





# Welcome To IDEAL MOLDING TECH CO.,LTD VOWIN MODEL DESIGN CO.LTD

Email: id@idmould.com ; eng@vowin.cn

深圳宝安福永街道永福路富桥工业一区二栋3楼

Building 2, FuQiao Industrial Zone 1, Yongfu RD, FuYong Street, Bao'an District, Shenzhen, China. Postcode: 518101

电话 Tel: (0086)0755-29981960 0755-29981760 网站 Web: www.vowin.cn

Rfq: rfq@vowin.cn

Complaint at: info@vowin.cn

深圳市·宝安区·松岗大田洋工业区6路

Da Tian Yang Industrial Zone, Song Gang Town, Baoan District, ShenZhen, China Postcode: 518103

电话 Tel: (0086)0755-29667661 网站 Web: www.idmould.com

Rfq: Rfq@idmould.com

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Plastic Molding/Low Volume Molding/Plastic Injection/Painting /OEM Service 模具制造 塑胶注塑喷油 小批量生产 Rapid Prototyping/CNC Machining/3D Printing/Jigs&Fixtures 手板模型 3D打印 五金钣金机加工 工装治具 自动化零件







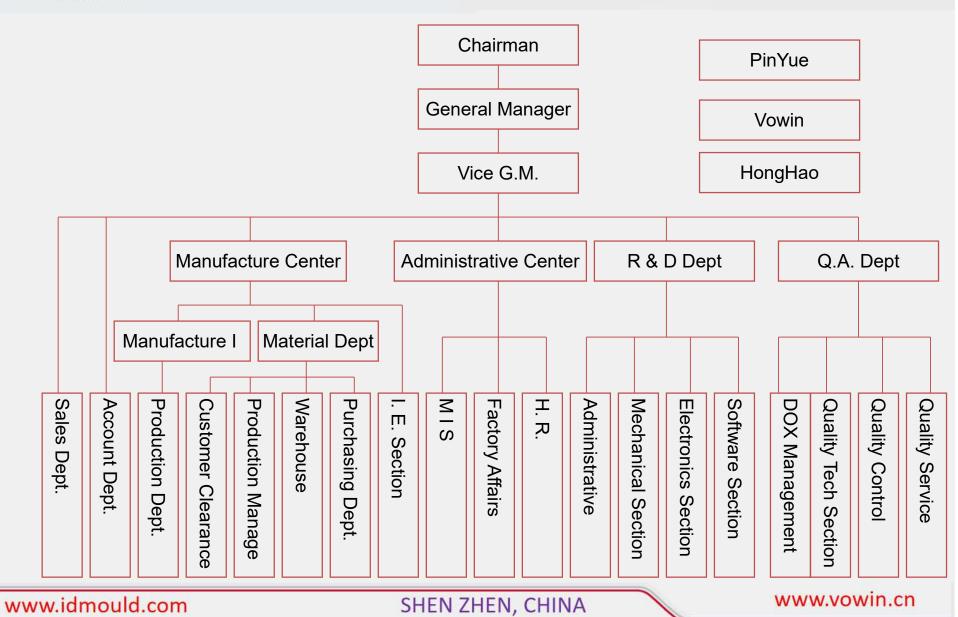
### **About Ideal Group**

\* Total Employee: 180+

\* Design 10% cnc machining ,prototype mold 40
% mold and parts 50%









### **OUR Service**

- □ Mould > >
- □ Prototype Mould > >
- □ Automotives/Medical Mold/2K Mold Solution> >
- □ Plastic injection/Painting/Plating/Screen Printing > >
- □ Die-casting > >
- □ Branch Company For Rapid Prototype > >
- □ OEM/ODM > >











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### Case Study Mold







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### Case Study Prototype Mold

### **Prototype Mould**

Fast Prototype Mold(10-25days)
50 to 10,000pcs Same Mass
Production Material

# Rapid tooling small batch production

The solution [1] Rapid tooling

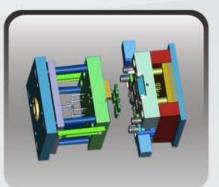
Using range <a>Image</a> Suitable for medium and small parts

Economic usage (piece) DE A single batch of 100-2000

material Months and Material (ABS/PC/POM/PA conventional plastic)

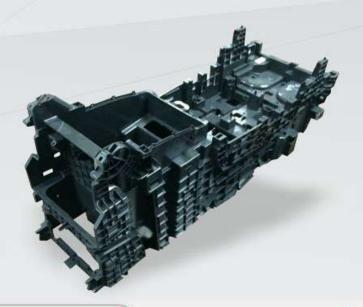
Product performance 05 With the formal mould

The delivery cycle 00 10 to 15 days













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Design. Prototype. Mold

# Audi, Land Rover, Ford, Lear, IAC, Visteon, Case Study Magna, Jonson Controls, Denso, Valeo, Delphi... Automobile medical equipment solutions

Life safety car medical products as a relationship of special consumer goods, the development of every part are very demanding, we follow your rigorous, provide qualified manufacture







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### Medical Equipment









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# Case Study Screen printing/injection/injection mold series







**Car Parts** 

### 20% Percent

2K Mold for Car and Tools













www.idmould.com

SHEN ZHEN, CHINA

www.vowin.cn























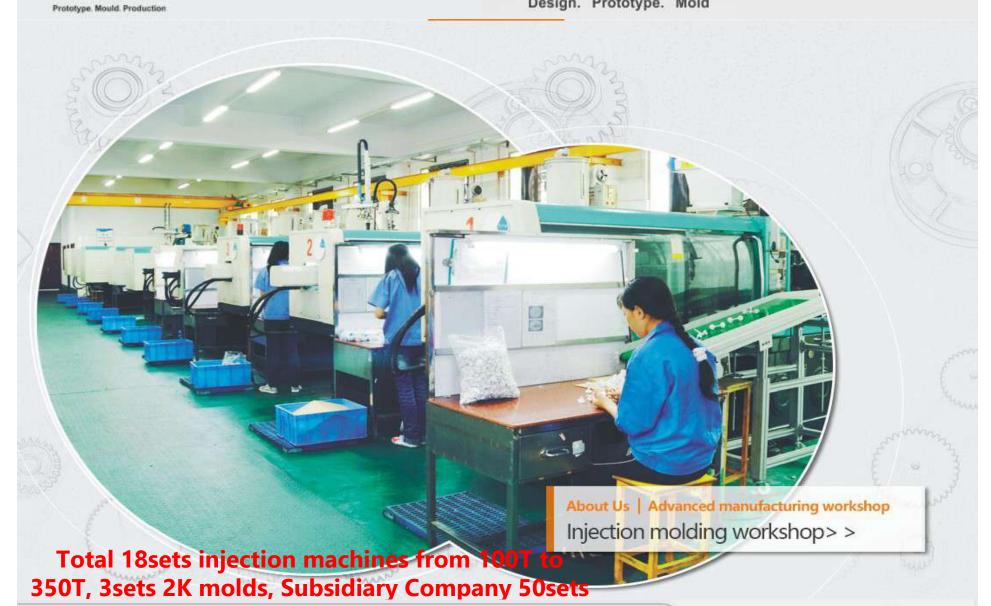




















Machine	QTY	Brand	Producing	PRECISION (mm)
CMM	2	Micro-HITE3D	Switzerland	0.002
Projector	2	EASSON	Japan	0.005
Milling Machine	10	1K831413	Japan	0.5
Milling Machine	20	1K831404	Japan	0.5
CNC(HSP)	2	Mikron	Switzerland	0.002
CNC(HSP)	4	JINZUN	Taiwan	0.003
CNC	6	XINFeng	Taiwan	0.005
EDM	18	Sodick	Japan	0.003
Assembly Line	1	N/A	China	N/A
UV and Painting line	1	Line	China	N/A
Grinding Machine	8	FUKEXING	Taiwan	0.003
Precision Wire Cut	8	Sodick	Japan	0.002
Wire Cut	10	SUSANGUANG	Taiwan	0.005
Injection Machine	13	Hengsheng	Taiwan	/





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### **Advantage**

Testing equipment

Ideal have achieved ISO 9001:2000 certification. "Integrity Centered, Customer First, Quality Priorty and Continuous Improvement" is our quality policy.

We have a complete set of standards for mold design, fabrication and inspection which comply with the quality requirements of Europe, USA and Japan.









Prototype Mould Production

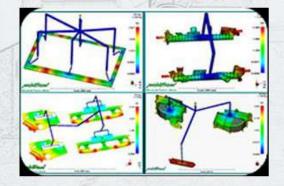


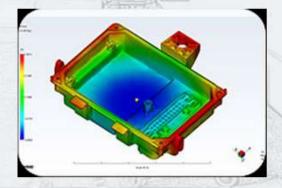
### Moldflow analysis

We also do Moldflow Analysis during our mold design period. Mold utilizes Moldflow analysis that can be used to simulate the broadest range of injection molding processes to predict and avoid potential manufacturing defects, and enable you to predict and solve manufacturing problems in the earliest stages of product development.

### MPI/FLOW

MPI/FLOW simulates the filling and packing phases of the injection molding process to predict the flow behavior of the thermoplastic melts so you can ensure parts of acceptable quality can be manufactured efficiently.













### Advantage Supply chain and customer standards

### Our suppliers























### Strict quality management

Our company passed the ISO9001:2008 quality management system certification, with all kinds of test measurement equipment, meet the demand of any finished product measurement test. Strict management system, strict quality engineer team, cash testing instruments and equipment, to provide customers with the most trustworthy quality guarantee, to create maximum value for customers.

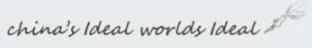
### **Heat treatment**

- 1. Isothermal guenching
- 2. Vacuum carburizing, carburizing
- 3. Play nitrogen altogether permeability
- 4. Conditioning
- 5. Nitriding, plasma nitriding
- 6. Normalizing, annealing
- 7. High frequency
- 8. At high frequency solid solution heat treatment

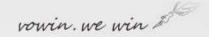


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### **Branch Company For Rapid Prototype**



### RAPID PROTOTYING

1 to 500+Parts in Plastic&Metal











CNC Plastic Parts

**CNC Machining** 

PU casting(Silicon Mold)

Rapid Sheet metal

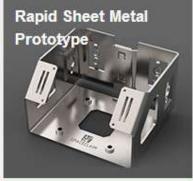
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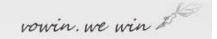












深圳沃优达模型设计有限公司是一家由一批优秀手板专业人才和研发工程师组成的一个实力雄厚的团体。秉承以"品质赢得信赖"的宗旨,以"互惠互利共创双赢"为经营理念;坚持走"科技创新、精益求精"之路,以"沃能,我能"做公司创办方针。以"协助客户的发展就是自己的发展"为原则与客户携手共进!

### 我们提供下列服务:

- 产品设计 快速成型及手板制作
- 零件后处理及修饰
- 五金手板、铝(锌、铜、铁)零件加工
- 抄数及逆向工程
- SLA/SLS 快速原型制造

Pu复模

- 小批量定做零件生产
- 家电手板,数码产品手板,工业手板

- 欧洲水平复模制作技术 / 真空复模
- 快速模具
- 钣金手板

We are a market leader in Rapid Product Development, producing functional prototypes, aesthetic models and durable, complex production run parts using Selective Laser Sintering (SLS) and Vacuum casting (RTV), CNC Machining technologies. Whilst high-tech design software can provide photo-realistic images ideal for the concept stages of product development, a physical, tactile, 3D model of a new product or component can speed up the approval process and play a vital role in functionality testing, assembly trials and final design verification.

We recognized that designers and manufacturers are increasingly seeking the fast, accurate production of durable, complex parts. Prototypes is the cost-effective method of choice, producing otherwise 'impossible' end-use parts whilst negating the investment in time and money of conventional tooling. The parts produced are comparable to a good investment cast part and the mechanical properties are comparable to those of a cast or machined component.

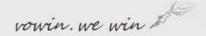
Our consultative approach to doing business ensures our customers always get the best quality, service and delivery for all their prototyping requirements, helping them to develop new products and launch them into the marketplace ahead of their competition and within development budgets.



Mateix







### **Vowin Material Specification And Capability**

Matrix					N	late	eria	ils																																
Process	Brand		Plastic Metal						Applications									S	urfa	ce F	inis	ħ	Natural Colour						uar	ititie	s	Dispatch Times								
		Epoxy@hotopolymer	GF Nylon	Elastomer	Polyurethane	ABS	Acrylic	Other(Rubber)	Stainless Steel	Aluminium	Zinc	Aesthetic	Fitment	SnapFits	Impact Strength	High Temperature	Water Resistant	Complex Geometries	Intricate Detail	Transparency	Medical Grade	Rough	Bead Bast	Smooth	Polish	Paint/pad printing	White	Black	Translucent	Other	Moulded Colour to Spec	1-10 off	<100	<10,000	>10,000	Next Day	3 Working Days	<1 week	2-3weeks	4-6weeks
Stereolithography	Dura Max SLA																		0						0															
(SLA)	Dura Pro SLA													0			0	0	0	0					0				•											
	Full Cure720													0			О			0						0														
Objet	VeroBlue													0										D																
	Tango Black	e II Acc															П	П																	ī					
Objet Express	FullCure720											0		0			0			D																				
Selective Laser Sinting SLS)																	0	-0																						
Rapid CNC																		п	0	•																				
Rapid Plastic Rubber															0	0		П	0						0															
Rapid Tooling (vacunm casting)	Silicon Mould						á																																	
Production	Low-volume						B											п																						

Key	
	IDI

IDEAL	
OK TO USE- Limitation Exist	D





- ① CNC加工车间 CNC Workshop
- ② 车加工车间 CNC Turning Workshop
- 3 激光成型机 SLA Machine
- 4 铣床 CNC Milling
- 5 冲床 Punch Machine
- 6 喷油车间 Painting Workshop
- 激光切割机Laser Cutting Machine
- 8 丝印 Screen Printing
- 9 会议室 Meeting Room
- ID CNC加工车间(2) CNC Workshop(2)





















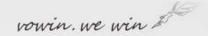
公司拥有强大的技术后盾,先进的机器设备和丰富的生产经验,能为客户



Prototype Mould Production

# china's Ideal worlds Ideal





Design. Prototype. Mold

#### CAD/CAM Machining(CNC) Prototypes And Precision Parts Processing CNC 手板

Vowin utilizes state-of-the-art CAD/CAM Technologies(CNC) to provide high-quality parts in a variety of machinable plastics and metals, For accuracy, surface finish, and material properties, CNC is the best choice. On large and complex parts, Vowin can often compete with Rapid prototyping priaing and lead-times.

CNC(Computer Numerical Control)手板模型是综合计算机辅助设计(CAD)、计算机辅助制造(CAM)、计算机数字控制(CNC) 等先进技术,把计算机上构成的三维数据模型,由整块材料切割挖掘而成。工件经一次装夹后,数字控制系统能控制机床接不同工序,自动 选择和更接刀具,自动改变机床主轴转速。进给量和刀具相对工件的运动轨迹及其他辅助机能,依次完成工件几个面上多工序的加工,整个 加工过程由程序自动控制,尺寸精度可达+/-0.05mm,机床主轴转速最高可达24000转/min,表面光洁度高。

CNC模具的材料选择范围广泛,如ABS(进口,围产,黑色,阻燃等)/POM(衰弱)/PMMA(亚克力)/PA(尼龙)/PC/PP/电木。 金属材料:铝合金、镁合金,锌合金,铜等等。这些材料可以保证与批量生产零件材料一致,以模型验证批量产品的信赖性。

CNC模型分为功能模型和外规模型。功能模型是用于验证产品结构,材质,尺寸公差,信赖性,同时用于开模前检讨,避免开模后出现 因设计问题而变更,影响量产。外观模型用于验证产品的造型,色彩,骤感等。

#### Material Options Include The Following Plastics And Metals:

Ren

■ Foam

■ Steel

Brass

■ Ultem

- ABS
- Polycarbonate ■ Delrin
- Acrylic
- Nylon
- TPFE
- PEI
- PA+30GF ■ PP/PE
- Aluminum A ■ Magnesium ■ ABS+PC











### Rapid Casting(Silicon Mold)

#### 硅胶小批量复模

Vowin utilizes Rapid Casting(RTV) to offer prototypes and limited production runs to create parts with production like aesthetics and material properties. This pattern based process allows Vowin to create reproductions in Silicone Rubber tools that emulate the color, texture and feel of production plastic parts

在产品简型的基础上、运用真空复模机快速制造简单的硅胶模、通过多次真空 浇注,完成小批量复制,其材料为PU料,可制出多种如下所示材料件透明件,软胶 耐高温等。同时生产周期短,加工成本低、样品强度好,可以用于客户样机测试与 小批量试产与试市场。

#### **Material Options**

- ARS-like
- PP-like
- ABS/PC-like
- Acrylic-like(tints and clear)
- TPE-like(Multiple durometers)
- POM-like

- Cast in Color
- Insert-Molding Over-Molding
- Cast-in-Texture or Polish
- PA-like
- PA+GF-like







#### SLA/SLS Rapid Prototyping SLA/SLS 激光成型手板

#### High Resolution Stereolithography(SLA)

Vowin utilizes advanced hi-resolution stereolithography(SLA) technologies and the latest production-like materials to offer high quality and durable parts. Our Master Model Makers optimize thefinishing of your parts which provides accuracy and precision. A wide range of materials are available including ABS-like, clear, PP-Like(flexible), moisture resistant, and high temperature.

Vowin's online Rapid Quote system will instantly price your SLA parts in all our material and finishing options.



#### Selective Laser Sintering(SLS)

Vowin's Selective Laser Sintering (SLS) capabilities offer a Variety of durable material options. SLS is the technology of choice for Rapid protorypes to be used in functional applications. SLS material options include nylon, glass-filled nylon, wax, and metals. VOWIN's online Rapid Quote system will instantly price your SLS parts in all of our material and finishing options

利用3d printer 您可以充分了解最终产品的外观和性能状况。设计师和工 程师可借助此项技术进行探索和创新,在更短的时间内做出最合适的选择,将 更好的最终产品更迅速地投放到市场,获得前所未有的成本效益





#### **Sheet Metal Prototypes**

Vowin can support projects from simple bent sheet metal prototypes to complex electro-mechanical assemblies. We've specifically created our services to support prototype and limited production runs of high quality sheet metal parts. Rapid lead times are available utilizing the following material and finish options:

#### 钣金手板

钣金手板部门位与佛山五金重镇拥有手板行业内最先进 的生产设备和多名资深技术人员和钣金师傅,能够加工生产各 种工艺和各种材料的钣金手板。制作的手板基本能满足参展要 求,并可批量生产钣金产品,钣金部可以加工各种材质、各 种工艺的五金类手板,有加工折弯、拉伸、冲压、焊接等方 面的五金手板。切割、折弯、冲压的设备都有一批,起板快、 质量有保证、价格实惠,极具竞争力。 凭借维厚的实力,客 户已遍及全国各地,产品质量市场享有较高的声誉。







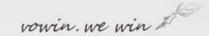
- Steel
- Stainless Steel Spring Steel
- Aluminum
- Copper ■ Brass
- Powder Coating
- Pems and Hardware
- Electro-mechanical Assemblies



Prototype Mould Production

# china's Ideal worlds Ideal





Design. Prototype. Mold

#### Rapid Injection Tooling/Die Casting Tooling:(Low Volume Production: Number of Application: (100-10,000 Pcs) 快速小批量生产模具

Rapid Tooling / Prototyping: (Low Volume Production: Number of application:100 to 10 000 parts)

Vowin offers a wide variety of rapid tooling technologies, including Prototype / Bridge tooling and Short Run / Production tooling. We offer in-house services along with use of our database of reliable rapid tooling providers. Vowin produces injection mold rapid tooling to generate:

Your requirements and your tooling expectations determine the method that we

use to create your rapid tooling. Yowin will select the fastest and most cost effective method that meets your requirements. Our rapid tooling and prototyping engineering team stays up-to-date on the latest technologies and advancements in the industry. We will stay on top of the rapid tooling technology, allowing you to do your job and use our expert services as needed

#### Technical Overview of Rapid Tooling

Vowin uses 1: Aluminum tooling . 2: old mould base tooling . 3: same new mould base different core Tooling. for our Rapid Tooling, Aluminum tooling is versatile approach to Rapid Tooling, it can be CNC machined, EDMed, textured and can create undercuts, also old mould base tooling meaning use no need mould change to your project new core, and same mould base but different project core tooling meaning many project's new core use the same new mould base

We can mold most all thermoplastic materials. Engineering grade resins can also be molded.

Rapid Tooling FAQs

Q: What lead times are available?

A: Tooling lead times range from 2-6wks

Q: Can part have undercuts?

A: Parts can be molded with undercuts. Cams, slides, and lifters can be incorporated into the tooling. For low part volumes, hand loaded inserts can be used to help keep costs down.

A: As with any plastic part that is to be injection molded, draft is needed. The degree of draft is dependent on several factors, depth of draw, surface finish, textures. 1 degree draft is typically adequate.

O: Can I have a texture applied?

A: can have textures applied. They can be bead blasted or sent out for specific textures.

Q: What type of CAD file will you need to quote tooling?

A: The file format needed for tooling quotes is STEP, IGES, Pro/Engineer, or SolidWorks

Q: How about the cost if use vowin's rapid tooling method

A: it's will save your many cost, if use our 1: Aluminum tooling . 2: old mould base tooling . 3: same new mould base different core Tooling No 1: we will save the mould material cost, No 2: we will save our make time. No 3: we can repeat use the mould base . so You can be better than ordinary mould province 60%.

我们同时针对你对小批量生产的需求,如医用产品以及高精度设备产品 本公司引进美国最新式的快速铝模制造,采用特殊的高强度合金铝材应用于模 具上,可大幅缩短模具制作时间,约7-10天即可完成一副模具,同时也可以 采用旧模胚但是新的模仁并可用于一般射出成型机,可维持3百至1万模次,特 别适合于多样少量的生产模式。









### **Product Design** 产品设计

Vowin offer superior industrial design services to create high-quality Product

Our team dedicated to develop and design products is always ready to meet customer's new demand; Advanced design and analysis means provide optimal product design and integrated solution for application: Also vowin offer prototype make-test- mould design -injection-painting- assembly and shipment one step service after design finishe.





我们的团队致力于开发和设计的产品满足客户的需求先进的设计和分析手段提供 最优的产品设计和集成应用程序的解决方案;我们同时提供手板验证--模具设计-喷油 丝印一以及菊配和运输服务。

#### Automotive And Medical Equipment Prototypes Solutions 汽车与医用手板解决方案

we specializes in automotive and medica equipment prototype services, providing automotive and medica equipment components prototypes, automotive and medica equipment parts prototypes, automotive models, and physical prototypes for automotive applications, we has produced automotive prototypes for many major auto manufacturers. Tier 1 and Tier 2 suppliers. Our vast experience in rapid prototyping for automotive and medica equipment applications is a compelling reason to work with us. Rapid prototyping (RP) technologies for automotive and medica equipment applications is a proven technology used by automotive and medica equipment engineers and designers to produce physical, tangible prototypes to work with in design and testing.

#### Key Benefits of Automotive Rapid Prototyping:

Reduced design time and cost Reduced testing time and cost Fast prototype turn-around Better visualization of products with a physical, solid, tactile item in addition to drawings and computer models Testing can be based on form, fit and/or function Quick iterative testing Wide variety of available prototype materials

#### Materials used in Automotive and medica equipment Prototypes:

Silicone rubber, ABS, PC, POM, ABS+PC, ABS+GF10%, PA+30%GF, PTFE, PEI, Aluminum, Stainless steel, Brass, Bronze, Carbon steel, HT steel 4140 Magnesium

Titanium, Zamac - Zinc/Aluminum



# VOWIN

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Prototype Mould Production

Design. Prototype. Mold

### Examples of Automotive and medica equipment Rapid Prototype Parts:

Car Engine parts: Engine castings and parts-

Auto Body Components Auto Mechanical parts-

Car Dashboards

Car Handles and Knobs - Car Trim parts

我司先后引进多台日本Fanuc高速加工中心,设备最高转速为24000转 /min,加工精度可达±0.05mm。专门应用于汽车、医疗等大型结构件的样板 加工。材料可选择ABS、PC、PP、PMMA、POM、尼龙、铝合金、镁合金、 电木等等。同时利用真空复模,低压灌注,等技术来完美配合汽车,医用。 以及空调等大件产品的小批量生产与试样。利用我们的技术可以使部分产品 可以达到量产品的品质与效果。

我们提供的真空复模与 低压灌注 可以用类似ABS、类PP、类PMMA/PC 透明件、软橡胶件 (40-90shord D)、耐高温件 (150℃)、防火材料等等。

标准复制结底: ±0.15mm/100mm

浇注样件厚度:最小 0.5mm,最佳为1.5 mm-5 mm。低压灌注的厚度可以

达到10mm,最大浇注工件:2000X1200X1000mm



















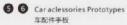








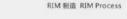












### We Offer a Wide Range of Finishing Options 表面处理

From hand-finishing operations such as sanding polishing and bead blasting to application of cosmetic and non-cosmetic surface treatments, including painting, powder coating, artwork, metalizing, plating and etching, we are your best resource for quality finishing. Our high-volume, rapid throughput capabilities allow us to quickly deliver flawless, expertly finished prototypes and high-volume production parts that meet the specific needs of a wide range of industrial applications.













#### Vowin Finishing Services Include:

Painting Texturing Color Matching Silk Screen Pad Printing Rub Ons Laser Marking Ultrasonic Welding Soft Touch Loserts Hot Stamping Shielding Assembly Packaging

Metalizino Plating **Powder Coating** Polishing Fabrication Etching

喷油 焊接 蚀纹 喷橡胶油 热转印 上色 对色 水转印 丝印 组装 镭雕

电镀 測键 抛光 暗皮革油 喷UV油











































































vowin. we win

### **Advantage**

Supply chain and customer standards

### 11 the information security management measures

Customer product technical information confidential information security work is the core of MEKO priorities. We strictly follow the ISO9001:2008 standards management system, factory to monitor all closed classification fingerprint door control management, by using professional encryption software, server document encryption control step by step, banning the use of intelligent mobile storage devices, personal electronic equipment and photographic equipment; We strictly carry out internal secrecy rules and obey the confidentiality agreement signed with the customer, to ensure that customer information security technical data.

1	Objective: effective information security in a perfect way during the whole processes
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- Information security team: in line with MEKO regulation, practice of assigning exclusive personnel for assigned work to ensure all-round information security;
- Asset management: customer products and important MEKO equipments covered by property insurance, carefully protected and monitored
- Human resource management: employee confidentiality and proprietary rights agreement signed by all the employees
- Physical environment management: monitoring the fully enclosed working space, thorough prohibition in using personal electronic devices in all workshops, hierarchical fingerprinting access control for each workshop
- Communication and operation management: multiple encryption measures on the closed internal computer network to fight against the attack of virus and trojan horse;
- Access control: user classification on access permission into internal system, thorough prohibition in using portal storage devices.
- Information exchange security: exchange of daily service information in strict accordance with company policies
- Security incident management: investigation and accountability into each security incident
  - Continuity management: monthly meetings to review practices as to achieve the continuity of effective information management













# Thank you very much

# Let me know if you have any

# questions