

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.

Finehope

This product is customized for the customer, not for sale







Sesuaikan kerusi pemotong rumput kalis air pu poliuretana

Bahan: buih pu besi

Jenis: busa poliuretana

Saiz (LWH): 431x429x238mm

Warna: hitam, kelabu dan banyak lagi sesuaikan

Bahan: poliuretana besi

Ketumpatan: 150-200kg/m³

Moq: 100pcs

Penggunaan: kerusi pemotong rumput

Sijil: RoHS, REACH, EN71-3, CA65



Finehope telah memperoleh sijil ISO 9001 secara berterusan sejak 2003.

Pensijilan IATF16949:

[China pu pembekal alat pemotong rumput](#) Finehope lulus Pensijilan Sistem Pengurusan Kualiti Automotif IATF16949 pada tahun 2021. Lebih daripada 50 dokumen menjamin kemajuan pembangunan produk baharu, kualiti, masa penghantaran dan kos percubaan dan produk pengeluaran besar-besaran. Sejak kerjasama antara Finehope dan Caterpillar pada 2007, Finehope telah menggunakan sistem pengurusan kualiti automotif untuk pengenalan produk baharu, menggunakan lima alat SPC, MSA, FMEA, APQP dan PPAP, yang telah mendapat pujian daripada eksekutif Caterpillar dan menubuhkan -perkongsian jangka setakat ini.

Our Advandages



Keupayaan penyelidikan dan pembangunan bahan mentah PU

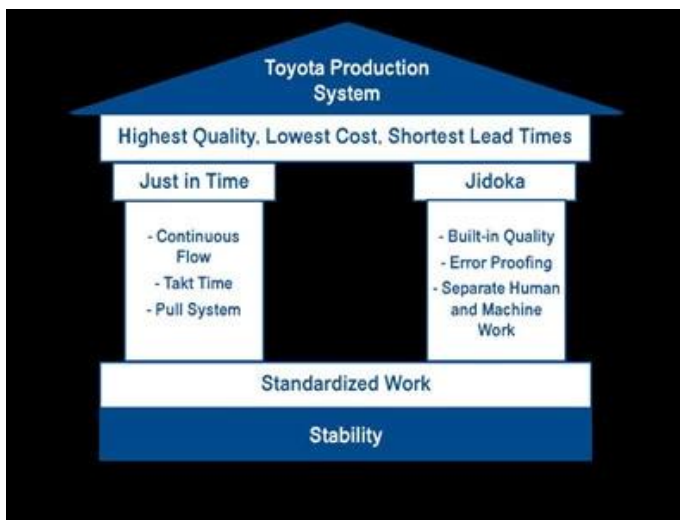
[China pu mesin pemotong rumput tempat duduk](#)

[manufcturer](#) Sejak tahun 2002, Finehope telah komited kepada reka bentuk dan pembuatan produk buih acuan PU. Penyelidikan dan pembangunan bebas bahan formula dan kapasiti pengeluaran yang stabil adalah asas untuk jaminan kualiti.

Finehope boleh melaraskan formula produk pada bila-bila masa mengikut keperluan tersuai pelanggan" produk peribadi, seperti keperluan untuk kekerasan, keanjalan, sokongan, rasa, ketumpatan, warna dan sifat fizikal dan kimia yang lain, dan boleh membuat keperluan formulasi dengan mematuhi dengan undang-undang dan peraturan pelbagai negara. Sudah tentu, formula yang baik juga mesti mempertimbangkan prestasi kos yang terbaik. Bagi projek baharu, keupayaan untuk membangunkan formulasi PU adalah syarat utama untuk memastikan kualiti pembangunan produk, masa penghantaran dan kos.

Reka bentuk peralatan automasi dan keupayaan pembuatan

Keupayaan Finehope untuk mereka bentuk dan mengeluarkan peralatan automasi jarang berlaku dalam industri. Dengan mengambil bahagian dalam reka bentuk peralatan pencampuran suntikan PU baharu dan transformasi automasi barisan pengeluaran, untuk memastikan bahawa di bawah persaingan dividen demografi China dikurangkan dan kos buruh terus meningkat, kecekapan pengeluaran juga boleh dipertingkatkan, kos buruh dan bahan dapat dikurangkan. Di samping itu, keupayaan reka bentuk dan pembuatan berterusan peralatan utama seperti lekapan, peralatan khas dan acuan automatik juga merupakan sebab mengapa Finehope berada di kedudukan utama dalam semua aspek. Keupayaan Finehope untuk terus mengurangkan kos dan menginovasi produk boleh membantu pelanggan membawa nilai yang lebih besar. Oleh itu, ia merupakan rakan kongsi jangka panjang yang boleh dipercayai bagi banyak syarikat Fortune 500 dan syarikat terkemuka dalam industri.



Keupayaan pengurusan saintifik

Finehope menekankan kepentingan Sistem Pengeluaran Toyota dan Model Kejurulatihan Korporat untuk mengoptimumkan kecekapan pengurusan.

Penambahbaikan berterusan kecekapan dan kualiti semua pekerja, pengurusan dan kakitangan pengeluaran telah dipertingkatkan secara berkesan dan berterusan, kos pengurusan dan pengeluaran telah dikurangkan secara berterusan, tetapi lebih penting daripada kecekapan dan kos adalah penanaman pertumbuhan pekerja melalui penambahbaikan berterusan. Kerana ini adalah teras pembangunan mampan korporat.

[Kilang buih poliuretana pu China](#) Penambahbaikan Finehope mengurangkan masalah pelanggan, kerana ia mengurangkan kecuaiian pada sistem proses manusia dan keupayaan untuk terus mengumpul pengalaman profesional, yang boleh memastikan semua projek baharu disiapkan dalam masa yang singkat.

Famous customer

Cooperation experience

Engineering
Vehicle

BOYD
CORPORATION

TVH



Honeywell | STIGA | CAT

Medical
Equipment

Hill-Rom

INVACARE
Yes, you can.

MAQUET
GETINGE GROUP

Dr Posture

Ki Mobility

Baby
Supplies

Bumbo Nuby

bugaboo

chicco

Hatch
Baby

GRACO

Fitness
Equipment

STAR TRAC
expect different.

BOWFLEX

IB&G
BUILDING PRODUCTS

ergoDRIVEN

NUVA

Other

PANDORA
UNFORGETTABLE MOMENTS

Cubefit

Knoll

Soalan Lazim

1. Mengapa anda memilih Finehope?

Finehope ialah pengeluar PU paling profesional di China, yang mempunyai pasukan R&D profesional, peralatan pengeluaran PU termaju, peralatan ujian profesional dan sistem pengurusan kualiti yang sempurna. Kami mempunyai pengalaman kerjasama 12 tahun dengan CAT, FIAT, TVH, STIGA dan perusahaan terkenal lain. Kami memberikan mereka perkhidmatan satu langkah daripada R&D kepada pengeluaran untuk memenuhi keperluan penyesuaian mereka.

2. Apakah kelebihan memilih Finehope?

- 1) Jaminan kualiti produk, jaminan penghantaran, perkhidmatan selepas jualan yang baik.
- 2) Kos efektif, kecekapan pembangunan pantas, operasi profesional dengan integriti.
- 3) Finehope akan menjalankan semua analisis ujian dan kemudian menyelesaikan piawaian ujian untuk mengurangkan pertikaian standard kualiti antara pelanggan dan pengilang.
- 4) Mod pengurusan pengeluaran kurus.
- 5) Bantu pelanggan untuk membangunkan dan mereka bentuk produk baharu.
- 6) Mempunyai pengalaman yang kaya dalam reka bentuk dan pemprosesan produk PU.
- 7) Finehope ialah perusahaan berteknologi tinggi di China dengan teknologi dan intelektual tempatan dan mempunyai paten ciptaan antarabangsa harta benda.

3. Apakah perbezaan antara Finehope dan rakan sebaya domestik?

- 1) Jaminan kualiti: perancangan kualiti lanjutan (APQP).
- 2) Finehope mempunyai pengalaman yang kaya dalam melayani perusahaan besar antarabangsa.
- 3) Mempunyai pasukan penyelidikan saintifik profesional bahan poliuretana.
- 4) Mempunyai reka bentuk bebas, pembuatan dan keupayaan inovasi peralatan pengeluaran dan

acuan.

5) Mempunyai pasukan jurutera yang bertanggungjawab ke atas sistem jaminan kualiti dan kawalan kualiti.

4. Apakah perbezaan antara Finehope dan rakan sebaya Eropah dan A.S?

- 1) Mempunyai rantaian bekalan sokongan yang sempurna dan matang.
- 2) Kos acuan yang lebih rendah.
- 3) Kecekapan tinggi pembangunan dan keupayaan reka bentuk dan masa proses yang singkat.
- 4) Kelebihan kos dan sikap perkhidmatan yang baik.

5. Apakah aplikasi produk PU?

Kereta, jentera kejuruteraan, peralatan kecergasan sukan, jentera perubatan dan barangan rumah harian dan sebagainya.



About us



OUR
BUILDING







Our Certification



Xiamen Perusahaan Mikro, Kecil & Sederhana yang berorientasikan Pertumbuhan



Xiamen Khusus, Menapis, Membezakan, PKS Inovatif



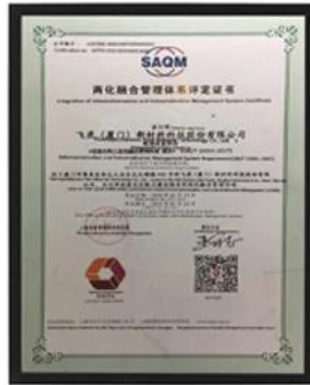
Syarikat Peneraju Sains dan Teknologi Little Giant Xiamen



Finehope telah dinilai sebagai "Perusahaan Mikro, Kecil & Sederhana yang berorientasikan Pertumbuhan Xiamen" sejak 2019. Ia adalah keputusan pemarkahan Kerajaan Perbandaran Xiamen berdasarkan pelbagai petunjuk komprehensif Finehope, model pertumbuhan, kekuatan jenama dalam industri, dan reputasi korporat yang baik, kemudian mengeluarkan sijil ini. Ia adalah bukti bahawa Finehope menonjol di kalangan beribu-ribu perusahaan kecil dan sederhana di bandar ini.

Finehope telah dinilai sebagai "Xiamen Specialized, Refining, Differentiate, Innovative PKS" sejak 2020. "Specialized, Refining, Differentiate, Innovative" merujuk kepada PKS dengan perniagaan utama yang cemerlang, keupayaan profesional yang kukuh, keupayaan R&D dan inovasi yang kukuh serta potensi pembangunan. Tertumpu terutamanya dalam teknologi maklumat generasi baharu, pembuatan peralatan mewah, tenaga baharu, bahan baharu, bioperubatan dan industri pertengahan hingga tinggi yang lain. Kerajaan menekankan dan mengiktiraf "pengkhususan, inovasi khas" finehope adalah untuk menggalakkan inovasi dan mencapai pengkhususan, pembaharuan dan pengkhususan.

Sejak 2019, Finehope telah dipilih sebagai syarikat terkemuka Xiamen Sains dan Teknologi Little Giant. Sijil ini dikeluarkan bersama oleh lima jabatan Kerajaan Perbandaran Xiamen. Kriteria pemilihan memberi tumpuan kepada industri baru muncul strategik seperti teknologi maklumat generasi baharu, peralatan mewah, bahan baharu, tenaga baharu, biologi dan perubahan baharu, penjimatan tenaga dan perlindungan alam sekitar, dan teknologi tinggi marin. Memenangi penghormatan ini menunjukkan bahawa Finehope berada di barisan hadapan industri dalam teknologi maklumat baharu dan bahan baharu.



Pensijilan Pentadbiran Makanan dan Dadah

Finehope telah lulus pensijilan Pentadbiran Makanan dan Dadah setiap tahun sejak itu 2018. Kelulusan Pentadbiran Makanan dan Ubat bermakna produk keluaran Finehope telah mendapat sijil kerajaan asing (CFG) dan boleh memasuki pasaran global dengan lancar.

Integrasi Sijil Sistem Pengurusan Penerangan dan Perindustrian

Sijil tersebut dinilai oleh Kerajaan Perbandaran Xiamen dan dikeluarkan oleh Akademi Sains Pengurusan Kualiti Shanghai. Sijil ini mencerminkan tahap penyepaduan mendalam Finehope dalam pemformatan dan perindustrian. Finehope akan terus mengambil jalan baharu

Sijil Penyeragaman Keselamatan Kerja

Keselamatan pembuatan adalah penting untuk mencegah atau mengurangkan risiko kecederaan, penyakit dan kematian di tempat kerja. Pengurus Besar Finehope Tiger Side: "Hanya kemudahan pembuatan yang terus menekankan keselamatan sebagai isu peringkat atasan akan kekal sangat produktif dan berdaya saing dalam pasaran hari ini."



Permit Pelepasan Pencemaran Wilayah Fujian

Permit pelepasan pencemaran ialah "kad pengenalan" semua entiti yang terlibat dalam pelepasan bahan pencemar dan dikeluarkan oleh Biro Perlindungan Alam Sekitar Perbandaran Xiamen.

Setiausaha Agung Xi Jinping menekankan bahawa "persekitaran ekologi harus dilindungi seperti mata, dan persekitaran ekologi harus dilayan seperti kehidupan." Perdana Menteri Li Keqiang berkata: "Pencemaran alam sekitar adalah bahaya kepada kehidupan rakyat dan kesakitan hati rakyat.

Pihak Ketiga -- Pensijilan TUV

Sejak tahun 2007, Finehope telah lulus pensijilan TUV secara berterusan dan telah menjadi Pembekal Disahkan Alibaba. Pembekal Disahkan ialah pembekal berkualiti tinggi yang disahkan oleh kekuatan berwibawa platform Alibaba. Melalui audit di tapak dalam talian dan luar talian, kelayakan korporat peniaga, kelayakan produk, keupayaan korporat dan kekuatan komprehensif lain disemak dan pengesahan.

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 D2014-2011 Test of Density, Test Agency
- 102 ASTM D2014-2011 Test of Density, Test Agency
- 103 ASTM D2014-2011 Test of Density, Test Agency
- 104 ASTM D2014-2011 Test of Density, Test Agency
- 105 ASTM D2014-2011 Test of Density, Test Agency
- 106 ASTM D2014-2011 Test of Density, Test Agency
- 107 ASTM D2014-2011 Test of Density, Test Agency
- 108 ASTM D2014-2011 Test of Density, Test Agency
- 109 ASTM D2014-2011 Test of Density, Test Agency
- 110 ASTM D2014-2011 Test of Density, Test Agency
- 111 ASTM D2014-2011 Test of Density, Test Agency
- 112 ASTM D2014-2011 Test of Density, Test Agency
- 113 ASTM D2014-2011 Test of Density, Test Agency
- 114 ASTM D2014-2011 Test of Density, Test Agency
- 115 ASTM D2014-2011 Test of Density, Test Agency
- 116 ASTM D2014-2011 Test of Density, Test Agency
- 117 ASTM D2014-2011 Test of Density, Test Agency
- 118 ASTM D2014-2011 Test of Density, Test Agency
- 119 ASTM D2014-2011 Test of Density, Test Agency
- 120 ASTM D2014-2011 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 (unit) | Customer Sample (unit) | |
|-----|------------------|-------------------|-----------------|----------------------|------------------------|------------------------|------|
| | | | | 1 | 2 | Average | |
| 1 | Thickness | mm | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |
| 2 | Thickness | mm | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |
| 3 | Specific Gravity | g/cm ³ | ASTM D2014-2011 | 0.95 | 0.95 | 0.95 | 0.95 |
| 4 | Strength | MPa | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |
| 5 | Strength | MPa | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |
| 6 | Strength | MPa | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |
| 7 | Strength | MPa | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |
| 8 | Strength | MPa | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |
| 9 | Strength | MPa | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |
| 10 | Strength | MPa | ASTM D2014-2011 | 1.5 | 1.5 | 1.5 | 1.5 |

FIG:

- In order to make the strength of two child seats can be compared, set of the test specimen in the same thickness (about 1.5mm) and test area in one side to do the tear strength test comparison.
- For the specific gravity value in the above test result, it is the value of specimen with skin on one side, and the actual value of the whole sample.

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

Sketch Picture

1. This picture 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 Develop | 21-Jun-21 | 10 | | |
| Product and Process Validat | 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

Product Name: Injection moulding

Procedure responsible dept: Production Dept

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 | 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 | 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 | 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 sink, 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 | 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:Wenhong-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 失效的后果/潜在失效模式 | 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 责任及完成日期 | 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 |
| Clamping is not in place 夹紧不到位 | SizeNG 尺寸NG | | 6 | B | ● Staff negligence 人员疏忽 ● Failure for bad 器具/物料不良 | 4 | ● Make the operation standard book 制定作业标准书 ● Make maintenance standards, regular maintenance 制定保养标准,定期保养,维护 | ● Visual inspection 目视检测 ● Finished 100% full inspection 完成100%全检 | 6 | 144 | ● Pre-service training of staff 岗前培训 ● Regular maintenance 工器具定期维护 | | 6 | 3 | 4 | 72 |
| Clamping (Clamping required is in place, no missing or wrong loaded) 夹紧(夹紧要求在位,无漏装/错装) | 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 器具/物料不良 ● Failure inaccurate 器具定位不准确 | 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 工装定期点检 | Visual inspection 目视检测 | 6 | 192 | ● Pre-service training of staff 岗前培训 ● Regular maintenance 工器具定期维护 ● Make inspection checklist for fixture 工装点检清单 | | 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 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 man 每粒人工100%全检,确认 | | 8 | 2 | 2 | 32 |
| Attachment error 附件错误 | Influence assembly 影响装配 | | 7 | A | No mistake proofing fixture 无防错工装 | 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 工装点检 | | 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 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 定期开展失效试验 | 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加工条件 | | 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