



Injection Molding Machine

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K-TEC Series
精灵K-TEC系列注塑机
Plastic Injection Molding Machine

Company Profile

企业简介

张家港达沃森机械有限公司位于“中国塑机之都”、“内陆第一保税区”的张家港市，是一家专注于细分市场专用注塑成型设备集研发、生产、销售及服务于一体的高新技术企业。现有产品已广泛应用于汽配、玩具、日用品、电子、医疗、包装、建材物流等众多相关的注塑制品行业。

达沃森始终坚持技术创新与品牌经营，公司所生产适用于通用注塑市场的k-tec伺服节能系列注塑机，产品主要锁模力从100T ~ 1600T，注射量100g ~ 12000g。同时针对在注塑产品细分市场精准开发了CPS清双色系列、CMS混双色、PET瓶胚/日用品专用系列等近30种专用型注塑机，为客户带来更高效的企业效益，并提供“量体裁衣”、“一站式售后服务”，为全球客户提供注塑成型解决方案。

经过近十年的国际化发展，公司已构建起塑机行业领先的产品研发能力、生产制造能力与市场营销能力。截止目前，我们已与众多国内外单位展开了深度的项目与技术合作，构筑了更完善的服务体系与网络，在上海，广州，台州等 20 多个城市设立办事处；在印度，越南，土耳其，印尼等多个国家与地区设立了分销商或代理公司，真正让“达沃森”品牌注塑机普及全国、走向世界。

Zhangjiagang Dawson Machine & Mould Co., Ltd is located in Zhangjiagang City of China, which Known as "Capital of Plastic Machines" & "the first inland tax free zone in China". We are a high-tech enterprise, focusing on the development, production, sales and services of special injection molding machines, which has been widely used in auto parts, toys, daily consumptions, medical parts... industry.

Dawson always adhere to technological innovation and brand operation. The K-TEC servo energy-saving series is standard type of injection molding machine. And the clamping force is from 100Ton to 1600Ton, the injection weight is 100g to 12000g.

Meanwhile, Dawson developed nearly 30 special type injection molding machines such as CPS clean two-color series, CMS mixed two-color series, PET bottle preform series /daily products series etc. Bring more efficient and benefits for our customers. Also Dawson provides the whole program solution and one-stop service for customers around the world.

Through the development of internationalization in the past ten years, Dawson has been built up lots of the research and development capabilities, manufacturing and marketing capabilities & experiences. Dawson machines are exported to overseas.

So far, Dawson has deep cooperation with many domestic and foreign companies in project or technical field. Dawson has founded a complete service system and network and established the branches and agents, such as Shanghai, Guangzhou, Taizhou, and other cities of China. Besides, has set up the distributors or agents in India, Vietnam, Turkey, Indonesia, and over twenty other countries. We are making the "Dawson" brand injection molding machines popularize in China and known all over the world.



精灵K-TEC series



K-TEC/H系列 K-TEC/H series



免烘料系列 Dry series



果筐系列 Crate series



胶木系列 Bakelite series



PET专用机 PET series



变色龙系列 Chameleon series



K-TEC Series

精灵 K-TEC 系列注塑机

Plastic Injection Molding Machine

- 全封闭设计，安全性更高
- 加大模具区域具有更大的适应能力
- 现代化控制技术，世界名厂控制器，反应快速，操作更方便。
- 精密锁模装置，采用 5 点双肘和液压机械驱动技术

Totally Enclosed Design
High-safety

Larger Space Between Tie-Bars
Greater adaptability

Modern Control Technology, World famous brands controller
fast response speed, easy for operation

Precision Clamping Unit, Adopt 5 points elbows and hydraulic
mechanical drive technology

- 采用世界名厂电器元件，运行稳定

World Famous Brands Electric Parts
Stable operation

- 高性能注塑装置
采用双缸注塑装置，注射效率极高，
可最大化控制精度

High-Performance Injection Unit
Double cylinder injection system, high
injection efficiency maximize control of
the precision



1 CLAMPING PART 锁模部分

- 拉杆采用表面镀铬处理、抗磨损、耐腐蚀。
- 二板底脚具有可调节斜块结构，方便磨损后进行调节，从而延长机器使用寿命。
- 自动的集中润滑功能方便机器维护。
- 采用同步齿轮调模，可实现齿式自动调模。
- 锁模位置尺连接推力座，更便于调节模具保护位置。
- 优化设计的机绞连杆机构，开合模平稳快速，寿命长久。
- Tie bar adopt surface hard chromium plating processing.
- With adjustable feet slip block structure.
- Automated centralized lubrication system.
- Synchronous gear mold adjustment.
- Sensor feet connecting thrust block.
- Optimization design of toggle structure, clamp of opening and closing fast and smooth.

2 INJECTION UNIT 射出部分

- 双导杆导向，提高注射技术。
- 高速液压马达。
- 注射、保压压力闭环控制，背压精密控制。
- 螺杆料筒上拆式结构，更换便捷。
- 高强度的机械结构设计，保障持久精密。
- 低速大扭矩液压马达驱动螺杆转动，塑化性能极佳。
- 优化设计的螺杆，原料适用性广。
- Double guide bars, improve inject technology.
- High speed hydraulic motor for screw.
- Screw barrel demolishing vertically makes it easy to replace.
- Injection, holding pressure closed-loop control and precise back pressure control.
- High-strength mechanical structure design, keep lasting precision.
- Low speed and high torque hydraulic motor drive screw rotation, excellent performance of plastic.
- Optimized design of screw, wide range of raw materials.

3 HYDRAULIC UNIT 液压系统

- 采用台湾加工技术制造阀块
- 符合国际安全标准的液压回路设计
- 油温自动读取
- 无焊接的管路施工，保障持久可靠便利的维护
- 采用国际著名的液压元器件
- Adopting Taiwan's technology to produce valve
- Hydraulic circuit designed to meet international safety standards
- No welding pipe in order to achieve stable and reliable maintain
- Automatically read oil temperature
- Adopt international well-know hydraulic components



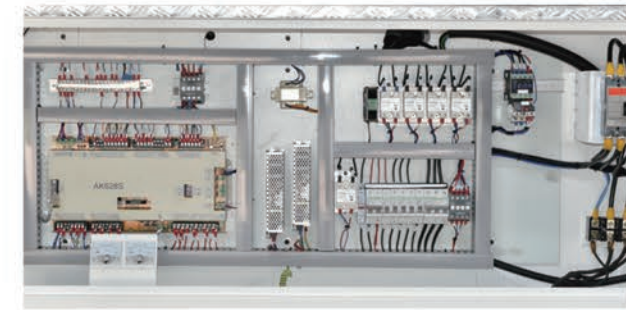
4 ELECTRIC SYSTEM 电气部分

控制器采用专业注塑及专用计算机，支持以下功能：

- 面板操作界面可支持多国语言。
- 系统单元采用双核微处理器，具有高速、抗噪声、低功耗。
- USB 界面可更新或备份成型、系统参数。
- 内建以太网网络界面，连线方便快捷。
- 智能保养页面提示功能，提供多画面保养说明及提示。
- 射胶压力、速度、终点及保压压力、曲线图形显示。
- 具有 120 组修改记录及 120 组警报记录功能，方便出现异常时资料查找。
- 计算机开机自我检 / 硬件检测功能及机械故障报警功能。
- I/O 模拟功能，可实现输入 / 输出点在线模拟，易于查找接线和自我侦测，I/O 故障点转向功能，可实现软件替代硬件功能。
- 支持通过学习办公室计算机同时监控多台机器控制器，建立专属 WEB 系统：WEB 浏览的网页，公司管理人员可依据生产流程的不同，以 HTML 的方式规划生产资源。
- 人性化设计的操作面板，可旋转 90°，更便于人操作。
- 伺服驱动器可实现数字化控制及模拟量控制多种控制方式，以满足多样化需求。
- 标配调模电眼、检物电眼、测速电眼等多种闭环监控装置。



- Support for multiple languages.
- System with dual-core microprocessors makes it high-speed, anti-noise, low power consumption.
- USB interface can be updated or backup system parameters.
- Internal inspection Ethernet interface, convenient connection.
- Smart security features like page prompts, Provide maintenance tips and warranty.
- Injection pressure, velocity, end and holding pressure curve display graphical.
- With a record 120 groups and 120 groups to modify alarm recording function.
- Computer boot self-test function and mechanical failure alarm.
- I/O simulation capabilities that enable online analog input and output points.
- Supports simultaneous monitoring of multiple machines through an office computer, corporate managers may differ according to the production process, production resources planning.
- User-friendly design layout manipulation.
- Servo drives can achieve a variety of control methods of digital control and analog control.
- Multiple closed-loop monitoring device as standard transfer mode electric eye, the analyte electric eye, speed electric eye, etc.



5

FEATURES 特点

节能、高效、稳定可靠

1

成熟稳定性极佳

伺服驱动系统，压力、流量采用闭环控制，相比较传统注塑机，成型重复精度明显提高

Excellent molding produce valvestability

The servo driving system has its pressure and flow under close loop control; and compared with traditional injection molders, its molding repetition precision is improved substantially

2

响应速度快

伺服驱动响应迅速，快速启动时间比传统注射提高50%

Rapid response

The servo driver features rapid response whose rapid starting time is improved by 50% compared with traditional injection.

3

超低能环保

整机运行低噪音，低速运行更宁静

High performanceV environmental protection

The complete machine features. low operating noise, and even quieter during low-speed operation

4

油温恒定

伺服电机按比例输出液压油，避免多余热量产生。液压油甚至不需要冷却实现大幅度节水

Constant oil temperature

The serve motor output hydraulic oil proportionately to prevent excessive heat. It can achieve substantial water saving even without cooling.

5

大幅节能

在同条件下，相比传统定量泵注塑机节能20%-80%

Substantial energy saving

Under the same conditions, it can save 20%-80% energy compared with traditional constant delivery pump injection molders.

6

SERVICE ADVANTAGE 服务优势

售前服务

- 为客户正确选购注塑机提供全方位的技术支持与服务。
- 全面了解客户的各项需求
- 帮助客户选择正确的机型。
- 帮助客户选配正确的特别工程。
- 帮助客户配置周边设备。
- 帮助客户规划水、电、气、油等方案。
- 选购科隆阁注塑机的可行性方案。

- Supply the bst solutions with technolog support for customer
- Get more details requirement from customer
- Chose the best option for customer.
- Help the customer choose best machins size
- Help the customer give the solutions for auxiliery machines.
- Helo the customer design the electrical/air/water ect at customer factory.
- Give the best special solutions fror customer.

售中服务

- 准时将合格的机器交付客户，并教会客户如何使用。
- 及时与公司市场部沟通，按时向客户交货。
- 免费协助客户安装、调试。
- 免费指导培训操作与维修人员。

- Delivery the good quality machines on times to customer. And training customer engineer and workers.
- Delivery on times.
- Setup machines and adjustment free charge.
- Training the engineer and workers free charge.

售后服务

- 机器终身维修。凡达沃森公司生产的机器，我司负责终身维修。
- 充足的零配件供应保障。

- All the DAWSON machines we will give the service at machines whole life.
- Prepared the parts for all customer.



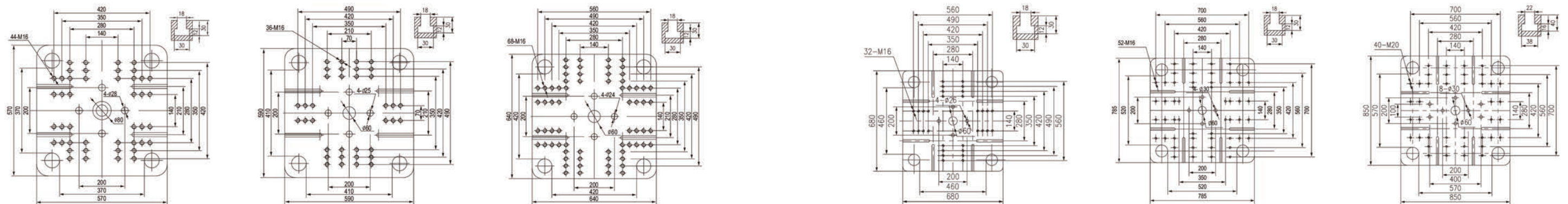
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CORPORATE HONOR 企业荣誉



机型	SPECIFICATION 国际标准注射容积 VB	CN cm ³	K-TEC100			K-TEC120			K-TEC140			K-TEC170			K-TEC230			K-TEC270		
			358	450	473	633	824	1085	A	B	C	A	B	C	A	B	C	A	B	C
INJECTION UNIT																				
注射装置			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	35	38	42	35	38	42	38	42	45	42	45	50	45	50	55	50	55	60
螺杆长径比	Screw L/D Ratio	L/D	22.8	21	19	22.8	21	19	22.1	20	18.7	23.5	22	19.8	23.4	21	19.1	25.2	22.9	21
理论注射容积	Shot Volume	cm ³	163	192	235	163	192	235	226	277	318	311	357	441	397	490	593	530	641	763
注射重量	Injection Weight(PS)	g	148	175	213	148	175	214	206	252	289	283	325	401	362	446	540	482	583	694
注射速率	Injection Rate	cm ³ /s	90	104	128	92	108	130	94	115	132	138	160	196	124	154	186	187	227	270
注射压力	Injection Pressure	Mpa	219	186	158	219	186	158	209	171	149	203	177	143	207	168	138	205	169	142
螺杆最大转速	Screw Speed	rpm	205			220			220			200			175			185		
CLAMPING UNIT																				
锁模力	Clamping force	KN	1000			1200			1400			1700			2300			2700		
移模行程	Toggle Stroke	mm	350			360			380			435			475			540		
拉杆间距	Space Between Tie-Bars (WxH)	mm	370 X 370			410 X 410			420 X 420			460 X 460			520 X 520			570 X 570		
最大模厚	Max. Mold Height	mm	380			400			450			520			530			580		
最小模厚	Min. Mold Height	mm	150			160			160			180			200			200		
顶出行程	Ejector Stroke	mm	100			100			120			135			140			150		
顶出力	Ejector Tonnage	KN	30			30			50			50			70			70		
OTHERS																				
最大油泵压力	Max. Pump Pressure	Mpa	16			16			16			16			16			16		
电机功率	Motor Power	KW	11			14			14			21			28			36		
电热功率	Heater Power	KW	7.55			7.55			9.3			12.3			14.8			16.8		
外形尺寸	Machine Dimension	m	4.2 X 1.2 X 1.79			4.4 X 1.2 X 1.8			4.48 X 1.33 X 1.90			5.18 X 1.40 X 2.12			5.58 X 1.50 X 2.14			6.0 X 1.60 X 2.25		
油箱容积	Oil Tank Capacity	L	190			220			270			300			300			380		
机器重量	Machine Weight	ton	3.5			3.8			4.3			6			7			8.5		

模板正面尺寸 PLATEN DIMENSIONS

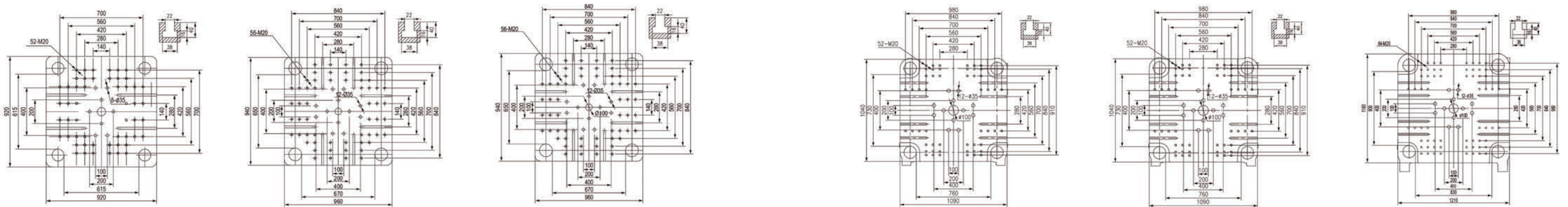


模板侧面尺寸 MOULD SPACE DIMENSIONS



机型	SPECIFICATION 国际标准注射容积 VB	CN cm ³	K-TEC310			K-TEC320			K-TEC360			K-TEC400			K-TEC450			K-TEC500		
			1354	1354	1354	1354	1354	1354	2418	2418	2418	2418	2418	2418	2987	2987	2987	2987	2987	2987
注射装置			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	55	60	65	55	60	65	65	70	75	65	70	75	70	75	80	70	75	80
螺杆长径比	Screw L/D Ratio	L/D	22.9	21	19.4	22.9	21	19.4	22.5	21	19.6	22.6	21	19.6	22	20.5	19.2	22	20.5	19.2
理论注射容积	Shot Volume	cm ³	677	805	945	677	805	945	1161	1347	1546	1161	1347	1546	1500	1723	1960	1500	1723	1960
注射重量	Injection Weight(PS)	g	616	733	860	616	733	860	1057	1226	1407	1057	1226	1407	1365	1568	1784	1365	1568	1784
注射速率	Injection Rate	cm ³ /s	223.5	266	312.2	223.5	266	312.2	337	368	422	337	368	422	335	384	437	335	384	437
注射压力	Injection Pressure	Mpa	200	168	143	200	168	143	208	179.6	156	208	179	156	199	173	152	199	173	152
螺杆最大转速	Screw Speed	rpm	185			185			155			155			150			150		
合模装置																				
锁模力	Clamping force	KN	3100			3200			3600			4000			4500			5000		
移模行程	Toggle Stroke	mm	590			615			615			740			740			840		
拉杆间距	Space Between Tie-Bars (WxH)	mm	615 X 615			670 X 650			670 X 650			760 X 730			760 X 730			830 X 800		
最大模厚	Max. Mold Height	mm	630			680			680			780			780			830		
最小模厚	Min. Mold Height	mm	200			250			250			280			280			350		
顶出行程	Ejector Stroke	mm	150			160			160			200			200			240		
顶出力	Ejector Tonnage	KN	70			100			100			150			150			150		
其他																				
最大油泵压力	Max. Pump Pressure	Mpa	16			16			16			16			16			16		
电机功率	Motor Power	KW	36			36			43			43			56			56		
电热功率	Heater Power	KW	18.3			18.3			24.6			24.6			28.7			28.7		
外形尺寸	Machine Dimension	m	5.98 X 1.66 X 2.3			7.1 X 1.84 X 2.34			7.1 X 1.84 X 2.34			7.24 X 1.88 X 2.41			7.54 X 1.92 X 2.41			8.54 X 2.05 X 2.3		
油箱容积	Oil Tank Capacity	L	380			450			600			650			700			700		
机器重量	Machine Weight	ton	9			11.5			12.5			15			15.4			18		

模板正面尺寸 PLATEN DIMENSIONS



模板侧面尺寸 MOULD SPACE DIMENSIONS



K-TEC310

K-TEC320

K-TEC360

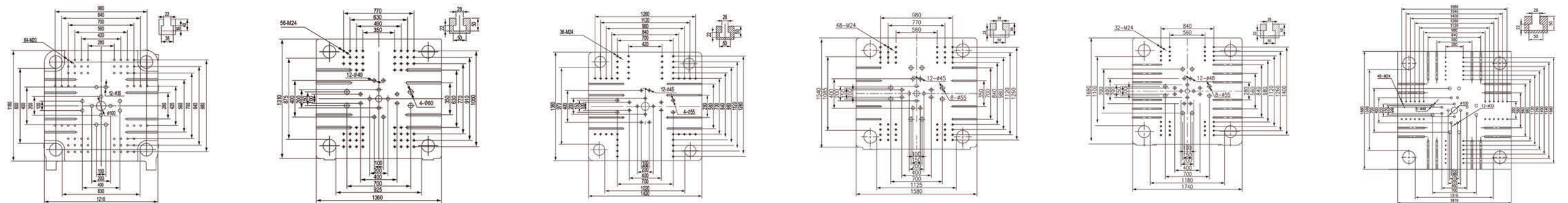
K-TEC400

K-TEC450

K-TEC500

机型	SPECIFICATION 国际标准注射容积 VB	CN cm ³	K-TEC530				K-TEC650				K-TEC800				K-TEC1000				K-TEC1200				K-TEC1400				
			4155				4680				5706				6353				9792				13060				
			A	B	C	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D		
INJECTION UNIT	注射装置																										
	螺杆直径	Screw Diameter	mm	80	85	90	90	95	100	105	90	95	105	110	90	100	110	115	110	115	120	125	110	120	130	140	
	螺杆长径比	Screw L/D Ratio	L/D	22.3	21	19.8	20.4	19.4	18.4	17.5	23.2	22	19.9	19	25.5	23	20.9	20	23	22	21	20.2	25.7	24	22	20	
	理论注射容积	Shot Volume	cm ³	2210	2495	2797	2544	2835	3141	3663	2926	3260	3983	4371	2920	3610	4369	4778	5270	5760	6272	6805	6271	7463	8759	10158	
	注射重量	Injection Weight(PS)	g	2011	2270	2545	2315	2580	2858	3151	2663	2967	3624	3978	2670	3300	3980	4325	4796	5242	5707	6193	5706	6791	7970	9243	
	注射速率	Injection Rate	cm ³ /s	442	499	560	552	612	679	748	574	640	781	858	580	717	867	948	793	867	944	1024	815	970	1138	1320	
	注射压力	Injection Pressure	Mpa	188	167	149	184	165	149	135	195	175	143	130	216	176	146	133	186	170	156	144	208	175	150	129	
螺杆最大转速	Screw Speed	rpm	120				145				125				100				90				90				
CLAMPING UNIT	合模装置																										
	锁模力	Clamping force	KN	5300				6500				8000				10000				12000				14000			
	移模行程	Toggle Stroke	mm	840				900				1000				1100				1250				1350			
	拉杆间距	Space Between Tie-Bars (WxH)	mm	830 X 800				925 X 875				1020 X 970				1125 X 1085				1180 X 1100				1310 X 1300			
	最大模厚	Max. Mold Height	mm	830				900				960				1100				1250				1400			
	最小模厚	Min. Mold Height	mm	350				350				400				500				500				600			
	顶出行程	Ejector Stroke	mm	240				335				300				335				325				360			
顶出力	Ejector Tonnage	KN	150				150				210				216				245				260				
OTHERS	其他																										
	最大油泵压力	Max. Pump Pressure	Mpa	16				16				16				16				16				16			
	电机功率	Motor Power	KW	28+36				43+36				43+56				43+56				56+56				43+43+43			
	电热功率	Heater Power	KW	32.6				46				54.3				59				66.1				86			
	外形尺寸	Machine Dimension	m	8.74 X 2.05 X 2.3				10.2 X 2.24 X 2.71				11.8 X 2.24 X 2.71				12.1 X 2.64 X 3				12.54 X 2.66 X 3.27				15.2 X 3 X 4.13			
	油箱容积	Oil Tank Capacity	L	800				1100				1200				1400				2100				2900			
机器重量	Machine Weight	ton	20				28				37				48				55				90				

模板正面尺寸 PLATEN DIMENSIONS



模板侧面尺寸 MOULD SPACE DIMENSIONS



K-TEC530

K-TEC650

K-TEC800

K-TEC1000

K-TEC1200

K-TEC1400