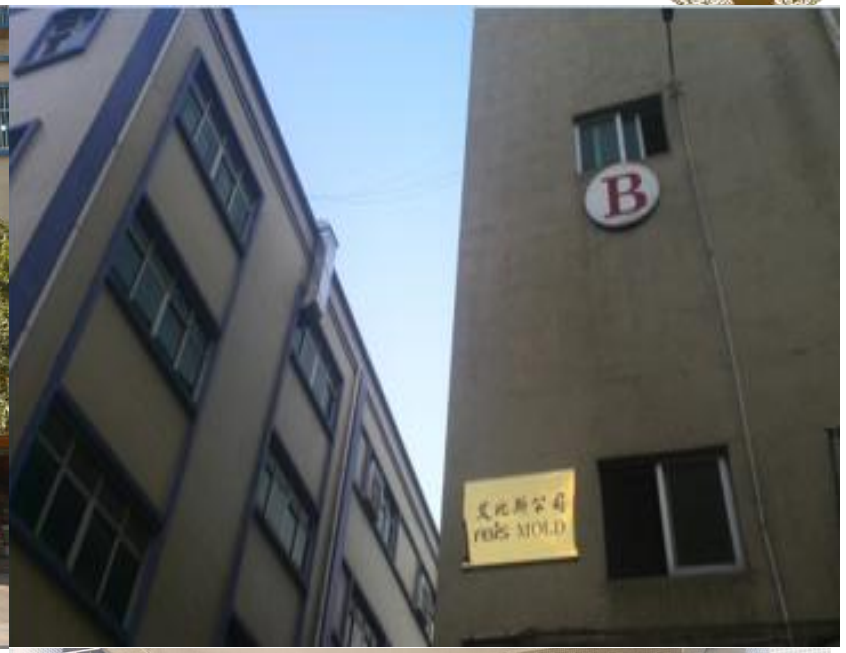
ABIS Tooling &Molding

ABIS MOLD TECHNOLOGY (HK) CO., L TD

ABIS Mold Technology (HK) CO., Ltd



Add: Building B#, YingKeli Industrial Park, Long Dong Community, LongGang District, Shenzhen, China 518116.
Phone: +86 15016526799
Tel: +86 -755 -89984896 ext 821
Fax: +86-755-89627978
Skype: daisymold@outlook.com
Email: daisy@abismold.com
Web: www.abismould.com

ABIS Tooling &Molding

Company Profile

ABIS Mold was found in 1996 in Shenzhen, adjacent to HK, China. and we moved to Long gang District in 2010.With the advanced facilities from Germany, Switzerland and Japan, and a highly experienced design and engineering team, ABIS builds multi-cavity molds to exacting tolerances, providing the critical structural foundation for leading manufacturing companies to produce high precision mold.

At ABIS, All new programs are entered into APQP as soon as the purchase order is received. A team will be assigned to review all steps of the project from tool design through work cell assignment, continuing on to the customer's first production run. Before mold building, Our teams will evaluate your part deign to give you the proactive comments, such us Cooling, Venting, Gating, Cavity/Core sticking concerns, Short Shot possibility, Thin steel conditions, etc. also our engineers will assist in improving the part design and optimizing the mold design to save your cost.

Our molding press machine ranges from 40T to 650T, 300+ molds capacity each year, and 70 % are exported to Europe and North America. Post molding operations include: CNC Machining, decorating, ultrasonic welding, silkscreen and assembly & insertion.

In addition to our plastic mold and molding specialties, we also can provide you the services such us die casting, stamping /punching, blowing mold, as well as the secondary process.

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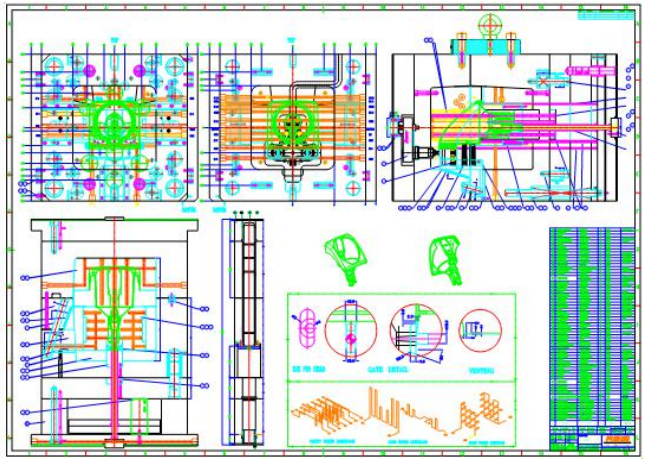
Molding Design



Engineering:

- Pro/ENGINNER(3D Modeling)
- Solid works(3D Modeling)
- AutoCAD(2D Modeling)
- Mold flow Mold Advisor (Plastic flow/deform simulation)-outsource
- Master CAM (CNC Programming)
- Unigraphics (CNC Programming)
- CNC Machining Centers
- CNC EDM's (Electro-Discharge Machining)
- Wire-Cut Machines

Mold standards

- Mold Steel: ASSAB, DAIDO, FINKL, AUBERT & DUVAL, GS, LKM;
- Mold Base: DME, HASCO, FUTABA, LKM;
- Hot Runner: MOLD MASTER, Master TIP, HUSKY, HASCO, DME, YUDO, INCOE, THERMOPLAY;
- Standard Parts: DME, HASCO, NEAREST ANSI STANDARD, NEAREST DIN STANDARD, LKM;
- Texture: Mold-tech, Yick Sang,
- Polish: SPI standard

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QC Control

Mold Making QC main steps

Mould Design Control : Design review checklist before submitting to the customer. We will not start the steel purchasing work until get your written approval on our mold drawing.

Incoming quality control: all steel material and outsourcing standard components will be checked to ensure that they are in accordance with the BOM(QTY and material/components name specified).

In process quality control: all the machining and assembling process is under control, we have QC team to check and supervise the tolerance and processed surface to satisfy the requirements. (Mould Steel Hardness Inspection, Mould Electrodes Inspection, Mould Core and Cavity Steel Dimension Inspection , Mould Pre-Assembly Inspection)

Final quality control: within 3 days the completion of the plastic mold, we will have a thorough check for the main size of the molded plastic sample and mold to ensure that the critical or full dimension (if required) are within tolerance.

Mould Pre-Shipment Final Inspection : Free-fumigation three-plywood case packing; make sure the mold is conformity to the approved mold drawing. The spare components and easily broken components and the electrode (if required) are packaged, as well as the mold drawing and some certificated.

Plastic Molding QC main steps

Vernier caliper measurement is performed by our trained operators when the first product comes out of our machine, we check the contour dimensions and assembly status (if exist) to identify if any rejects.

The molded parts are then inspected again by our experienced QA department for the full dimensions especially the critical dimensions set by customer, and quality result was recorded at the same time. The Result will be to our QC Supervisor directly to see if the unqualified dimensions (if exist) are caused by the uncontrolled factors or our mistakes and we will take the related actions to improve it.

We will trustily report the T1 result to customers, and send T1 samples to customers for checking . sometimes T1 samples need improvements, If good samples are required by customer at first, we will take actions to improve the mold to make sure the samples have 0 defects. No shrinkage, warpage, flash, material streak, air bubble, step line, ejector mark, and dimension within tolerance.

Package inspection: make sure QTY/color (if required) and weight are correct.

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Tooling Shop

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Small Precision Plastic Mold

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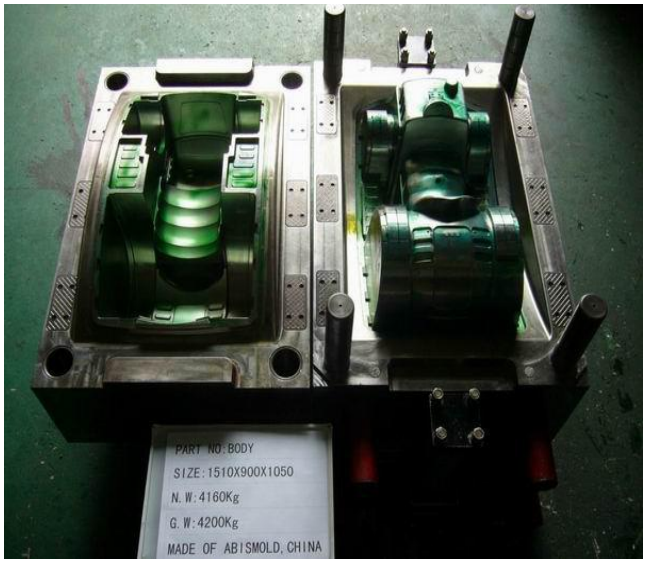
Medium & Big Plastic Mold



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Die Casting Series Show











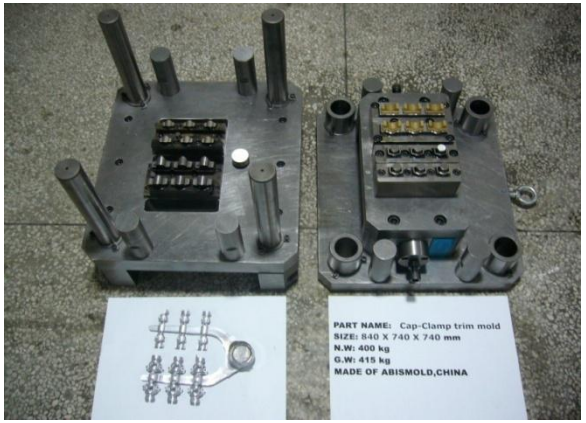

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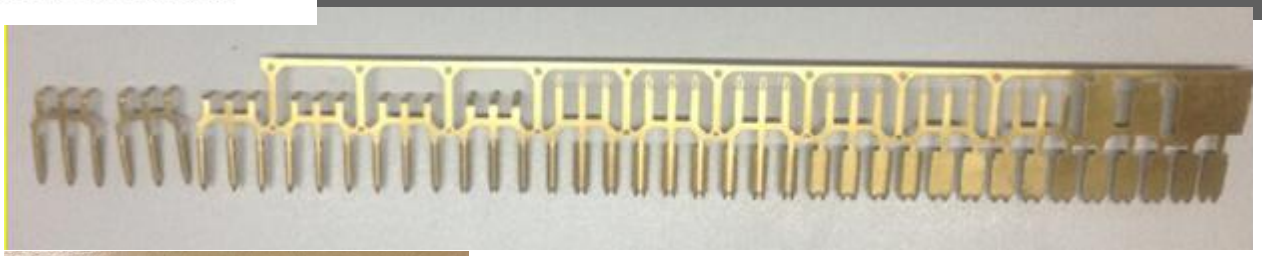
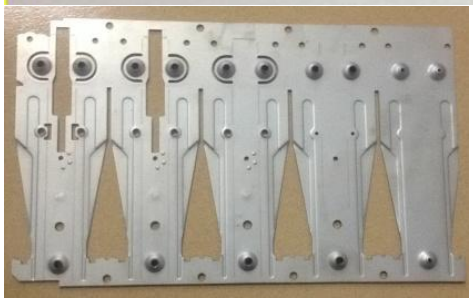
Metal Stamping



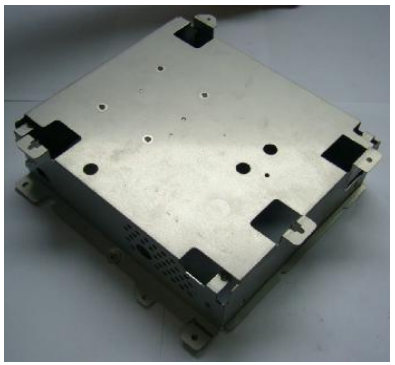




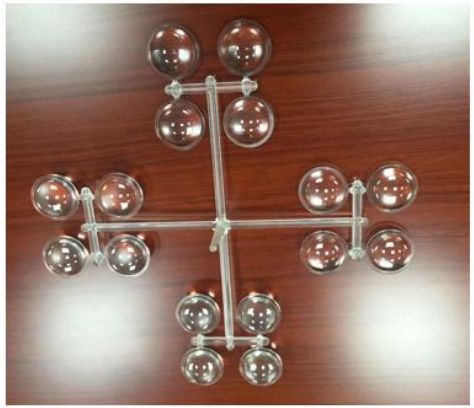









Medical Mold Parts



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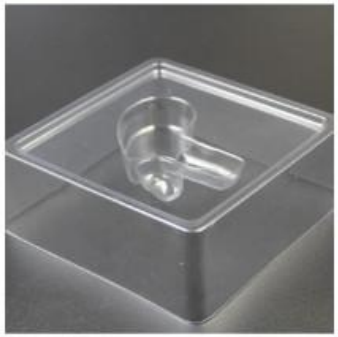
Molded parts-01











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Molded parts-02

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Molded parts-03












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Inserting molding parts

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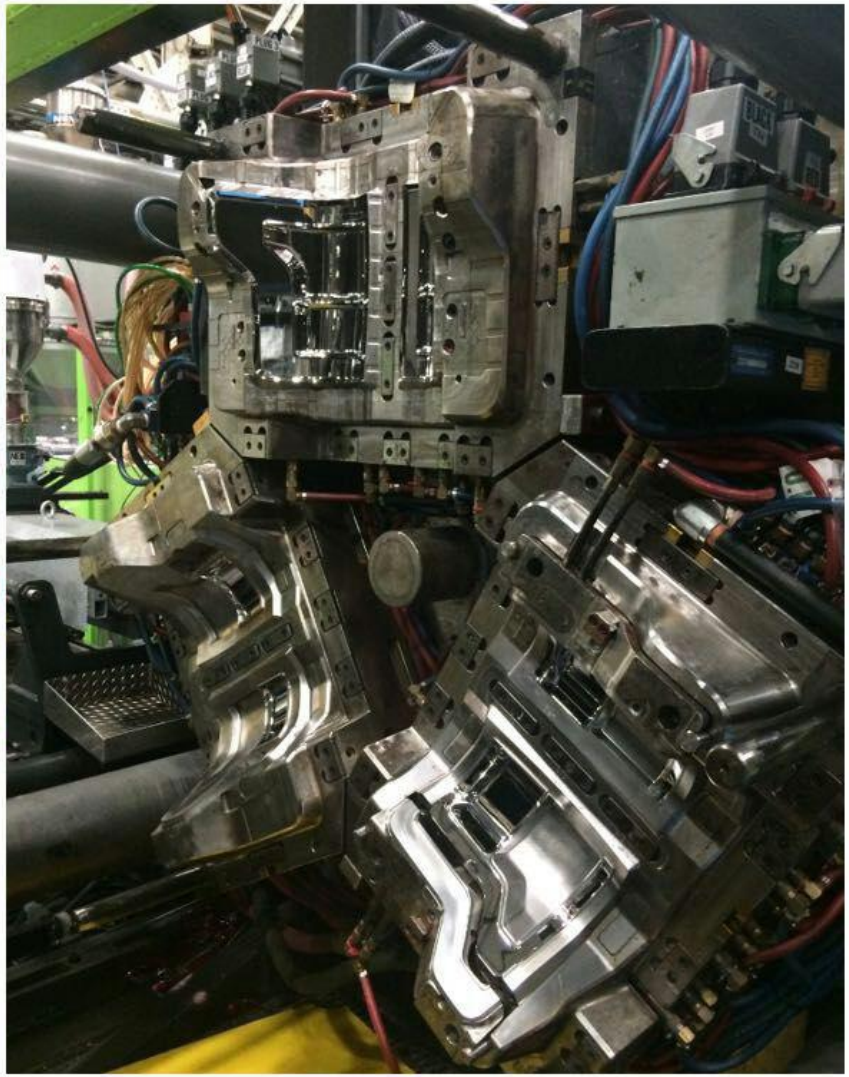
Three-Shot Automobile Molding



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Packing & Shipping

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Working Process

- **Customer RFQ** → 2D or 3D drawings, or the samples, even the concept or idea.
- **Quotation** → Issue quotation within 24 hours (Preliminary DFM if necessary.)
- **PO** → Project kicks off and release the final drawing.
- **DFM** → Submit DFM report within 2 days, some proactive comments like draft analysis, Parting Line, Undercut, Slider/Lifter mechanism, Cooling, Venting, Gating, ejection, Cavity/Core sticking, Short Shot, Thin steel conditions, etc. also our engineers will assist in improving the part design and optimizing the mold design to save your cost.
- **2D Mold design** → Submit 2D mold design within 3 days after DFM confirmed.
- **3D Mold design** → 3D mold design with all mold components, and other details.
- **Design** → Update mold design accordingly and finalize it within one week.
- **Order steel** → Order steel after mold drawing approved, steel certification required. 3-5 days for cavity/Core steel, and 2 weeks for mold base and other mold components, 4 weeks for Hot runner
- **Mold building** → Rough machining, Heat Treatment, CNC precision machining, EDM, Wire Cut, Polish, Mold Fitting, Assembly. Will update project schedule every week together with machining photos.
- **T1** → Normally 4.5 weeks from mold drawing approved to T1. Mold test video and sampling parameter to you, or on-site mold trial.
- **T2 or T2+** → Fix the mold following T1 comments and ECN, and have mold test.
- **Mold Approval** → Make sure parts approved, and mold movement smoothly.
- **Mold checking** → Follow mold check list, and water leak test.
- **Mold package** → Three-ply free fumigation wooden case, electrode, spare parts, steel certification, heat treatment, CD.
- **Mold Delivery** → FOB or CIF terms, by sea or by air.
- **After-sales services** → Make sure mold runs smoothly at your side.

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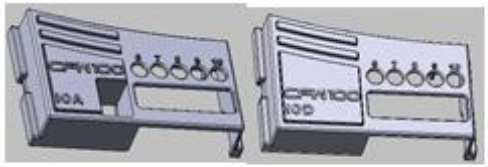
Progress Chart

ABIS TECHNOLOGY

Weekly Work Progress Report (Every Friday with digital photos)



Mold Maker: ABIS MOLD ABIS20141159

End Customer:

Process \ Time	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	September-14																			September-15																																		
Customer PO release																																																			
Received the deposit then starting process																																																		
Mould Design																																																		
Mould Design Approval &Update																																																		
Detail Drawing (2D&3D)																																																	
Order Material																																																	
Order Mould Base/Standard Inserts																																																	
Order hot runner system																																																	
CNC Programming																																																	
Rough Machining Cavity																																																
Rough Machining Core																																																
Heat Treatment																																																
Precise Machining cavity																																																
Precise Machining core																																																
Wire cut																																																
EDM																																																
Moldbase Machining																																																
Polishing																																																
Fit Mould																																																
Assembly																																																
Prepare testing material																																																
1st. Trial																																																
QC checking																																																
Sample send																																																
2nd. Trial																																																
3rd. Trial																																																
Sample Approval																																																
packaging																																																
QC checking																																																
shipment																																																

Schedule in process Schedule Finished Holiday Wok overtime

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Dimension Report

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TEL: +86-755-89984896 EXT:821 • FAX:+86-755-28960682 • Building B,Ying-Ke-Li Industrial Area,Long-Gang District.Shenzhen City,Guang-Dong Province,China P.C:518116

Dimension Inspection Report

Customer	SMR	Mold Trial #	T1	Unit	Metric	Picture	
Project #	Phase 2	Trial date	2014.12.29	Inspection date	2015.01.08		
Part Name	B876_SCALP without TS_RH	Mold number	ABIS 20141128	Inspector	Mr. Li		
Part / Draw #	60063006D #2	Material	ABS MP 0160R	Manager	/		

Inspection Tools: Block gauge (BG), Caliper (CP), Coordinate Measuring Machine (CMM), Height gauge (HG), Micrometer (MM), Projector (PJ), Pin gauge (PG), Radius gauge (PG), Thickness gauge (TG)

Dimension spec				Shot 1		Shot 2		Shot 3		Shot 4		Judgment	
Dim #	Dimension	Tolerance	Inspection Tools	1	2	1	2	1	2	1	2	OK / NG	Remarks
1-1	1.20	+ 0.20 / - 0.20	CP	1.19	1.23	1.22	1.24	1.22	1.23	1.20	1.21	OK	
1-2	1.20	+ 0.20 / - 0.20	CP	1.21	1.22	1.20	1.20	1.21	1.23	1.22	1.20	OK	
2-7	1.50	+ 0.20 / - 0.20	CP	1.51	1.52	1.52	1.53	1.51	1.50	1.49	1.52	OK	
2-8	1.50	+ 0.20 / - 0.20	CP	1.52	1.52	1.52	1.52	1.51	1.53	1.49	1.51	OK	
2-9	1.50	+ 0.20 / - 0.20	CP	1.51	1.52	1.52	1.52	1.51	1.50	1.49	1.50	OK	
3-1	1.70	+ 0.20 / - 0.20	PJ	1.72	1.69	1.70	1.69	1.70	1.71	1.73	1.70	OK	
3-2	1.70	+ 0.20 / - 0.20	PJ	1.71	1.72	1.69	1.70	1.71	1.72	1.71	1.72	OK	
3-3	1.70	+ 0.20 / - 0.20	PJ	1.71	1.72	1.71	1.70	1.69	1.70	1.69	1.71	OK	
3-4	1.70	+ 0.20 / - 0.20	PJ	1.69	1.70	1.70	1.71	1.72	1.71	1.73	1.71	OK	
3-5	1.70	+ 0.20 / - 0.20	PJ	1.71	1.71	1.72	1.73	1.71	1.71	1.72	1.73	OK	
3-6	1.70	+ 0.20	PJ	1.71	1.72	1.73	1.71	1.72	1.71	1.71	1.72	#REF!	

Prepared	Ms. Lillian	Checked	Mr. Li	Approved	Mr. Zhang
Date	2015.01.10	Date	2015.01.08	Date	2015.01.08

To be completed by customer:

Signature: _____

Result:	☐ Pass	☐ Fail	☐ Special Acceptance

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Parameter Report

ABIS MOLD INJECTION PARAMETER REPORT

>类型Shot Type: ☑ 单色One shot mold ☐ 双色第一次1st shot of 2-shot ☐ 双色第二次2nd shot of 2-shot

模具编号 Tool No.		产品名称 Part Name		模具规格(mm) Tool L*W*H		试模次数 Test times	
模腔数量 N° Cavity		塑胶原料 Raw Material		颜色 Color		项目负责人 Project Manager	
产品总重量 Gross Wt(g)		机台型号 Press Type		试模数量(啤数) Shot Qty		设计工程师 Design Engineer	
试模日期 Test Date		上机时间 Beginning Time		完成时间 Finish Time		审核Reviewed /日期Date	

*试模前的准备：试模单、产品图纸、物性表、卡尺、模温计、油温机、温控箱、生于去平、吸相机、打磨机（用于调整浇口直径）等工具

备注Comments:

>成型参数表Molding Parameter Sheet:

时间 Time(s)	周期时间Cycle Time			温度设定 Temp(℃) Setup	射嘴温度Nozzle Temp℃	
	填充时间Filling Time				一段温度Zone 1 Temp℃	
	保压时间Holding Time				二段温度Zone 2 Temp℃	
	冷却时间Cooling Time				三段温度Zone 3 Temp℃	
压力Pressure (Bar) (1Mpa=10Bar =145Psi)	射胶压力 Injection Pressure	一段1st Stage			四段温度Zone 4 Temp℃	
		二段2nd Stage			热流道温度Hot Runner Temp℃	
		三段3rd Stage			前模设定温度Cavity Temp. Setup	
		四段4th Stage			后模设定温度Core Temp. Setup	
	保压压力 Holding Pressure	一段1st Stage			行位设定温度Slide Temp. Setup	
		二段2nd Stage		速度或速率 Percent of Speed(mm/s) or Flow Rate(g/s)	射胶速率一段Injection Speed1	
		三段3rd Stage			射胶速率二段Injection Speed2	
	储料压力Charge Pressure				射胶速率三段Injection Speed3	
	背压Back Pressure				射胶速率四段Injection Speed4	
位置 Postion(mm)	射胶位置1st Inj. End Postion				保压速率一1st Holding Speed	
	射胶位置2nd Inj. End Postion				保压速率二2nd Holding Speed	
	射胶位置3rd Inj. End Postion				保压转换Turn Hold(time/pos.)	
	射胶终止位置Inj. End Postion				熔胶速率Charge Speed	
	熔胶终止位置Melt End Postion			原料干燥 Raw Material	干燥温度Drying Temp(℃)	
	射退位置Suck Back End Postion				干燥时间Drying Time(H)	
模具 Tool	锁模压力Clamp Pressure			实际模温 Actual Temperature (℃)	前模表面 Cavity Surface	机水Normal Water
	开模压力Opening Pressure					热油Hot Oil
	顶出行程Ejection Stroke					冻水Cool Water
	顶出次数Count of Ejection				后模表面 Core Surface	机水Normal Water
	抽芯机构Side Action(组Unit)					热油Hot Oil
顶出 Ejection (%)	托模进 Forward	压力Pressure				冻水Cool Water
		速度Speed			行位表面 Slide Surface	机水Normal Water
	托模退 Backward	压力Pressure				热油Hot Oil
		速度Speed				冻水Cool Water

>产品外观问题/Product Appearance Faults:

☐	粘前模Sticking in Cav	☐	抛光不良Poor Polishing	☐	披锋Flash	☐	裂痕Stress Crack	☐	熔合线Weld Line
☐	粘后模Sticking in Core	☐	顶出不顺Uneven Ejec.	☐	顶白Ejector Marks	☐	喷射痕Jetting	☐	黑点Dark Spots
☐	水印Water Wave Marks	☐	拖花Scratch Marks	☐	变形Deformation	☐	缺胶Short Filling	☐	烧焦Burn Marks
☐	冷料流痕Cold Slug Marks	☐	困气Gas Trap Effect	☐	缩水Sink Marks	☐	段差Gap	☐	气泡Air Bubble

>试模过程检查/Tryout Process Check:

开合模动作检查		模具进水检查		流动平衡检查，填充30%、60%、90%	
模具顶出动作检查		熔接痕充检查模具排气		填充99%检查毛边、缩水与变形	

>试模问题点描述及建议/Comments:

问题：产品毛边/玻纤纹

对策：飞模/流道加大/进胶口加大/冷料井加大

记录Record		日期Date		审核Reviewed		日期Date	

ABIS Tooling &Molding

Our Customers

Client on the first, quality on the top.

GB/T19001-2008 (ISO9001:2015)

认证证书

兹证书授予

深圳市艾比斯精密五金塑胶有限公司

认证地址：深圳市龙岗区龙岗街道龙东社区沙芦坳盈科科技工业园C栋 层

符合 ISO/TS 16949:2009 质量管理体系标准

认证范围：

塑胶制品（把手）的生产（不包括 7.3 产品设计）

注册号：	首次注册日期：	本次发证日期：
77485/A/0001/UK/en	2017 年 1 月 3 日	2017 年 1 月 3 日
相关机构代码：	注册有效日期：	IATF No:
UA6400005/0849/IN	2018 年 9 月 14 日	0259925

发证人：

认证经理

URS（中国）地址：Room 805、806, Block 3, Tianyi International Building of Huzhou street No. 599 in Hangzhou City, Zhejiang Province of China 电话：0571-86700669

Certificate of Registration

This certificate has been awarded to

Shenzhen ABIS Precision Hardware Plastic Co. Ltd

Flcor1, Building C, Sha Bei Li Ying Keli Indu.strial Park LongDong Community, Longgang Street, Longuang Distnct , Shenzhen City, Guangdong Provence, China

In reccgnition of the organizations Quality Management System which complies with

ISO/TS 16040:2009

The scope of activities covered by this certificate is definec below

Manufacture of Plastic Parts (Handles) (Excludes Product Design under Clause 7.3)

Certificate Number:	Date of Issue of Certification Cycle:	
77485/A/0001/SM/En	03 January 2017	
Issue No:	Expiry Date:	IATF No:
1	14 September 2018	0259925

Issued by: On behalf of the Schemes Manager

ZRX

QUALITY MANAGEMENT SYSTEM CERTIFICATE

This is to certify that the quality management system of

shenzhen city epice precision metal & plastic Co.,Ltd.

Which is in conformity with

GB/T 19001-2016 idt ISO 9001:2015

This certificate covers the following scope of

Development and production of plastic molds; production of plastic parts (except for products subject to qualification approval)

Issue Date: Sep 19 2018 Expiration Date: Sep 19 2021 (End)

Issued by: X.R Zhang

ZRX IAF CNAS

ZRX

质量管理体系认证证书

兹证明

深圳市艾比斯精密五金塑胶有限公司

质量管理体系符合

GB/T 19001-2016 idt ISO 9001:2015

该质量管理体系认证所覆盖的范围为：

塑胶模具的开发和生产；塑胶件的生产（有顾客许可要求的产品除外）

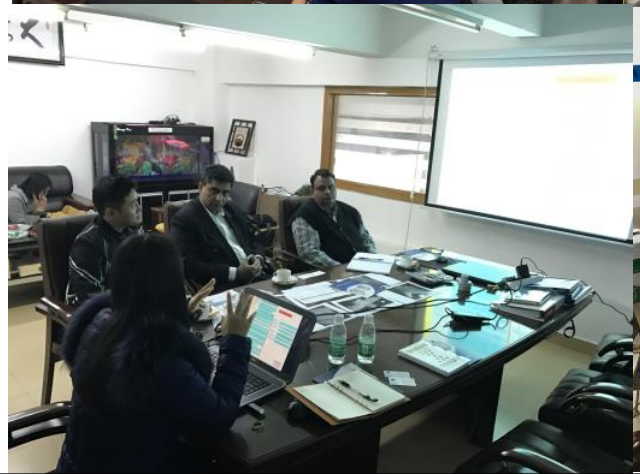
发证日期：2018 年 09 月 20 日 有效期：2021 年 09 月 19 日止

签发人：

ZRX IAF CNAS

ABIS Tooling &Molding

Project Discussion



ABIS Tooling &Molding

Customers Visit and Exhibition


Thailand


ABIS Family


Bali Island
ABIS Mold team building-Bali island 2018
---ABIS family


Birthday Party

ABIS Tooling &Molding

ABIS Future Planning

Our final aim: ABIS Building!

ABIS Tooling &Molding

THANKS!