOQ: 100pcs

Local de envio: China • Fujian • Xiamen

Conheça a certificação: RoSH, REACH, EN71-3, ftálico 6P

Outros: fábricas chinesas OEM e de processamento, especializadas na produção de produtos de PU, incluindo acessórios (ferro, madeira, plásticos, etc.).



A Finehope obteve o certificado ISO 9001 continuamente desde 2003.

Certificação IATF16949:

A Finehope passou na certificação de sistemas de gerenciamento de qualidade automotiva IATF16949 em 2021. Mais de 50 documentos garantem o progresso do desenvolvimento de novos produtos, a qualidade, o prazo de entrega e o custo dos produtos de teste e produção em massa.

Desde a cooperação entre a Finehope e a Caterpillar em 2007, a Finehope usou o sistema de gerenciamento de qualidade automotiva para a introdução de novos produtos, usando as cinco ferramentas de SPC, MSA, FMEA, APQP e PPAP, que ganharam elogios dos executivos da Caterpillar e estabeleceram um longo parceria de longo prazo até agora.

Our Advantages



Recursos de pesquisa e desenvolvimento de matérias-primas de PU

Desde 2002, a Finehope está comprometida com o design e fabricação de produtos de espuma moldada PU. Pesquisa independente e desenvolvimento de materiais de fórmula e capacidade de produção estável são a base para garantia de qualidade.

A Finehope pode ajustar a fórmula do produto a qualquer momento de acordo com as necessidades personalizadas dos produtos personalizados dos clientes, como os requisitos de dureza, elasticidade, suporte, sensação, densidade, cor e outras propriedades físicas e químicas, e pode fazer requisitos de formulação em conformidade com as leis e regulamentos de vários países. Claro, uma boa fórmula também deve considerar o melhor desempenho de custo. Para novos projetos, a capacidade de desenvolver formulações de PU é uma condição fundamental para garantir a qualidade do desenvolvimento do produto, prazo de entrega e custo.



Capacidade de gestão científica

Finehope enfatiza a importância do Sistema Toyota de Produção e do Modelo de Coaching Corporativo para otimizar a eficiência da gestão. Melhoria contínua a eficiência e a qualidade de todos os funcionários, o pessoal de gerenciamento e produção foram reduzidos continuamente, mas mais importante do que eficiência e custo é o cultivo do crescimento dos funcionários por meio da melhoria contínua, porque isso é o núcleo do desenvolvimento sustentável corporativo.



Recursos de design e fabricação de equipamentos de automação

A capacidade da Finehope de projetar e fabricar equipamentos de automação é rara na indústria. Ao participar do projeto de novos equipamentos de mistura de injeção de PU e da transformação de automação da linha de produção, para garantir que, sob a concorrência da China, o dividendo demográfico seja reduzido e os custos de mão-de-obra continuam a aumentar, a eficiência da produção também pode ser melhorada, os custos de mão-de-obra e materiais podem ser reduzidos. Além disso, as capacidades contínuas de design e fabricação de equipamentos-chave, como acessórios, equipamentos especiais e moldes automáticos, também são as razões pelas quais a Finehope está em uma posição de liderança em todos os aspectos.

A capacidade da Finehope de reduzir custos continuamente e inovar produtos pode ajudar os clientes a agregar maior valor. Portanto, é um parceiro confiável de longo prazo de muitas empresas da Fortune 500 e empresas líderes do setor.



O refinamento da Finehope reduz o problema para os clientes, porque reduz a negligência no sistema de processo humano e a capacidade de acumular continuamente experiência profissional, o que pode garantir que todos os novos projetos sejam concluídos no menor tempo possível.

Famous customer

Cooperation experience

Engineering
Vehicle

BOYD
CORPORATION

TVH



Honeywell | **STIGA** **CAT**

Medical
Equipment

Hill-Rom

INVACARE
Yes, you can.

MAQUET
GETINGE GROUP

DrPosture

Ki Mobility

Baby
Supplies

Bumbo **Nuby**

bugaboo

chicco

**Hatch
Baby**

GRACO

Fitness
Equipment

STAR TRAC
expect different.

BOWFLEX

IB&G
BUILDING PRODUCTS

ergoDRIVEN
ergonomic solutions

NUVA

Other

PANDORA
UNFORGETTABLE MOMENTS

Cubefit

Knoll

Perguntas frequentes

1. Por que você escolhe Finehope?

Finehope é o fabricante de PU mais profissional da China, que possui uma equipe profissional de P&D, equipamento avançado de produção de PU, equipamento de teste profissional e sistema de gerenciamento de qualidade perfeito. Temos 12 anos de experiência em cooperação com CAT, FIAT, TVH, STIGA e outras empresas famosas. Fornecemos a eles um serviço de uma etapa, de P&D à produção, para satisfazer suas necessidades de personalização.

2. Quais são as vantagens de escolher Finehope?

- 1) garantia de qualidade do produto, garantia de entrega, bom serviço pós-venda.
- 2) eficiência de desenvolvimento rápida e econômica, operação profissional com integridade.
- 3) A Finehope conduzirá todas as análises de teste e, em seguida, elaborará padrões de teste para reduzir a disputa de padrão de qualidade entre clientes e fabricantes.
- 4) Modo de gerenciamento de produção enxuta.
- 5) Ajude os clientes a desenvolver e projetar novos produtos.
- 6) Possui vasta experiência em design e processamento de produtos PU.
- 7) Finehope é uma empresa de alta tecnologia na China com tecnologia doméstica e internacional de patentes de invenção e intelectual propriedade.

3. Quais são as diferenças entre Finehope e pares domésticos?

- 1) Garantia da qualidade: planejamento avançado da qualidade (APQP).
- 2) Finehope tem uma vasta experiência em atender grandes empresas internacionais.

- 3) Possui equipe profissional de pesquisa científica de material de poliuretano.
- 4) Possui capacidade independente de design, fabricação e inovação de equipamentos e moldes de produção.
- 5) Possui equipe de engenheiros responsáveis pelo sistema de garantia de qualidade e controle de qualidade.

4. Quais são as diferenças entre o Finehope e os pares europeus e americanos?

- 1) Possui uma cadeia de suprimentos de suporte perfeita e madura.
- 2) Custos de molde mais baixos.
- 3) Alta eficiência de desenvolvimento e capacidade de design e tempo de processo curto.
- 4) Vantagem de custo e boa atitude de serviço.

5. Quais são as aplicações dos produtos PU?

Carro, máquinas de engenharia, equipamentos de ginástica esportiva, máquinas médicas e utensílios domésticos diários e assim por diante.



About us







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 damage 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 20-20. "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.



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



UNIVERSAL TESTING MACHINE(UTM)



Tensile Test



Tear Resistance Test



Compressive Strength



Indentation Force Deflection

INSPECTION STANDARD

MATERIAL PERFORMANCE TEST REPORT

Finehope
Test Report No. 00201457201 Date: 20140723 Page 1/4
 Customer: CUSTOMER SERVICE DEPARTMENT

The following samples were submitted and identified by/on behalf of the client as:

Sample Description: UHMW and MHD (underdevelopment)
 Material No.: 1
 Other info.: 1
 Sample Processing Date: 20140724
 Working Process: 20140723

Test Method

- 101 ASTM D2574-2011 Test of Density, Test Agency
- 102 ASTM D2574-2011 Test of Density, Test Agency
- 103 ASTM D2574-2011 Test of Density, Test Agency
- 104 ASTM D2574-2011 Test of Density, Test Agency
- 105 ASTM D2574-2011 Test of Density, Test Agency
- 106 ASTM D2574-2011 Test of Density, Test Agency
- 107 ASTM D2574-2011 Test of Density, Test Agency
- 108 ASTM D2574-2011 Test of Density, Test Agency
- 109 ASTM D2574-2011 Test of Density, Test Agency
- 110 ASTM D2574-2011 Test of Density, Test Agency
- 111 ASTM D2574-2011 Test of Density, Test Agency
- 112 ASTM D2574-2011 Test of Density, Test Agency
- 113 ASTM D2574-2011 Test of Density, Test Agency
- 114 ASTM D2574-2011 Test of Density, Test Agency
- 115 ASTM D2574-2011 Test of Density, Test Agency
- 116 ASTM D2574-2011 Test of Density, Test Agency
- 117 ASTM D2574-2011 Test of Density, Test Agency
- 118 ASTM D2574-2011 Test of Density, Test Agency
- 119 ASTM D2574-2011 Test of Density, Test Agency
- 120 ASTM D2574-2011 Test of Density, Test Agency

Finehope
Test Report No. 00201457201 Date: 20140723 Page 2/4
 Customer: CUSTOMER SERVICE DEPARTMENT

Test Result

| No. | Test Item | Unit | Test Standard | Customer Requirement | Customer Sample Result | Customer Sample Unit |
|-----|------------|-------------------|---------------|----------------------|------------------------|----------------------|
| 1 | Density | g/cm ³ | ASTM D2574 | 1.10 | 1.10 | 1.10 |
| 2 | Hardness | HR15N | ASTM D2574 | 50 | 50 | 50 |
| 3 | Strength | MPa | ASTM D2574 | 10 | 10 | 10 |
| 4 | Impact | J/m ² | ASTM D2574 | 10 | 10 | 10 |
| 5 | Modulus | GPa | ASTM D2574 | 1.0 | 1.0 | 1.0 |
| 6 | Creep | % | ASTM D2574 | 1.0 | 1.0 | 1.0 |
| 7 | Relaxation | % | ASTM D2574 | 1.0 | 1.0 | 1.0 |

FIG. 1. In order to make the strength of two steel rods can be compared, see the test specimen in the same background color. The red rod is the specimen in the test, the blue rod is the specimen in the background.

FIG. 2. For the specific grade value in the above test result, it is the value of specimen with the same size and the actual value of the whole sample.

Finehope
Test Report No. 00201457201 Date: 20140723 Page 3/4
 Customer: CUSTOMER SERVICE DEPARTMENT

Sketch Picture

100 pictures is only used with the Serial Report from Finehope.

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

| | |
|--------------------------|------------|
| Project | |
| Finehope Contact | Wendy Yang |
| Part No. | |
| Part Name | G1019Y04 |
| Change Level/Date | |
| User Plant(s) | Finehope |

| Core Team Members | Company/Title | Phone/Fax/E-Mail |
|-------------------|-----------------|--|
| Tiger Xu | G.M. | |
| Yubin 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 Inits | Finehope Acceptance Complete | Remarks or Assistance Required |
|--|------------------------------|-------------|-------------------|----------------------|---------------------|--------------------------|------------------------------|--------------------------------|
| | | | | | | | | |
| 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 | / |
| 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 | 20-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

Production dept: Shuwen Dong

QC: Bingxiang Zheng

People participated: Develop dept: Gaolin Wei

Sales: Haiyan Wu

PC: Jiannan Yan

Technology Dept: Jianyu Zhou

Purchaser: Yuanyuan Gou

| 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 | | | | |
|---------------------------------|---------------------------|----------------------------|--------------|-------|--|---------------|--|-----------------------------------|---------------|-----|---|---|---|---------------|------------------------|-----|----|
| | | | | | | | | | | | | | severity (S) | frequency (O) | difficult to check (D) | RPN | |
| 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 | 6 | 1 | 1 | 6 |
| 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 | 4 | 2 | 1 | 8 |
| 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 球, 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 | 8 | 1 | 3 | 24 |

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

Maint: Weihong-Huang

FMEA Date (Original): 2015.03.25

Item: Welding Improvement

Process Responsibilities: Production welding group

Model year/project

Key Dates

| Item 项目 | Potential failure mode 潜在失效模式 | Potential consequences of failure modes 失效后果/模式潜在失效后果 | 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 负责人及目标完成日期 | Measure results/测量结果 | | | |
|--|--|---|-----------------|-------------|---|--------------------------|---|--|-----------------------|-----|--|---|--|-----------------|-----------------------|--------------------------|
| | | | | | | | | | | | | | Measures and effective date 措施及有效日期 | Severity 严重度 | Incidence rate 发生率 | Detection degree 可检测度 |
| Request 项目 | Clamping is not in place 夹具不在位 | Welding error, leak, welding deviation, affect the assembly or use function 焊接错误、漏焊、焊接偏差、影响装配或使用功能 | 6 | B | ● Staff negligence 人员疏忽 ● Failure for bad 夹具不在位 | 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 maintenance 定期保养 | ● Visual inspection 目视检测 ● Finished 100% full inspection 完成100%全检 | 6 | 144 | ● Pre-service training of staff 岗前培训 ● Regular maintenance 定期保养 ● Regular maintenance 定期保养 | | 6 | 3 | 4 | 72 |
| Clamping (clamping required is in place, no missing or wrong loaded) 夹具不在位、无漏装、错装 | Clamping is not in place 夹具不在位 | Welding error, leak, welding deviation, affect the assembly or use function 焊接错误、漏焊、焊接偏差、影响装配或使用功能 | 8 | A | ● Staff negligence 人员疏忽 ● Failure for bad 夹具不在位 ● Failure 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 夹具定期检查 | Visual inspection 目视检测 | 6 | 192 | ● Pre-service training of staff 岗前培训 ● Regular maintenance 定期保养 ● Make inspection checklist for fixture 制定夹具检查清单 | | 8 | 3 | 4 | 96 |
| Attachments missing 附件缺失 | Affect product strength or influence the assembly 影响产品强度或影响装配 | | 8 | A | Staff negligence 人员疏忽 | 3 | Make the operation standard book 制定作业标准书 | Visual inspection 目视检测 | 4 | 96 | Final inspection personnel do 100% full inspection for each bead with man 每个工人100%全检、目视 | | 8 | 2 | 2 | 32 |
| Attachment error 附件错误 | Influence assembly 影响装配 | | 7 | A | No mistake proofing fixture 夹具无防错 | 3 | Make the operation standard book 制定作业标准书 | Visual inspection 目视检测 | 6 | 126 | ● Increase the mistake proofing devices 增加防错装置 ● Inspection for final inspection tools 对终检工具进行检查 | | 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、速度设置不合理 | 4 | ● Welding process guidance making 制定焊接工艺指导书 ● Condition confirmation check 加工条件确认书 ● Confirm the failure test on a regular basis 定期确认失效试验 | Destructive testing 破坏性试验 | 8 | 288 | After the procedure is set up to confirm the processing conditions, the execution and marking of the failure test is performed. 工序设置完成后确认 | | 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

Precisa de produtos de espuma de poliuretano, seja bem-vindo, entre em contato conosco.

Amanda



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