| LIBRE | | | |
|---|---|---|---|
| **DFM / un rapport** | **Conception 3D gratuite** | **Libre Ouverture de moule** | **Réglage de la norme d'inspection du produit gratuit** |
| Finehope montrera les détails et les solutions de fabricabilité et d'assemblage Par PPT pour aider les clients à réduire les problèmes. | Finehope aide le client concevoir le désiré produit ou modifier la conception gratuitement. | Grosse commande Quantité avec le moulage gratuit. | En plus de la quantification habituelle de Propriétés physiques et normes d'apparence, nous allons ajouter la portée, RoHS, FDA, CA-65 ou CFC gratuitement aux normes en fonction des besoins des clients. |

Certificate

Certificate No.: 11420Q46208R0M

This is to certify that the Quality Management System of

FINEHOPE (XIAMEN) NEW MATERIAL TECHNOLOGY CO., LTD.

Unified Social Credit Code: 91350200612047822X4

No. 466, Jiutianhu Road, Xinghei Industrial Zone, Jimei District, Xiamen City, Fujian Province, China

Has been audited to conform to the following Quality Management System standard

GB/T19001-2016/ISO9001:2015

This Quality Management System is valid for the

The manufacture of polyurethane foam products (Soft polyurethane foam products for construction machinery accessories, agricultural machinery accessories and sports equipment accessories; rigid polyurethane foam products for building decoration; elastomer polyurethane foam products for mechanical parts; soft polyurethane floor mats for home and office use)

Issued by:

Beijing East Alliance Certification Center Co., Ltd.

EACC IAF CNAS

### Certificat ISO 9001

Finehope a Obtenu Certificat ISO 9001 en continu depuis 2003.

**Certification IATF16949**

Finehope a passé le IATF16949 Certification des systèmes de gestion de la qualité de l'automobile en 2021. Plus que 50 documents garantissent la progression du développement de nouveaux produits, la Qualité, délai de livraison et coût des produits de production d'essais et de masse.

Depuis la coopération entre Finehope et Caterpillar en 2007, Finehope a utilisé l'automobile Système de gestion de la qualité pour la nouvelle introduction du produit, en utilisant les cinq Outils de SPC, MSA, FMEA, APQP et PPAP, qui ont gagné des éloges de Caterpillar dirigeants et établi un partenariat à long terme jusqu'à présent.

## Notre Avantages

**1**

**Équipement d'automatisation Capacités de conception et de fabrication**

Chine Fournisseur de mousses de mousse de mémoire en polyuréthane PU La capacité de l'Finehope à L'équipement d'automatisation de la conception et de la fabrication est rare dans l'industrie. Par participer à la conception de nouveaux équipements de mélange d'injection PU et de la transformation de l'automatisation de la ligne de production pour s'assurer que sous la La concurrence du dividende démographique de la Chine est réduite et les coûts de main-d'œuvre se poursuivent augmenter, l'efficacité de la production peut également être améliorée, travail et matériau les coûts peuvent être réduits. De plus, la conception continue et la fabrication capacités d'équipements clés tels que des luminaires, des équipements spéciaux et Les moules automatiques sont également les raisons pour lesquelles Finehope est dans une position de leader dans tous les aspects.

La capacité de l'Finehope à réduire en permanence les coûts et innover les produits peuvent aider les clients à apporter plus grande valeur. Par conséquent, il s'agit d'un partenaire fiable à long terme de nombreuses fortunes 500 entreprises et principales entreprises du secteur.

**2**

**Recherche en matière première et capacités de développement**

Depuis 2002, Finehope a été engagés dans la conception et la fabrication de produits mousses moulés en PU. Recherche et développement indépendant des matériaux de formule et de la production stable La capacité est la base de l'assurance de la qualité.Chine Tapis de cuisine usine

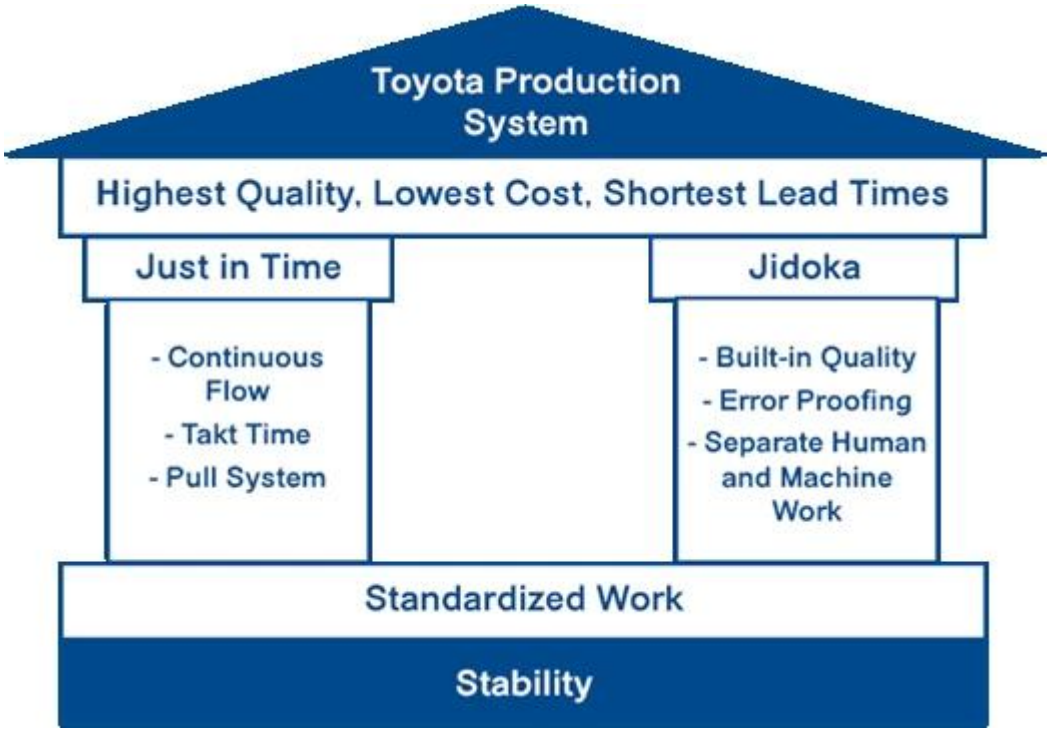
Finehope peut ajuster la formule de produits à tout moment en fonction des besoins personnalisés des clients produits personnalisés, tels que les exigences relatives à la dureté, l'élasticité, soutien, sensation, densité, couleur et autres propriétés physiques et chimiques, et peut faire des exigences de formulation conformément aux lois et règlements de divers pays. Bien sûr, une bonne formule doit également considérer le meilleur Performance des coûts. Pour de nouveaux projets, la capacité de développer des formulations PU est une Condition clé pour assurer la qualité du développement de produits, le délai de livraison et le coût.

**3**

**Gestion scientifique capacité**

Finehope souligne la importance du système de production de Toyota et du modèle de coaching d'entreprise à Optimiser l'efficacité de la gestion. Amélioration continue de l'efficacité et La qualité de tous les employés, la gestion et le personnel de production ont été efficacement et continuellement amélioré, la gestion et les coûts de production ont été continuellement réduit, mais plus important que l'efficacité et le coût sont les la culture de la croissance des employés grâce à une amélioration continue, car c'est le noyau du développement durable des entreprises.Chine Tapis anti-fatigue décoratifs fabricant

Finehope 'S RÉFINIMENT réduit le problème des clients, car il réduit la négligence sur le Système de processus humain et la capacité d'accumuler continuellement professionnel expérience, qui peut garantir que tous les nouveaux projets sont terminés dans le temps le plus court.

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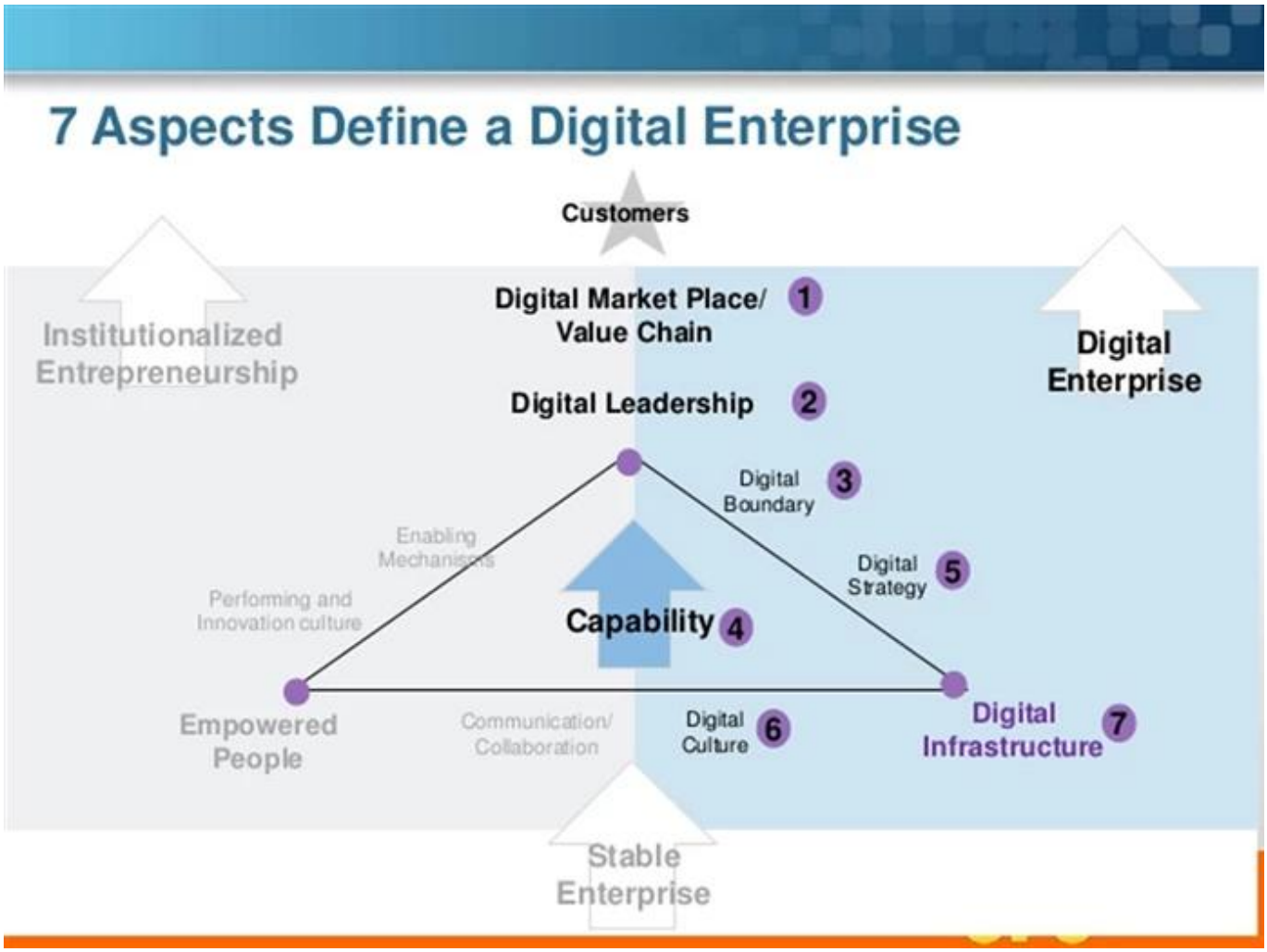
**4**

**Enterprise Digital capacités**

Finehope a investi fortement dans la recherche et le développement de systèmes logiciels à numériser Gestion des processus métier et fabrication industrielle. Numérique La transformation

permet à Finehope d'utiliser de nouvelles technologies pour permettre aux clients de avoir une expérience plus positive, tout en réduisant la charge de travail de la société employés et en fin de compte réduire les coûts.



## Famous customer

Cooperation experience

**FAQ**

**1. Pourquoi vous choisissez Finehope?**
Finehope est le fabricant PU le plus professionnel en Chine, qui possède une équipe de R & D professionnel, un équipement de production PU avancé, un équipement de test professionnel et un système de gestion de la qualité parfait. Nous avons une expérience de coopération de 12 ans avec Cat, Fiat, TVH, GGP et d'autres entreprises célèbres. Nous leur fournissons un service en une étape de la R & D à la production afin de satisfaire leurs besoins de personnalisation.

**2. Quels sont les avantages de choisir Finehope?**
1) Assurance qualité produit, garantie de livraison, bon service après-vente.
2) Efficacité de développement rapide et rentable, fonctionnement professionnel avec intégrité.
3) Finehope effectuera toutes les analyses de test, puis élaborera des normes de test afin de réduire le différend standard de qualité entre les clients et les fabricants.
4) Mode de gestion de la production maigre.
5) Aidez les clients à développer et à concevoir de nouveaux produits.
6) Une expérience riche dans la conception et la transformation des produits PU.
7) Finehope est une entreprise de haute technologie en Chine avec intérieure et possède une invention internationale des brevets technologiques et une propriété intellectuelle.

**3. Quelle est la différence entre Finehope et ses pairs domestiques?**
1) Assurance qualité: planification de la qualité avancée (APQP).
2) Finehope a une riche expérience dans la prestation de grandes entreprises internationales.
3) Une équipe de recherche scientifique professionnelle de matériel de polyuréthane est-elle.
4) possède une conception indépendante, une capacité de fabrication et d'innovation d'équipement de production et de moules.

5) L'équipe d'ingénieurs a-t-elle responsable du système d'assurance qualité et du contrôle de la qualité.

**4. Quelles sont les différences entre les pairs Finehope et européen et américain?**

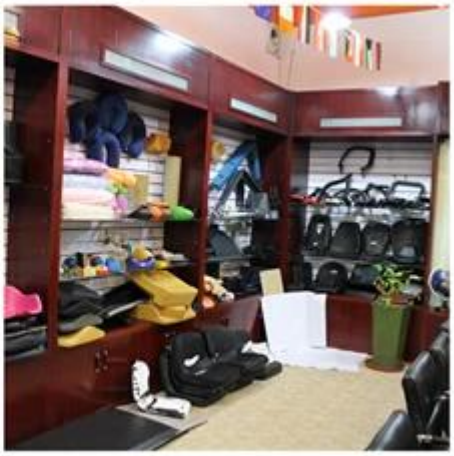
1) a une chaîne d'approvisionnement parfaite et mature.
2) Frais de moule inférieur.
3) Efficacité élevée de la capacité de développement et de conception et du temps de processus court.
4) Advantage coûteux et bonne attitude de service.

**5. Quelles sont les applications des produits PU?**
Voiture, machines d'ingénierie, équipement de fitness sportif, machines médicales et articles ménagers quotidiens, etc.

## À propos de nous

**Bureau**

**Échantillon salle**



**Activité**

| **Notre Certification** |
|---|

**Fournisseur vérifié d'Alibaba Certificat**

Depuis 2007, Finehope a constamment adopté la certification TUV et est devenu une alibaba. Fournisseur vérifié.

Vérifié Fournisseur est un fournisseur de haute qualité vérifié par la force faisant autorité de Plate-forme d'Alibaba. Grâce aux audits sur site en ligne et hors ligne, les marchands qualifications d'entreprise, qualifications du produit, capacités d'entreprise et D'autres atouts complètes sont examinés et vérifications.

**L'intégration de Certificat de système de gestion de l'information et de l'industrialisation**

Le certificat est évalué par le gouvernement municipal de Xiamen et délivré par l'Académie de Shanghai de la science de la gestion de la qualité. Ce certificat reflète le niveau de L'intégration approfondie de l'Finehope de l'informatisation et de l'industrialisation. Finehope continuera à prendre une nouvelle voie d'industrialisation; utiliser des informations la technologie comme support pour transformer et mettre à niveau l'énergie cinétique traditionnelle, cultiver une nouvelle énergie cinétique et poursuivre un modèle de développement durable.

**Xiamen Micro, petites et moyennes entreprises axées sur la croissance**

Finehope a été évalué Comme "Micro, petites et moyennes entreprises" de la croissance de Xiamen "depuis 2019. C'est le résultat de la notation du gouvernement municipal de Xiamen basé sur l'Finehope divers indicateurs complets, modèles de croissance, force de la marque dans le Industrie et bonne réputation d'entreprise, puis émettez ce certificat. C'est un proof that Finehope stands out among thousands of small and medium-sized enterprises in the city.

**La sécurité du travail Standardization Certificate**

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

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 Géant. This certificate was jointly issued by five departments of the Xiamen Municipal Gouvernement. 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 a été évalué 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 Xinglin , 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: +1-855-957-7770 / E-mail: sungo.group@yahoo.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.*

Sungo FDA

Executive Director
Issued: Dec. 19 2019
Cert. No.: 2006US756528
Expiration Date: Dec. 31 2020

SUNGO CHINA OFFICE Tel: 021-68828052 Email:Shage2008@126.com Website: www.sungoglobal.com
Add: 13th Floor, No.1500 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.

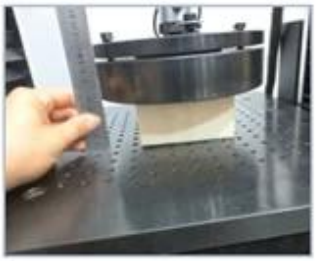
Finehope has passed FDA certification every year since 2018. FDA approval means that the products produced by Finehope have obtained foreign government certificates (CFG) and can enter the global market smoothly.

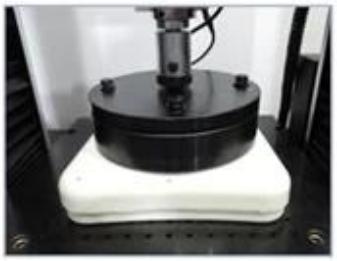
## Qualité Assurance

Tensile Test

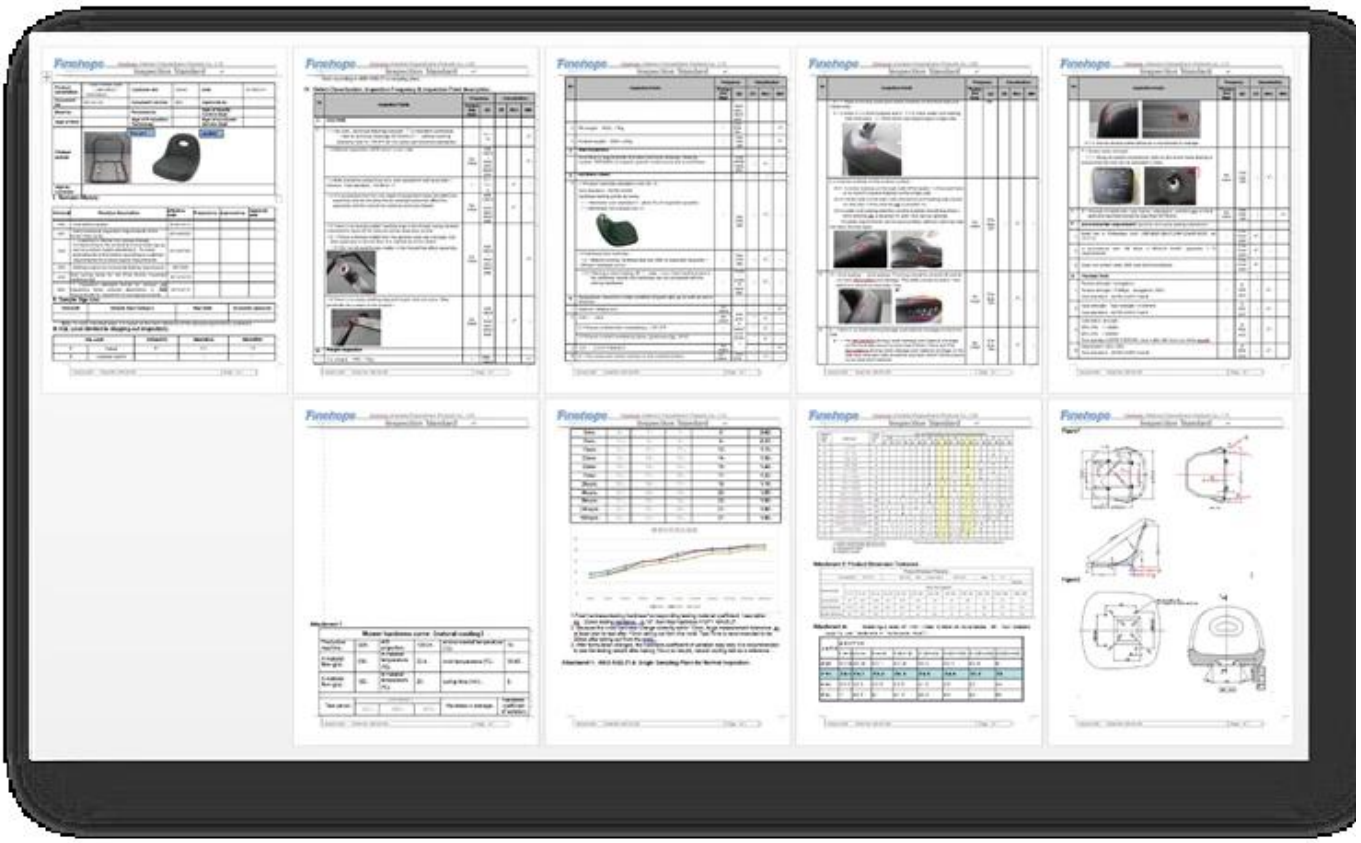
Tear Resistance Test

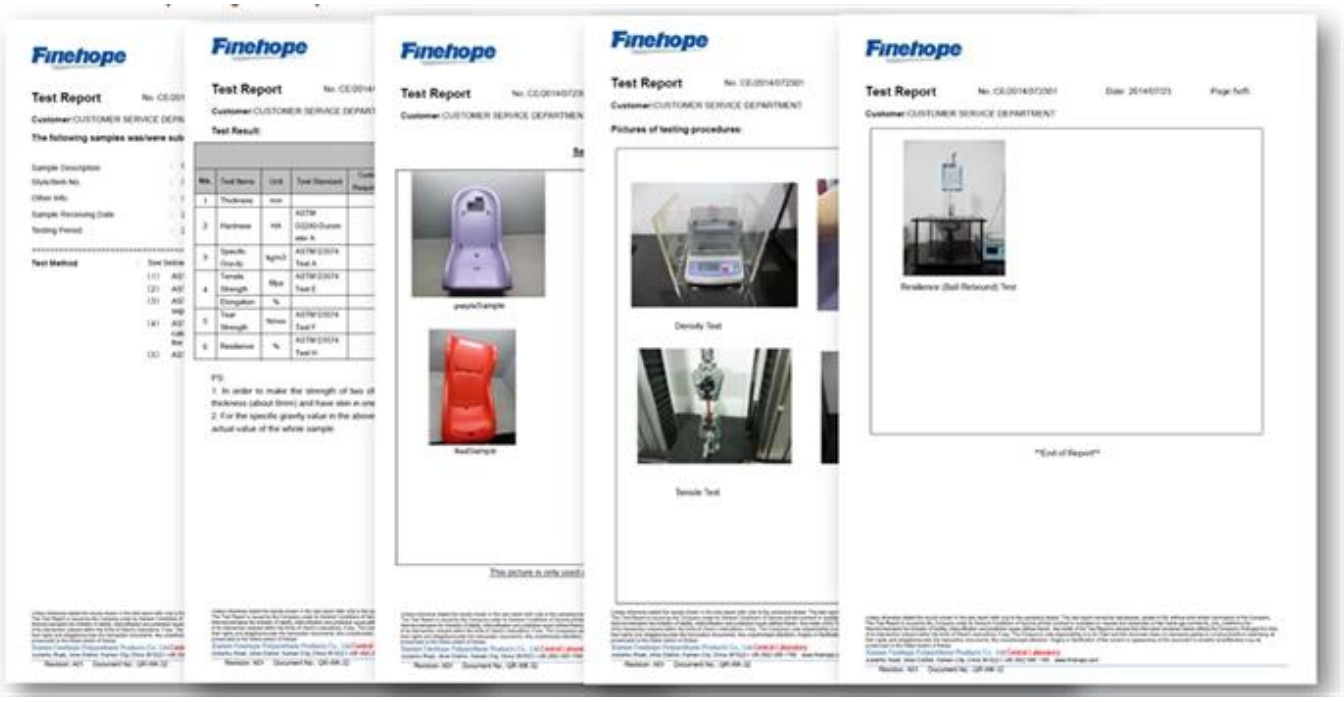
Compressive Strength





Indentation Force Deflection






**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 conditions.

Finehope **Advanced Product Quality Planning** Date: 01-Oct-17

| | | | |
|---|---|---|---|
| Customer | [redacted] | Project | [redacted] |
| Location | New Zealand | Finehope Contact | Wendy Yang |
| Customer Code | G1019 | Part No. | [redacted] |
| Risk Assessment | | Part Name | G1019Y04 |
| New : Site ☐ Technology ☐ Process ☐ | | Change Level/Date | |
| Other Risks ☐ | | User Plant(s) | Finehope |

| Core Team Members | Company/Title | Phone/Fax/E-Mail |
|---|---|---|
| Tiger Xu | G.M. | [redacted] |
| Yibin Lim | Vice G.M. | [redacted] |
| 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 | No. Concurred Majors | | |
|---|---|---|---|---|---|---|
| Product Design and Develop | 21-Jun-21 | 10 | | | | |
| Product and Process Validat | 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 |
|---|---|---|---|---|---|---|---|---|
| **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 | 2080 | G | 26-Jun-21 | 27-Jun-21 | 27-Jun-21 | 28-Jun-21 | 29-Jun-21 | / |
| 6. Preliminary Bill of Materials (BOM) | 2090 | 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 | 2250 | 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 Reasiness 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 (PVP&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 | / |

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 lien.

**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 chacun. 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

Project Name: injection moulding

Procedure responsible dept: Production Dept

Made: Xiaodong Qiu

Model year/vehicle types: CRV

Soybean Milk Maker

Important date: Nov.10th.2015

FMEA 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 | detectivity (D) | RPN | recommended measures | Responsibility and target completion date | action results | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | Action Taken | 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 | warpage 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 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 | 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

Item:Welding improvement
项目:焊接改善

Process Responsibilities: Production welding group
过程职责：生产部焊接组

Maker:Wenrong-Huang

Model year/project
型号年/项目

Key Dates
关键日期

FMEA Date (Original):2015.03.25

| Item 项目 / Request 问题 | Potential failure mode 潜在失效模式 | Potential consequences of failure modes 失效的模式潜在后果 | 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 现行过程控制探测 | Detection rate 探测率 | 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 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | Measures and effective date 采取的措施 | Severity 严重度 | Incidence rate 发生率 | Detection degree 探测度 | RPN |
| Clamping (clamping required is in place, no missing or wrong loaded) 钳夹（钳夹需到位，无漏装，错装） | Clamping is not in place 钳夹不到位 | SizeNG 尺寸NG | 6 | B | ●Staff negligence 人员作业疏忽 ●Fixture for bad 夹具作动不良 | 4 | ●Make the operation standard book 制定作业标准书 ● Make maintenance standards, regular maintenance 制定保养基准，定期保养，维护 | ●Visual inspection 目视检测 ● Finished 100% full inspection 完检100%全检 | 6 | 144 | ●Pre-service training of staff 人员岗前培训 ● Regular maintenance 工装定期维护 | | | 6 | 3 | 4 | 72 |
| | | Welding error, leak welding, welding deviation, affect the assembly or use function 焊接错误，漏焊，焊接偏移，影响装配或使用功能 | 8 | A | ●Staff negligence 人员作业疏忽 ●Fixture for bad 夹具作动不良 ●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 制定保养基准，定期保养，维护 ●Regular checking of fixture 对夹具定期检测 | Visual inspection 目视检测 | 6 | 192 | ●Pre-service training of staff 人员岗前培训 ●Regular maintenance 工装定期维护 ●Make inspection checklist for fixture 制作夹具检测点检表 | | | 8 | 3 | 4 | 96 |
| | Attachments missing 附件漏钻 | 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 目视检测 | 4 | 96 | Final inspection personnel do 100% full inspection for each bead with mark 终检人员100%全检，对 | | | 8 | 2 | 2 | 32 |
| | Attachment error 附件装错 | Influence assembly 影响装配 | 7 | A | No mistake proofing fixture 治具无防错 | 3 | Make the operation standard book 制定作业标准书 | Visual inspection 目视检测 | 5 | 126 | ●Increase the mistake proofing devices 增加防错装置 ●Inspection for final inspection tools 定检检具检测 | | | 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 加工条件确认点检 ●Confirm the failure test on a regular basis. | Destructive testing 破坏试验检测 | 8 | 288 | After the procedure is set up to confirm the processing conditions, the execution and marking of the failure test is performed. 首程序设定加工条件确认 | | | 9 | 3 | 4 | 108 |

**KRAUSS MAFFEI**

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

**Self-invented fully automatic production line**

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

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**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.

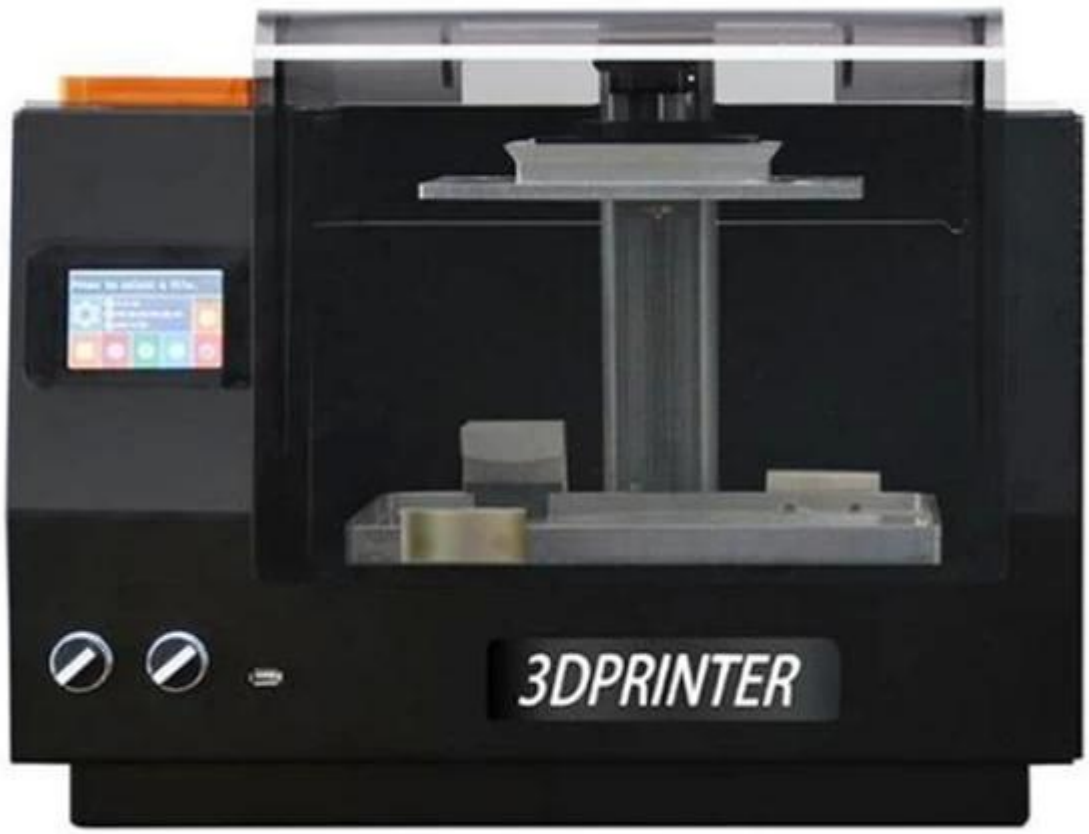
**Machine cnc**

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 les coûts de main-d'œuvre.




**Imprimante 3D**

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.

**EN OUTRE**

En plus de ce qui précède, we also have more powerful 19-year supply chain management capabilities, with supporting processing equipment and capabilities which not listed above. Nous have strict regulations and requirements for their qualification review, quality control plan and incoming quality batch management.

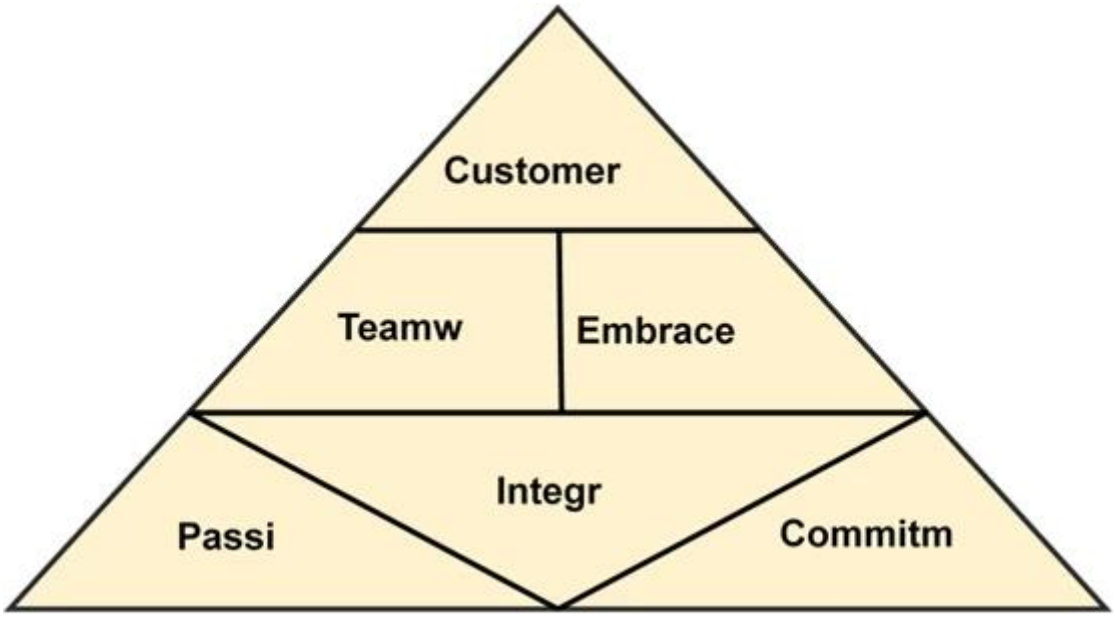
We can do carbon fiber, glass fiber, wood products, hardware, etc. In large quantities, we have suppliers with stable quality and output to cooperate.

## Social Responsabilité

- Strictly follow SA8000
- public-spirited

Voluntary tree planting after Super Typhoon Meranti 2016

## UN Value-based Company




**Polyurathanemoussedes produitsavoir besoin,bienvenueContacteznous.**

Amanda

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