


 高速精密注塑机 注塑工程解决商
 High speed precision injection molding machine Injection molding engineering solution

宁波市富弘机械有限公司

NINGBO FUHONG MACHINERY CO.,LTD.

地址 (ADD) : 鄞州区高桥镇宋家浦阳光路338号

电话 (TEL) : 0086-574-87503603

传真 (FAX) : 0086-574-87504677

网址 (http) : www.fookhung.com

邮箱 (E-mail) : sales@fookhung.com

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公司简介:

宁波富弘机械有限公司坐落在中国注塑机最大的生产基地浙江省宁波市西首，公司拥有自主开发设计各类塑料注塑成型机的能力，已经导入ERP/CRM/用友财务软件/Solidworks三维软件设计应力分析，使机器的设计更加合理安全，基础管理与信息化管理的同步发展构建了公司可发挥最佳综合经济效益的管理平台。在组建高起点专业化规模企业的同时，公司尊重知识，尊重人才，以人为本，凭借成熟的管理经验，超前的管理意识，加大技术研发/市场开发的投入；加强技术人才的交流与合作；注重设计理念与前沿技术的学习，形成了勇于改革大胆创新的企业文化。

公司自创立以来，以“客户的需求，我们的追求为己任”以追求卓越的注塑技术打造完美精品为目标，追求市场创新/技术创新/管理创新的齐头并进。汲取市场各名牌塑机之精髓和本着用户要求的理念专业生产具有富弘特色的各档塑料热塑性（包括热固性）注塑成型机。以最好的质量性能/技术支持和售后服务为客户提供承诺和保证。

INTRODUCTION

Ningbo Fuhong Machinery Co.,Ltd, is located in the farthest west of the urban districts of Ningbo,Zhejiang,where lies the largest production base of injection molding machines. Fuhong is able to independently develop and design various plastic injection molding machines. The application of ERP/CRM /User Friend Financial Software/Solidworks 3D software design for stress analysis has made the machine design more reasonable and secured;the development of basic management and information management has built a management platform for realization of optimal comprehensive economic benefit of the company;When organizing a profession alenterprise with large scale and high starting point, the company respects knowledge,talent and human resources and increases the investment in technical R&D/market development depending on rich management experience and leading management concept,stresses on learning of design concept and forerand technology and has formed the corporate culture of reform and innovation with great courage and resolution.

Since the foundation, the company has been pursuing excellent injection molding technology and progress in market innovation/technical innovation/management innovation and aiming to create top products based on demands of the clients, the company is specialized in manufacturing thermoplastic(including thermoset) injection molding machines for various grades of plastic with Fuhong characteristics by assimilating the marrow of all plastic machines and basing on user's requirement. Fuhong is committed to offer clients best quality, performance/technical support and after service.

The company is specialized in manufacturing thermoplastic injection molding machines and energy saving Series injection molding machines with variable displacement pump.

我们的优势 Our Advantages

稳定

20余年的塑机经验，结使多年来为世界知名品牌OEM经验。FUHONG系列除了带给您杰出的性能表现之外，还有超乎想象的规定。

Stability

More than 20 years experience in this field, and several years OEM experience for world famous brands IMM.FUHONG series can serve you perfect performance and stability.

高速

快速响应的液压系统，反应灵敏的控制系统配合最优化的机械结构，使整机速度大幅提升。

High speed

Fast response hydraulic system,sensitive controller system, and the best optimized mechanical system,highly improved machine's cycle time.

洁净

长期免维护的润滑系统。动模板部位采用油脂润滑，令生产更为洁净。

Clean

Maintenance free lubrication material used on adjustment system,grease lubrication for movable platen,ensure a clean production environment for you.

可靠

液压、电器件全部采用世界顶尖品牌，整个机械结构刚性远超国内同行，关键机械部位的供应商与世界高端品牌一致。

Reliability

All of hydraulic and electric parts adopt world top brands, the whole mechanical system's rigidity is much higher than Chinese normal IMM, the key mechanical parts' suppliers same as world first-class IMM brands.



节能

伺服精密节能系统配合优化设计的油路，带给您可媲美全电机的节能效果。

Energy Saving

Precision and energy saving servo system with optimized designed hydraulic circuit, the energy saving capacity is near with full-electric machine.

个性化

根据您的选择和实际需求，我们按照您的菜单量身打造，我们丰富的可选功能几乎覆盖了您的一切需求。

Individuality

We will custom-made your FUHONG according to your menu and necessary, and our wide range options near covered all of your necessity.

性价比

FUHONG 不仅是拥有与世界高端塑机媲美的性能，其合理的价格也令您欣然接受。

Cost-performance

FUHONG not only has the near performance with world high level IMM, but also its price is easy affordable.

用户友好

操作简单、维修方便，FUHONG带给您非一般的感受。

User-friendly

Easy for operation, convenient for maintenance, FUHONG makes everything easy.

Clamping Unit

锁模单元 // / / /

随着全球范围提倡低碳环保，以及塑料工业快速发展，多腔化、轻量化、快速化、已经成为注塑工厂的需求，而 FUHONG 正是您的最佳选择。

With the global necessary for low-carbon and environmental protection , and the fast development of plastic industry,multi-cavity,light-weighting and fast cycle already become the demands for injection molding factories,AND,FUHONG will be your right choice.

更大的拉杆间距，可适应更多的模具尺寸范围和产品多腔化的需求。

加长、加宽的导向支撑，重复精度更高，大幅度提升产品质量和模具使用寿命。

配重升级、拉杆、顶出导向套采用含石墨铜套，二板、尾板滑块采用含石墨铜块，

确保快捷、精确开模。

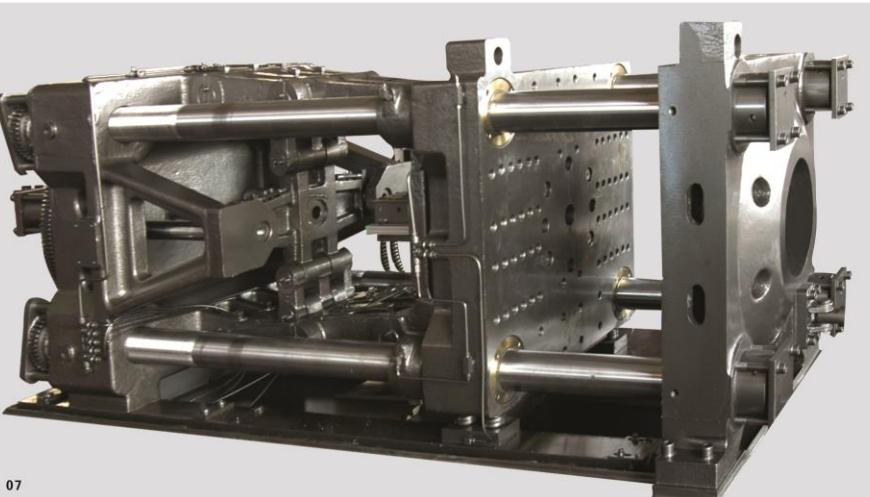
机械结构、连杆设计更优化、运行速度更快，生产效率提高。

液压顶出结构，空间更大，维修更方便。

预留空间大，方便维护及产品升级改造。

调节方便的机械保险杆，更安全、更可靠。

整体机械刚性优于国内同行，不仅仅提升机器使用寿命，还能有效的保护模具。



Larger space between tie-bars,suitable for larger molds and multi-cavity necessary.

Longer and wider guide length,higher repeatability precision,improve product quality and mold working-life.

Upgraded parts,Graphite-copper bushes and slider used on tie-bar,ejector and movable platen,ensure fast and precise mold close and open.

Better designed mechanical structure and toggle system,faster cycle time, and improve production efficiency.

European type ejector structure,larger space,convenient for maintenance.

Prepared enough space for upgrade and retrofits.

Built-in and adjustment free mechanical safety bar,more safe and convenient.

Much higher rigidity mechanical system than normal Chinese IMM, not only improve machine's using-life,but also can protect mold.

Injection Unit

射出单元 /////

注射设备

双缸平衡注射系统，一线式高扭矩液压马达预塑装置、多段注射、保压、储料。压力、速度可调，预进背压调节装置。优质合金钢螺杆、料筒经表面氮化。螺杆处理，确保各种塑料的注射成型。

INJECTION UNIT

Double-cylinder balanced injection system, one-line high-torque hydraulic motor preplasticizing device/multi-section injection/pressure holding/material storage. Pressure/speed adjustable, pre-molding back pressure adjust device. Quality alloy steel screw/material cylinder with nitridation/chromizing treatment for surface, ensuring injection molding of various plastics.



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Single injection cylinder, can avoid the double cylinder's pressure difference, injection more stable and precise.

Double linear guide rail, low friction, faster speed, more precise and stable. Double carriage cylinder, avoid injection unit moving left and right, perfect for fast and precise injection.

Full supported injection unit moving up and down.

Injection proportional back-pressure control,

convenient for operation, and data more stable.

All of screw L:D=20:1, prepared the installation place for different size screws, more convenient.

To compare with normal IMM, injection speed improved higher than 30%, mold cavity easy to full filled, product internal stress will be lower and quality will be more stable.

The key parts, like injection cylinder, spline etc. our suppliers are same as world high level IMM manufacturers, reliable quality.

FUHONG series adopt high-tech modular design, through power, mold, rail, screw unit can be combined, through adjustment of speed and pressure, the machine can adapt to different industries, such as electronic components, electric connectors, thin-walled containers, caps, light guide plates, optical camera lenses, etc.

FUHRUNG series adopt high-tech modular design, to meet various applications can adjust speed and pressure independently to mold high demanding components, for example: electric components, electric connector, thin-wall container, caps, light guide plate, optical camera lens etc.

Electric Unit

电气单元 /////

- 专用的塑机控制电脑，控制和显示相对独立，可靠性好
- 工艺参数预设及储存功能
- 参数资料保护功能
- 料筒温度偏差自动校正
- 异常报警功能
- 前后门紧急停止按钮
- 实时监测显示各工作的运行情况
- 电机安全保护装置
- 机械手接口
- 下料光电开关
- 系统硬件I/O检测功能
- 通过电脑设定和PID闭环方式精确控制料筒温度
- 屏幕保护功能，延长显示屏的使用寿命
- 全封闭电器控制器，电气元件排布整齐，互不干扰



- Special control the computer for plastic injection machine use, control and display relatively independent with high reliability
- Technical parameters pre-setting and storage function
- Parameters information protection function
- Charging barrel temperature deviation automatic adjustment function
- Abnormal alarm function
- Front and back door emergency stop button
- Real-time monitoring can display the condition of each motion
- Electrical motor safety protection device
- Robotic pincher interface
- Cutting photoelectric switch
- System hardware I/O detection function
- Charging barrel temperature is controlled accurately by computer setting and PID closed-loop manner
- Screen protection function, prolong the life of screen using
- Full-enclosed electrical-controlled box, electrical components are neatly arranged, never interfere with each other

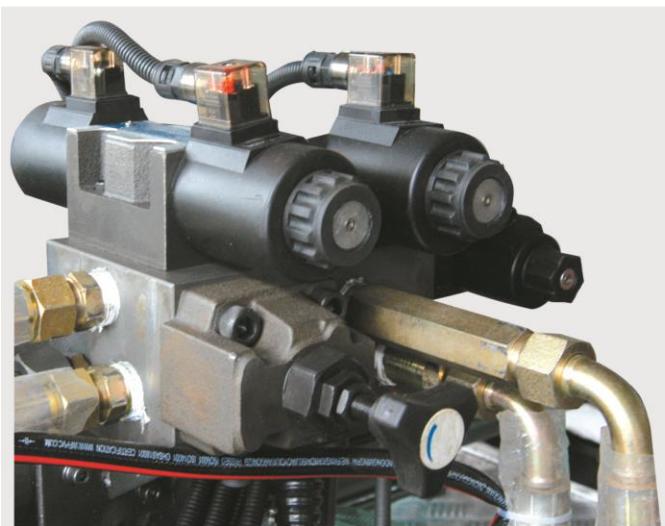


Hydraulic Unit

液压单元 // / / /

在FUHONG模块式设计的液压系统基础上，无论是节能技术，还是满足高效率生产的多同步动作，我们均可轻松为您解决。

Thanks to FUHONG modular designed hydraulic system,no matter energy saving technology,or simultaneous/parallel movement for high speed high efficiency production,we are easy to solve for you.



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节能: 标配伺服精密节能动力系统,其输出功率随负载变化而时刻调整,避免了对能量的浪费,根据产口的工艺不同,较之于传统注塑机,可节约用电20%-80%。

精密: 伺服电机的精密特性与内啮合齿轮泵精密特性叠加,通过高灵敏度的压力反馈装置形成闭环,注射重复精度可达3%,大幅度提升产品合格率。

快速: 高响应油路、高性能伺服系统,注塑机达到最大输出仅需0.05秒,有效缩短成型周期,提升生产效率。

节水: 伺服系统无溢流发热的特性,配合FUHONG系列超高效日本进口冷却器,使得用水量大幅度减少。

环保: 机器运行噪音、低能耗、名品液压胶管,采用标准球面带密封接头,阀板采用Z螺纹密封堵头,杜绝油污污染。

稳定: 与著名品牌液压元件供应商精诚合作,精确控制液压系统的力、速度及方向,保证了整个机器的精确性、耐用性及稳定性。

方便: 油箱采用可视化、可拆卸式设计,油品一目了然,方便维护;同时采用自封式磁性吸油过滤器,且所有管接头位置合理,维护简单、方便。

前瞻: 模块式设计,无论您是需要功能升级,或者对油路系统的重新改造,我们预留的孔位和空间使这一切都变得无比简单。



ENERGY SAVING: Standard with precision and energy saving servo power system, the output drive system is sensitively altered, according to the actual need of the plastic parts being produced, avoid energy waste. Depending of the plastic parts being produced and the material being processed, energy-saving ability can reach to 20%-80%.

PRECISION: Precise servo motor with precise internal gear pump, via a sensitive pressure sensor to feedback and become close-loop control, injection repeatability precision can reach to 3%, highly improved product quality.

HIGH SPEED: High response hydraulic circuit, high performance servo system, it requires only 0.05sec to reach the maximum power output, cycle time is substantially shortened, the efficiency is improved significantly.

SAVE WATER: Without overflow heating for servo system, equipped with Japanese high efficiency cooler, much less cooling water required.

ENVIRONMENTAL PROTECTION: Machine working quietly, low energy consumption; Famous brand hydraulic pipe, Germany standard hydraulic pipe fitting with seal, Z screw thread style plug, avoid oil pollution.

STABILITY: Cooperate with European famous brands hydraulic suppliers, precise control force, speed and direction of hydraulic system, ensure machine's precision, durability and stability.

CONVENIENT: Visible and dischargeable oil tank, easy for hydraulic circuit maintenance; self-seal suction filter, reasonable placed hydraulic pipe fittings, maintenance will be easy and convenient.

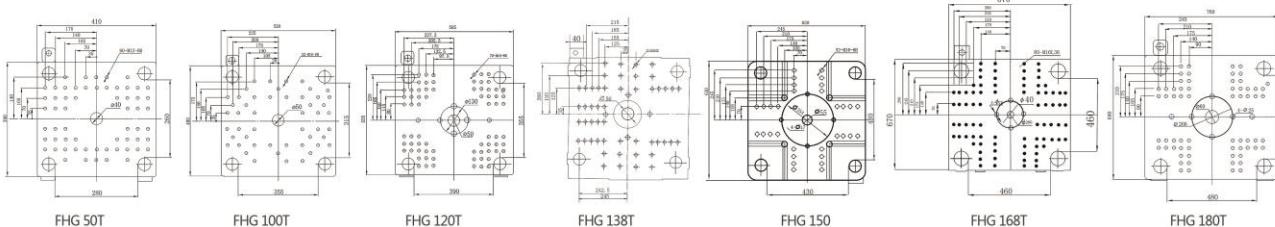
FUTURE-PROOFING: Modular designed hydraulic system, no matter function upgrade, or retrofit hydraulic system, our prepared installation position and space will make it so easy.

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注塑机参数表 INJECTION MACHINE SPECIFICATION

	INJECTION UNIT			FHG50T			FHG100T			FHG120T			FHG138T			FHG150T			FHG168T			FHG180T			
	A	B	A	B	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
注射装置																									
螺杆直径	Screw diameter	mm	28	32	35	38	36	40	42	40	42	45	42	45	48	45	48	50	45	50	52				
理论注射容积(PS)	Theoretical shot volume	cm ³	62.8	82	161	190	152	188	207	226	249	286	263	302	343	318	361	392	326	402	405				
注射量																									
注射量	Actual shot weight	g (克)	57	74.6	147	173	138	171	189	205	226	280	239	275	312	289	329	357	296	366	396				
射程距离	Injection rate	Mpa	173	133	170	144	207	168	152	188	170	148	182	159	139	159	140	129	215	174	160				
注射速率	Injection rate	g/s	51	55	75	78	73	90	100	98	108	124	130	138	156	144	164	178	128	159	172				
螺杆转速	Screw stepless	r/min	0-200	0-200	0-200	0-200	0-190	0-190	0-180	0-180	0-180	0-180	0-180	0-180	0-180	0-180	0-180	0-180	0-180	0-180	0-180	0-180	0-180		
合模装置	CLAMPING UNIT																								
锁模力	Clamping force	kN	500		1000			1200		1380		1500		1680		1800									
开模行程	Opening stroke	mm	260		280			320		350		380		380											
拉杆间距(宽×高)	Space between tie-bars (WxH)	mmmm	280x260		355x315			390x355		415x375		430x380		460x460		480x460									
滑模量(距离-最厚)	Mould thickness	mm	100-300		150-380			150-400		180-440		150-460		160-450		200-480									
顶出行程	Ejector stroke	mm	65		70			75		100		120		120											
顶出力	Ejector force	kN	20		27			30		33		38		50		53									
其他	OTHERS																								
油压系统压力	System pressure	Mpa	14		16			16		16		16		16		16		16		16					
油泵马达	Pump motor	KW	5.5		9			11		13		13		15		18.5									
电热功率	Heating capacity	KW	4.95		6.9			7.5		8.8		9.2		9.9		12									
外形尺寸	Machine dimensions (LxWxH)	MmMmMm	316x121x155		381x131x17			4x1.3x1.8		4.75x1.4x1.85		4.6x1.4x1.96		4.88x1.55x1.9		5.00x1.5x1.96									
机器重量(约)	Machine weight	Ton	2.2		2.7			3.4		3.8		4.2		4.5		6									

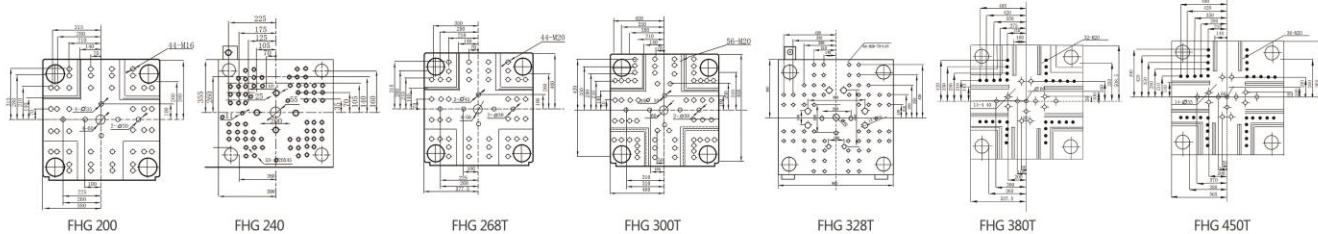
模版正面尺寸 Pisten Dimensions Monring platen



注塑机参数表 INJECTION MACHINE SPECIFICATION

	FHG200T			FHG40T			FHG268T			FHG300T			FHG328T			FHG380T			FHG450T				
注射装置	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C		
螺杆直径	Screw diameter	mm	48	50	55	50	52	55	50	55	60	65	60	65	65	70	70	75	80	70	75	80	
理论注射容积(PS)	Theoretical shot volume	cm³	389	420	510	441	477	534	455	550	655	676	805	945	862	1014	1274	1500	1723	1960	1500	1723	1960
注射量	Actual shoot weight	g (克)	354	383	466	402	434	486	416	503	600	615	732	859	784	923	1159	1365	1567	1784	1365	1567	1784
注射速度	Oz (毫米)		12.4	13.5	16.4	14.2	15.3	17.1	14.6	17.7	21	21.7	25.8	30.3	27.6	32.6	40.9	48	55.2	62.9	48	55.2	62.9
射胶压力	Injection rate	Mpa	182	168	139	204	189	169	205	169	142	200	168	143	213	182	157	199	173	152	199	173	152
注射速率	Injection rate	g/s	342	154	186	148	160	180	187	227	270	223.5	266	312.2	246	289	363	335	384	437	344	395	449
螺杆转速	Screw stepless	r/min		0-155		0-365		0-180		0-220		0-165		0-155		0-150		0-160					
合模装置	CLAMPING UNIT																						
锁模力	Clamping force	kN		2000		2400		2680		3000		3280		3800		4500							
开模行程	Opening stroke	mm		475		480		540		590		620		705		740							
拉杆间距 (宽 X 高)	Space between tie-bars (WxH)	mm/mm		520x505		520x520		580x580		620x620		670x670		730x730		760x760							
容模量 (最厚 - 厚度)	Mould thickness	mm		200-530		220-500		200-550		200-630		350-670		250-780		250-780							
顶出行程	Ejector stroke	mm		140		100		150		150		170		150		200							
顶出力	Ejector force	kN		70		70		70		70		90		90		110							
其他	OTHERS																						
油压系统的压力	System pressure	Mpa		16		16		16		16		16		16		16		16		16		16	
油泵马达	Pump motor	KW		18.5		22		22		30		37		37		45							
电加热功率	Heating capacity	KW		13.6		14.3		15		18.3		21.4		29.3		29.3							
外形尺寸	Machine dimensions (LxWxH)	MmMmM		522x157x2.21		56x1.5x2.2		5.82x1.60x2.24		6.11x1.77x2.41		7.20x2.00x2.40		7.35x1.82x2.40		7.46x1.84x2.41							
机器重量 (约)	Machine weight	Ton		6.4		8		7.5		8.7		13.5		15.4		16							

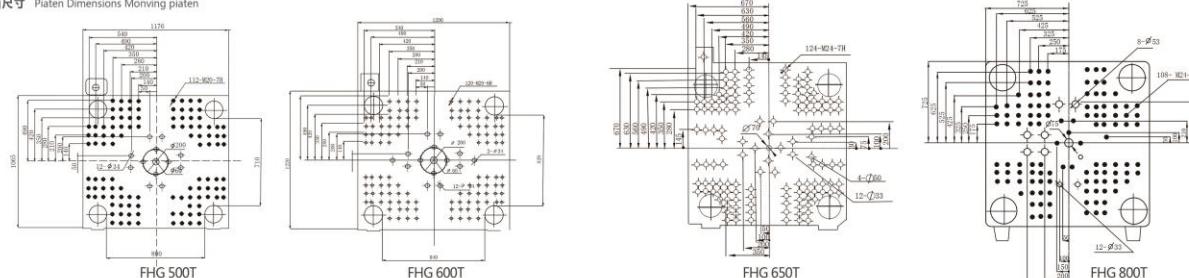
模版正面尺寸 Platen Dimensions Molding platen



注塑机参数表 INJECTION MACHINE SPECIFICATION

	FHG500T			FHG600T			FHG650T			FHG800T			FHG1100T			FHG1280T			FHG1680T				
注射装置	A	B	C	A	B	C	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C		
螺杆直径	Screw diameter	mm	80	85	90	90	95	100	80	90	100	110	90	100	110	120	130	110	120	130	140	150	
理论注射容积(PS)	Theoretical shot volume	cm³	1965	2218	2490	2545	2836	3140	2112	2673	3300	3993	2925	3611	4369	5200	3786	4581	5451	6398	5227	6220	7300
注射量	Actual shoot weight	g (克)	1770	2000	2240	2316	2580	2858	1920	2430	3003	3631	2632	3250	3932	4680	3445	4168	4960	5822	5660	6643	7731
射胶压力	Injection rate	Mpa	168	149	133	184	165	149	224	177	143	118	228	184	152	128	211	174	146	125	205	172	147
注射速率	Injection rate	g/s	480	508	590	470	530	580	420	531	656	794	492	607	735	875	663	802	954	1120	1299	1034	1214
螺杆转速	Screw stepless	r/min		0-150		0-125		0-130		0-120		0-110		0-110		0-90		0-99					
合模装置	CLAMPING UNIT																						
锁模力	Clamping force	kN		5000		6000		6500		8000		11000		12800		16800							
开模行程	Opening stroke	mm		730		850		900		985		1200		1250		1600							
拉杆间距 (宽 X 高)	Space between tie-bars (WxH)	mm/mm		800x710		840x820		910x910		980x980		1100x1100		1250x1250		1500x1350							
容模量 (最厚 - 厚度)	Mould thickness	mm		350x720		350x850		400x900		400x1000		500x1200		550x1250		700x1500							
顶出行程	Ejector stroke	mm		170		225		260		280		320		320		350							
顶出力	Ejector force	kN		150		150		175		186		215		215		318							
其他	OTHERS																						
油压系统的压力	System pressure	Mpa		16		16		16		16		16		16		16		16		16		16	
油泵马达	Pump motor	KW		45		55		30+37		37+37		45+45		55+55		45+45+45							
电加热功率	Heating capacity	KW		26		36		46		58.45		68.45		85.25		91.9							
外形尺寸	Machine dimensions (LxWxH)	MmMmM		8x2.1x2.7		9x2.3x3		9.9x2.5x3.0		11.00x2.60x3.80		11.93x2.8x4.00		13.1x3.1x4.1		13.85x3.43x4.20							
机器重量 (约)	Machine weight	Ton		20		26		36		45		56		65		100							

模版正面尺寸 Platen Dimensions Molding platen



特种机 Special Machine

SERIES THIN WALL HIGH-SPEED PLASTIC INJECTION MACHINE

This series of injection molding machine equipped by which motors can get instant increased output power. Controller can monitor temperature of mould by linked sensors and opto-isolated terminals. Such configuration makes the machine capable to do multi-process at same time. That means the machine can be instructed to achieve mould-opening. Also the premier injection pressure of such machine normally exceed 230MPa and cycle time is greatly shortened. This is right solution for thin-wall and precise plastic products.

UPVC SPECIAL MACHINE

Air cooling device with quick response and accurate temperature control.

Specially designed screw structure suitable to plasticize UPVC steadily.

Windon safeguard, suitable for mould with long core pulling.

Multi-core pull is available.

DM BAKELITE MACHINE SERIES

This series is specially designed for bakelite injection and molding. Such machine adopts diagonal five pivots double toggles clamping structure and equip with variable pump which features reliable clamping, precise molding and low power consumption.

PET SPECIAL MACHINE

This machine adopted our own designed barrel and screw with bigger L/D ratio (above 22:1), suitable to make PET bottle preform. Such design greatly improves uniformity PET plasticizing. That ensures all products are of high transparency.

POWDER INJECTION MOLDING MACHINE

Powder injection molding machines for different metals, magnetic materials, such as powder or ceramic material, with a unique design screw barrel structure and casting process, with users mixing, pouring molding process, providing special injection molding machines, injection molding machines to solve the general unable to complete the production capacity.

1. 该系列机型配备功率增容快速系统优化模块，实现一般塑料原料在合理配置下其最快注射速度同比提高100%以上，注射压力可达230Mpa以上，有些制品的成型周期可达4.5s以内。
2. 本机广泛适合薄壁、一模多腔和其它精密制品的快速注射成型，特别适用于在常规机器所难以达到优质制品或高效生产的快速注塑成型的理想设备。
3. 模具加热及温控信号直接与注塑机电脑PID连接，通过电脑温度感应介面与光隔离输出卡实现对温度的高精度控制。



薄壁高速机
Thin-walled high-speed machine



PVC专用机
PVC Machine



PET瓶胚专用机
PET Preform Machine



DM热固性电木机
DM thermoset bakelite machines



粉末专用机
Powder Machine