



CHINA-HWAMDA
THE CRAFTSMANSHIP OF THE WORLD
中国的华美达,世界的工匠心

EM 全电动注塑成型机

FULLY ELECTRIC INJECTION MOLDING MACHINE

2024年10月修订



宁波华美达集团有限公司
NINGBO HWAMDA GROUP CO., LTD.

地址: 浙江省宁波市小港安居路368号
Add: Anju Road No.368, Xiao Gang Street,
Ningbo, Zhejiang, P.R. China
邮编 (P.C.) : 315801
Http://www.hwamda.com

国内销售
电话: 0574-86175111
0574-86176676
传真: 0574-86176890
邮箱: info@hwamda.com

International
Tel: 86-574-86176630
86-574-86228735
Fax: 86-574-86228918
E-mail: sales@hwamda.com



宁波华美达集团有限公司
NINGBO HWAMDA GROUP CO., LTD.



宁波华美达机械制造有限公司地处“中国塑机之都”的浙江省宁波市，是一家专业化生产塑料注射成型机械的高新技术企业，经过不断的技术创新，公司自主研发的系列产品已广泛应用于汽车、电子、医疗、环保、物流、包装等众多注塑生产行业，目前，华美达已经成长为具有雄厚规模实力和创新竞争力的中国注塑机行业前列企业。2021年，成立宁波华美达集团有限公司，以集团化经营服务全球客户。

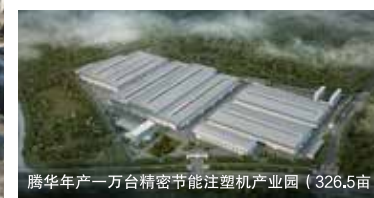
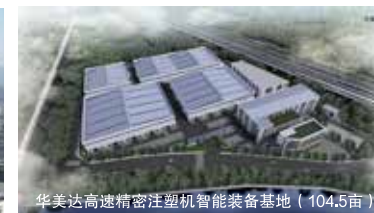
华美达公司现有四大生产制造基地，超过三十万平方米厂房设施，引进各种大型先进精密加工设备，团结了一支高素质的企业管理与技术创新团队。公司一直致力于高效节能型注塑机的开发制造与市场推广，已成功推出有精密伺服注塑机、二板注塑机、全电动注塑机、高速精密注塑机、高性能注塑机、清混多色注塑机、PET专用快速注胚系统等多个系列以及各种行业专用型产品。

为贴近客户，公司大力开拓国际市场，在国内外建立60余处完善的销售机构及海外服务中心，华美达注塑机受到了北美、中东、南美、东南亚、欧洲及非洲等各个国家和地区客户的使用和欢迎，建立了面向国际市场的营销体系。

公司通过ISO9001、ISO14001、OHSAS18001管理体系认证以及CE、EAC、KCS和“一带一路”等国际认证，所生产的各系列注塑机均配备世界知名品牌的液压、电器及控制系统，引进国际领先设计理念，通过严格的检验、加工、装配、调试，为客户提供优质的产品与服务。

一流的品质，是华美达执着追求的重要目标。尽力满足顾客需求，以精益求精、开拓进取的企业精神缔造辉煌的未来，公司始终坚持“专心专注，做好塑机”的企业理念，为中国注塑机械产业的发展和提高做出自己的贡献。

关于华美达 About US



Ningbo Hwamda Machinery Manufacturing Co., Ltd. is a new and high technology enterprise devoted to manufacture plastic injection machine, lying in the "City of China plastic molding machine" - Ningbo, Zhejiang.

Now, Hwamda Company owns four factories with more than three hundred thousand square meters. There are over 700 workers and staff members, holding together a high-quality team of managers and technical team. Our company always devoted to R&D for high efficiency and energy-saving injection molding machine. At present, our main products including servo motor energy saving machines, two platen machines, full electric machines, high speed machine for thin-wall products, twin-color machines, special high speed machine for PET preform and other standard or special injection molding machines.

Following the idea of serving customers, we have established more than 60 perfect sales & service branch in China and abroad. Hwamda machine has sold to many countries such as Russia, Poland, Mexico, India, Sri Lanka, Egypt, Brazil, Peru, Colombia, etc. Hwamda has gradually set up a marketing system covering both the domestic and overseas markets.

Hwamda has passed the ISO9001, ISO14001, OHSAS18001 and CE, EAC, KCS certification. All the series of injection machine are equipped with world famous hydraulic & electric elements and control system. Through strict inspection, assembly and test, Hwamda has provided first-class products and services to customers.

"First-class quality" is what we are pursuing the most. We will try our best to meet the requirements of customers and create even better future. Our company firmly sticks to the idea of "With undivided attention to manufacture excellent plastic injection molding machines", and makes our own contribution for the development and improvement of national plastic industry.



HMD EM SERIES

全电动注塑成型机
Fully Electric Injection Molding Machine

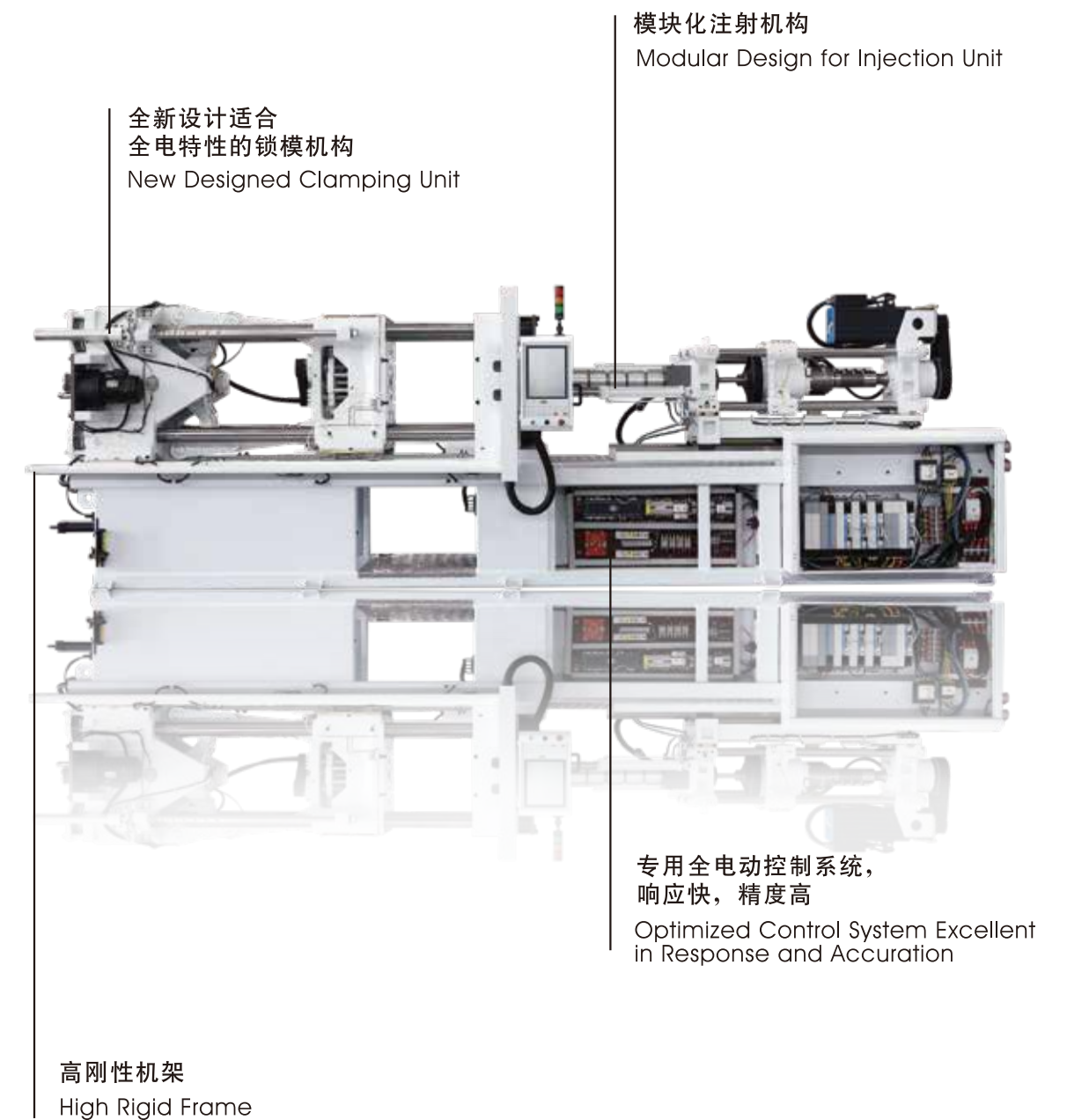


华美达EM系列是基于“高射速”，“高响应”，“高可靠性”的设计思路，所研发的全新系列全电动注塑机，通过引入模块化设计理念使机器匹配灵活多变，同等吨位设备可选配多种规格注塑机构，更好满足客户对精密产品注塑的各种需求。

The new concept EM series full electric machine adopted high injection speed fast response and reliable span life. With compact modular design, it provides wide range of injection unit to be the best solution for high precise products.

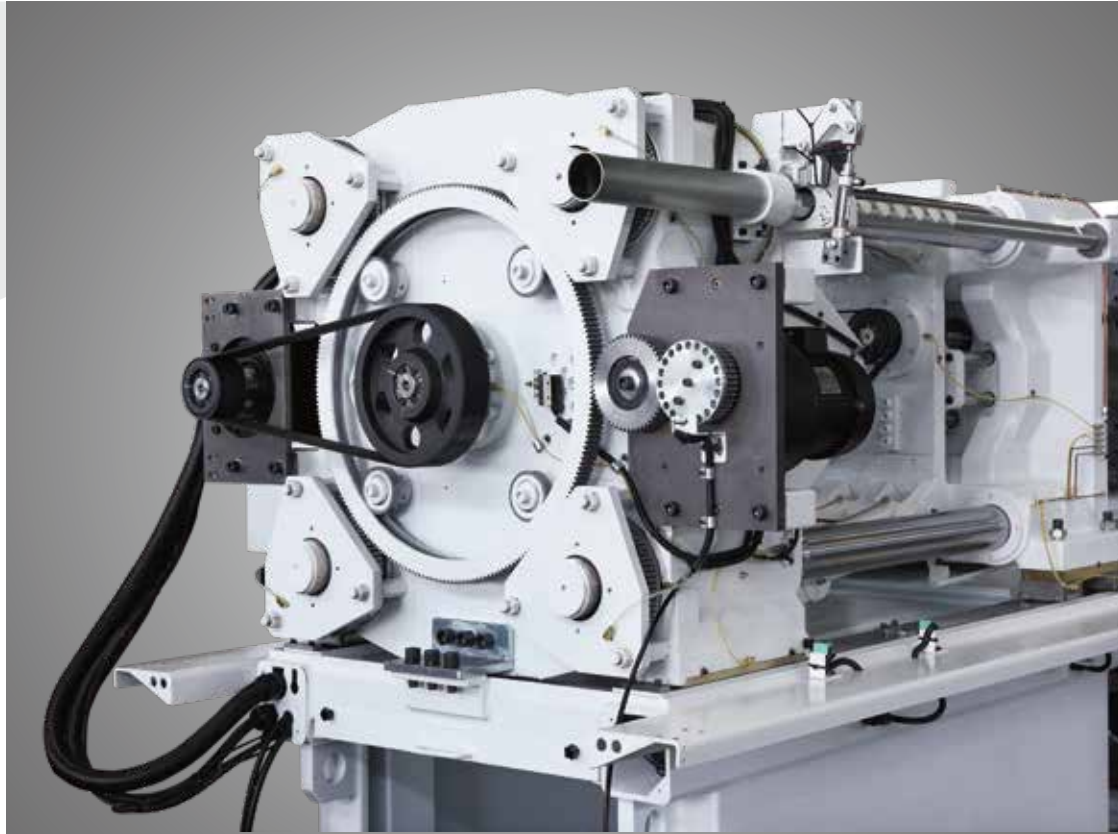
Overview

EM系列全电机特点



Clamping unit

锁模单元



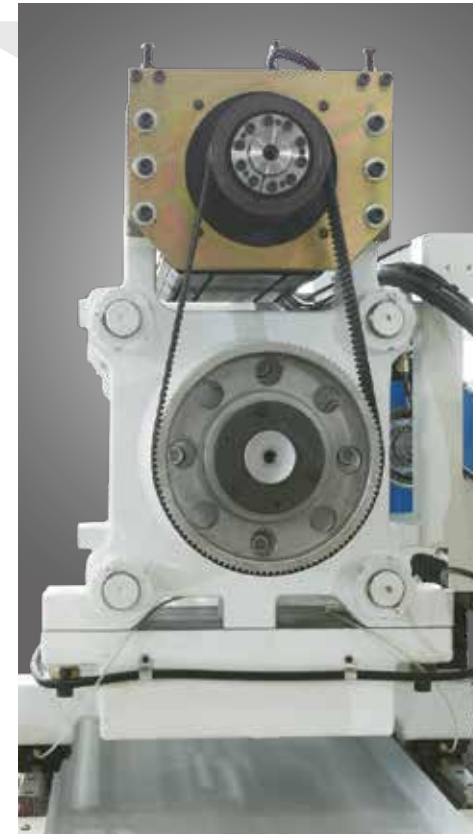
- 全新设计适合全电机特性的锁模机构，运行特性平稳、高速，模板刚性好，变形小，尤其适合精密模具使用。
- New design clamping unit with high rigidity structure helps in hence of stable and efficiency performance as well as lowering contraction defects, thereby it is specialized in precise products.
- 采用封闭式定量加压油脂润滑系统，油脂用量小，润滑可靠，同时保证部件洁净美观。
- Close type lubrication system guarantees precision and reliable oil maintenance and presents clear environment.



Injection unit

注射单元

- 注射机构采用模块化设计理念，相同锁模部件可与不同规格的注射部件自由组合，满足不同客户对注塑单元的特殊需求。
- Wide variety injection unit with modular design can be provided depending on the features of molded products.



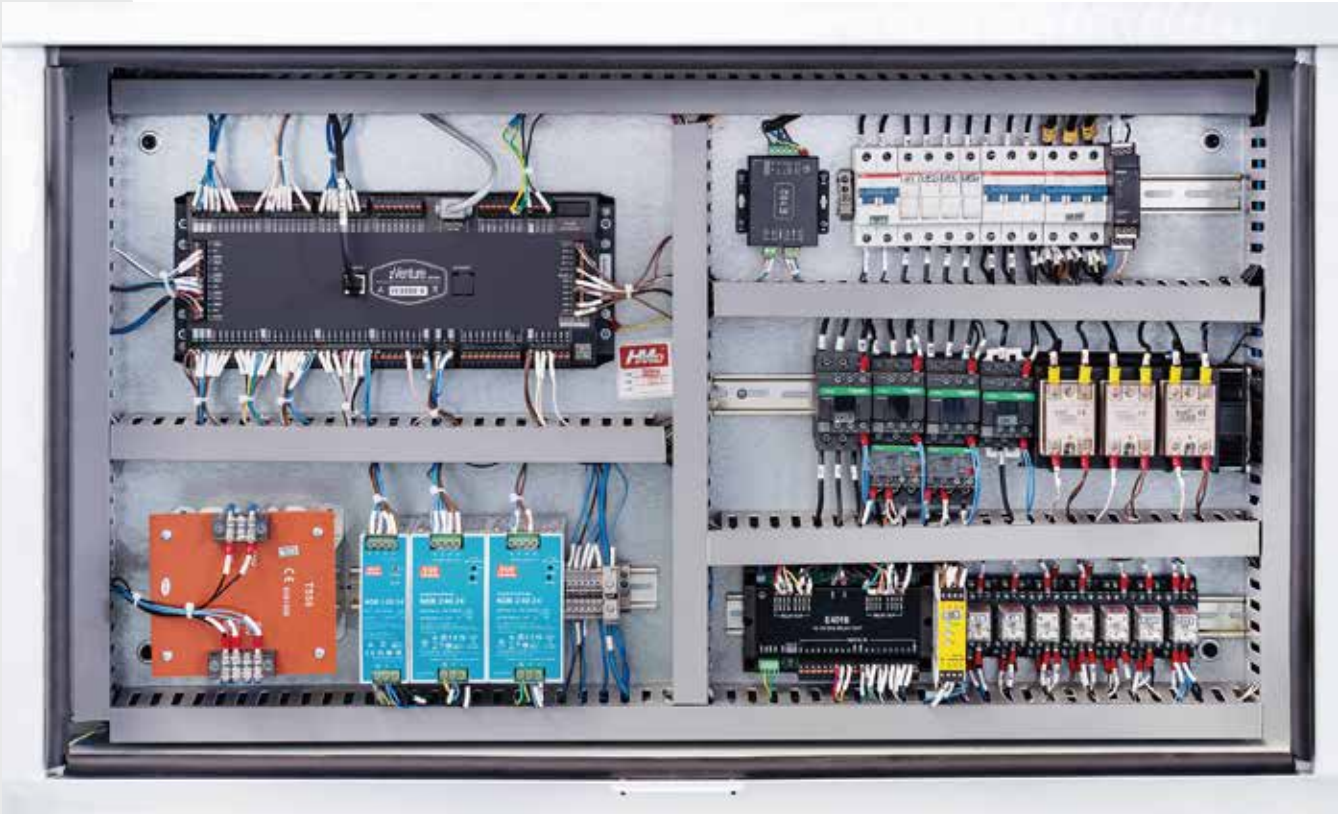
- 优化注射运动部件设计，使注射速度提升，动态响应快 0~300mm/s，注射速度响应均小于40ms，满足客户对超薄精密零件的高要求生产。
- High speed performance on injection speed 0~300MM/S and response 40ms, it suits to most of precise and thin-wall product.



Control system

控制系统

- 高响应全电动注塑机专用电脑，配合EATHERCAT总线通讯技术，抗干扰性能强，运算速度快，数据实时传输快，控制精准度好。
- The high performance controller co-effective with EATH-ERCAT can-bus system offers high efficiency anti-jam-ming performance and high speed internal calculation to guarantee real-time bulk data transfer and precise control.



Multi- Functional Man-Machine Friendly

功能丰富，人机界面友好



主画面
Main Page



注射功能
Injection Unit



锁模功能
Clamping Unit



模具参数存储
Production Data Storage



中子画面
Core Pull



模内压
Mold Pressure





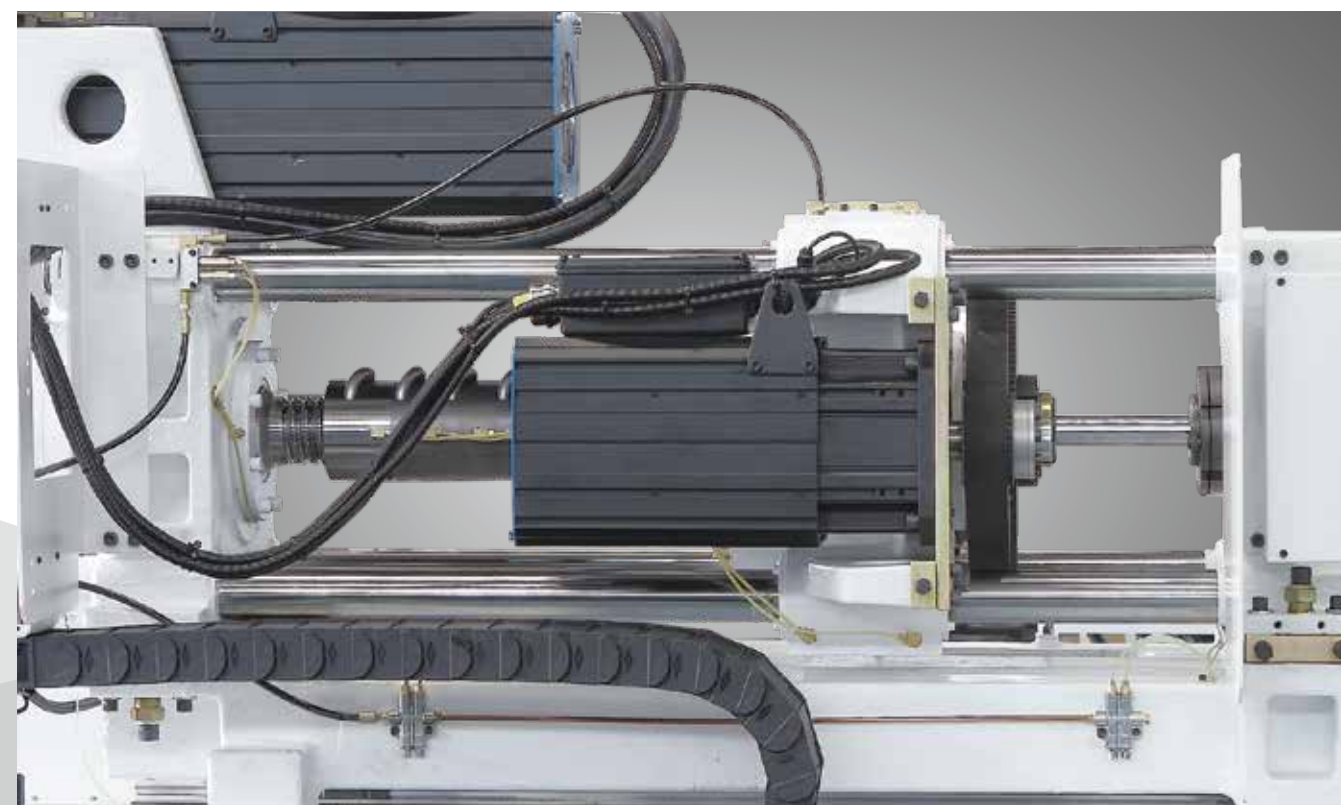
- 模块化共直流母线驱动设计，结构紧凑，功率密度高，维护方便。
- The designation based on modular common-DC-bus to enhance machine capacity and user convenience and practicality.

- 支持多种通讯协议，控制方式灵活可靠。
- Multi-communication protocol is supported to realize flexible and reliable control.

Control system

动力控制系统

- 定制化的全电动专用永磁伺服电机，动态响应快，功率密度高。
- Full electric machine costumed sync servo motor enables efficiency response and capacity.

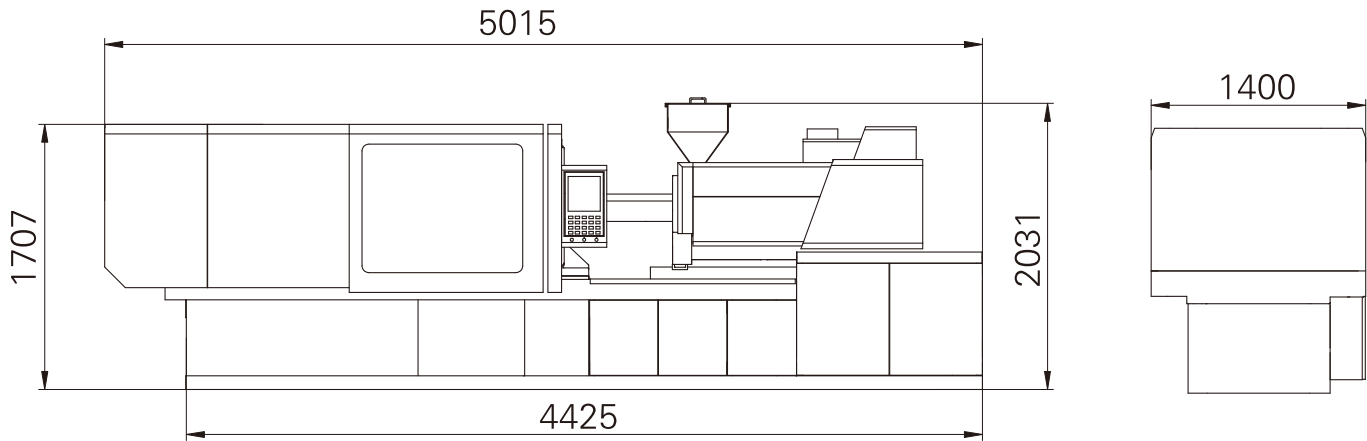


技术参数表 SPECIFICATIONS

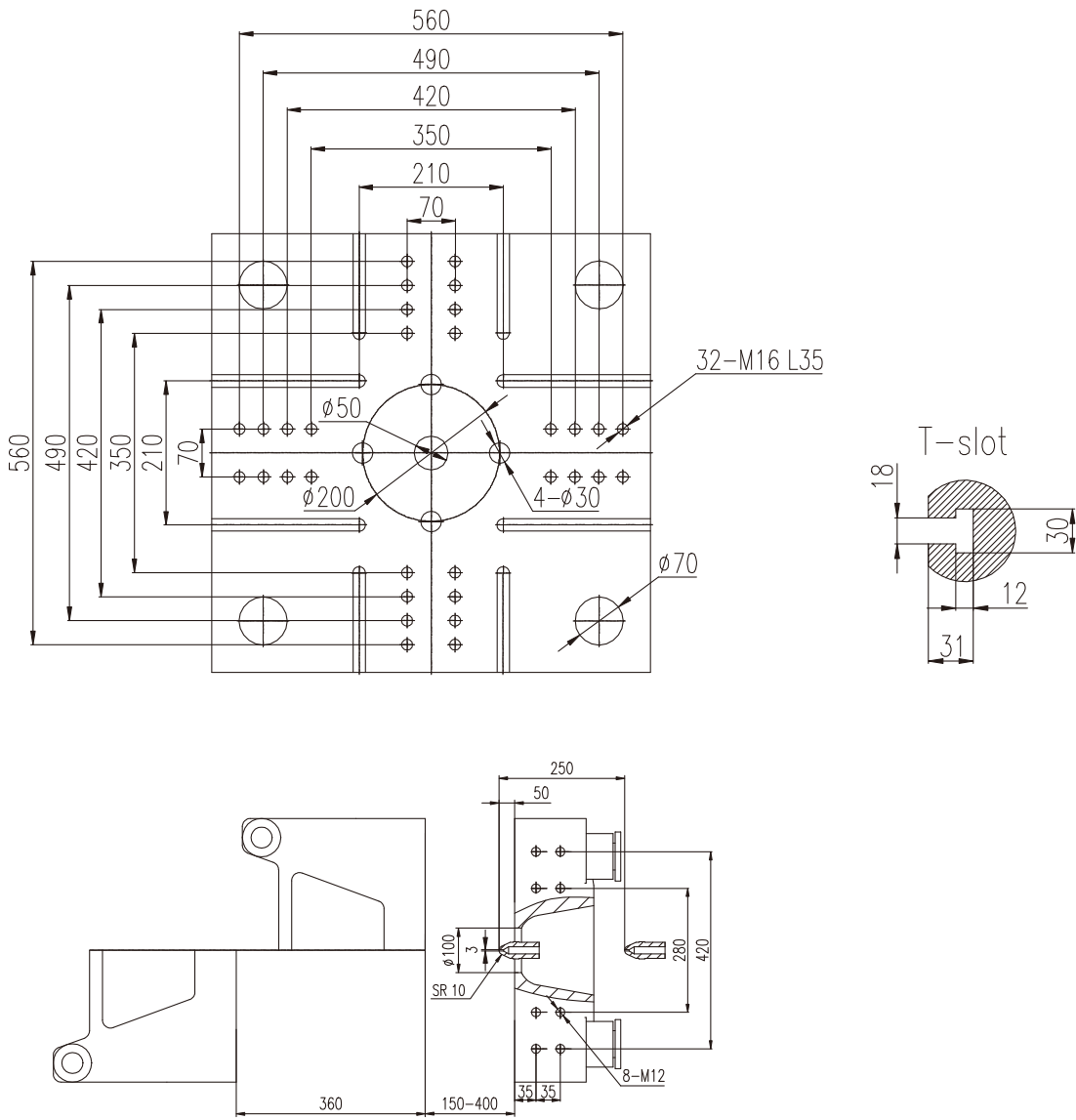
参数	PARAMETER	UNIT	HMD EM100									
合模装置		CLAMPING UNIT										
锁模力	Clamping force	kN	1000									
移模行程	Mold opening stroke	mm	360									
模板尺寸	Platen size	mm	625 × 625									
拉杆内间距	Dist. between tie bars (H × V)	mm	420 × 420									
模板最大距离	Max. daylight	mm	760									
容模量 (最小-最大)	Mold thickness (Min-Max)	mm	150 ~ 400									
顶出行程	Ejector stroke	mm	100									
顶出力	Ejector tonnage	kN	20									
注射装置	INJECTION UNIT		C120h			C160h			C210h			
理论注射容量	Injection volume (theoretical)	cm³	46	64	74	64	74	96	86	113	142	
注射重量	Injection weight (PS)	g (克)	41	58	67	58	67	88	78	102	130	
		oz (盎司)	1.45	2.05	2.36	2.05	2.36	3.1	2.75	3.6	4.59	
注射速度	Injection speed	mm/s	350			350			350			
注射速率	Injection rate (PS)	g/s	121	169	256	169	196	256	196	256	324	
螺杆直径	Screw diameter	mm	22	26	28	26	28	32	28	32	36	
注射压力	Injection pressure	MPa	281	201	173	247	213	163	276	211	167	
连续保压压力	Hold force	MPa	210	151	130	185	160	122	207	158	125	
螺杆长径比	Screw L/D ratio	— —	23.6	20	18.6	21.5	20	18.7	23.4	20.5	18.2	
螺杆行程	Screw stroke	mm	120			120			140			
螺杆转速	Screw speed	r/ min	400			400			400			
动力/电热		POWER UNIT										
电器总容量	Connection power	kW	28			30			29.2			
外形尺寸 (L × W × H)	Machine dimension (L × W × H)	m	5.0 × 1.4 × 2.0			5.0 × 1.4 × 2.0			5.0 × 1.4 × 2.0			
机器重量	Machine weight	Ton	4.3			4.3			4.5			
温度控制区数	Number of temp control zones	— —	4			4			4			

说明：由于产品改进，技术参数的变更，恕不另行通知。
Remark:We reserve the right to make any technical improvement without prior notice.

EM100机器尺寸 MACHINE DIEMENSION



EM100模板尺寸 PLATEN DIMENSION

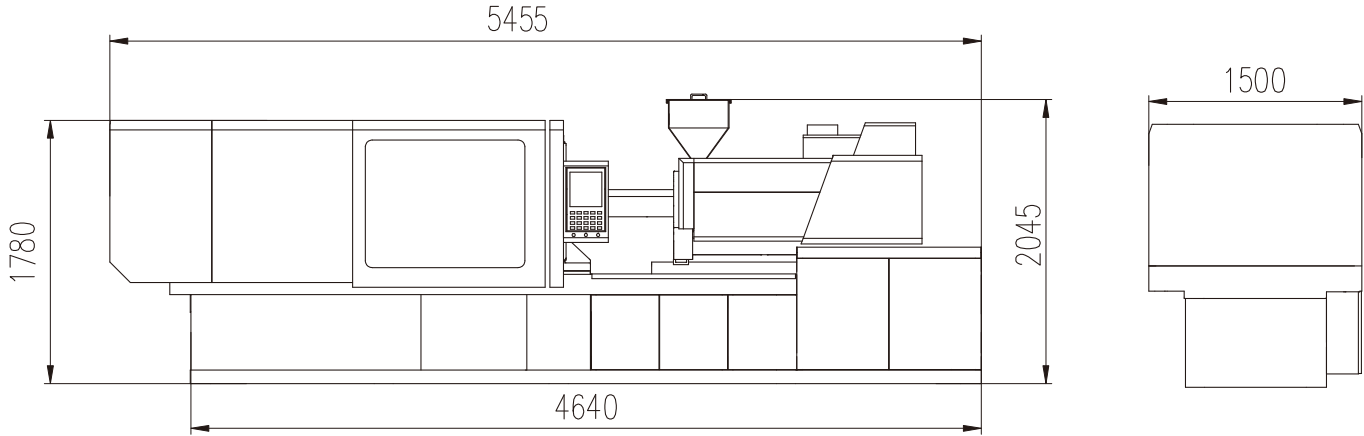


技术参数表 SPECIFICATIONS

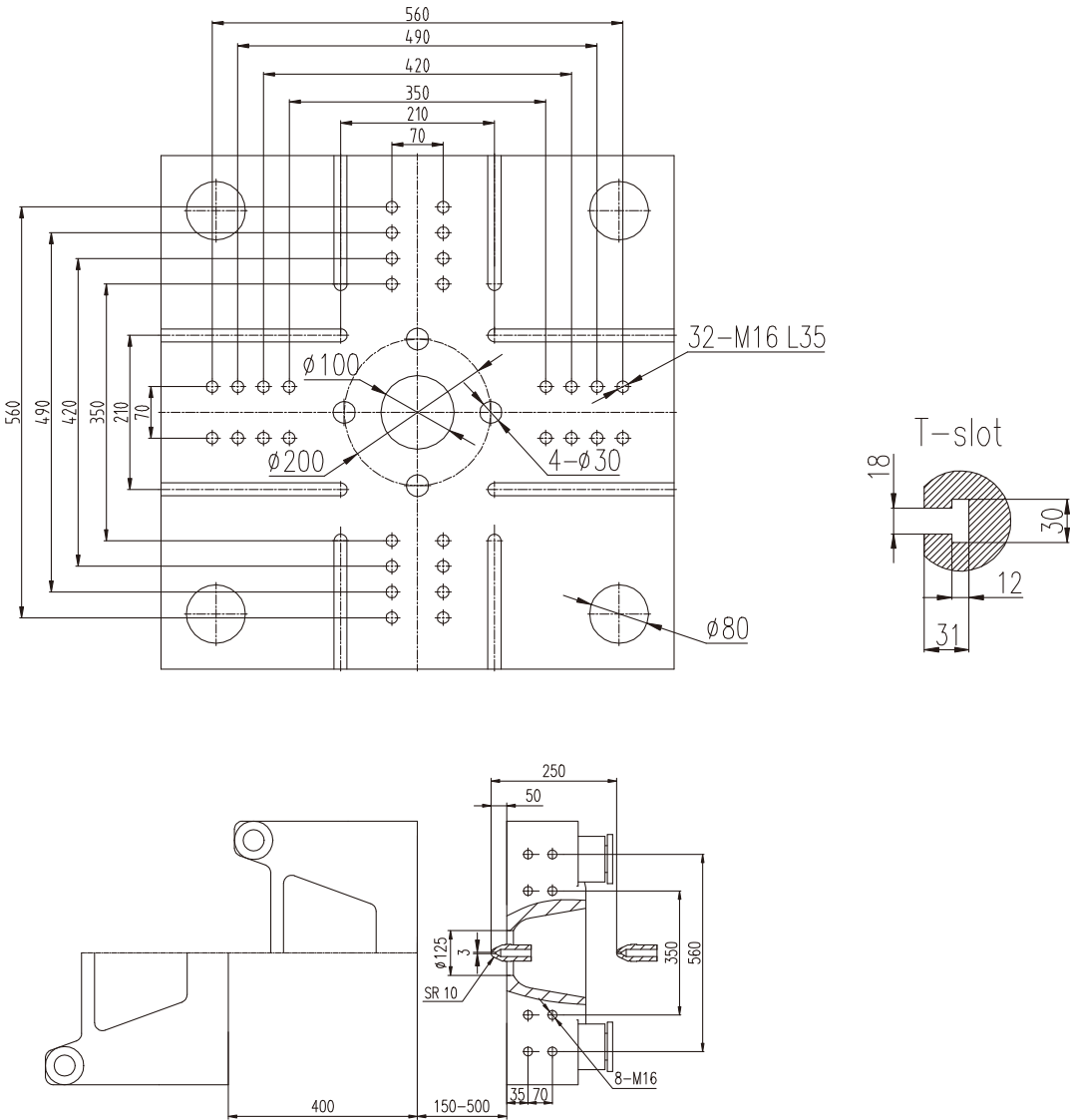
参数	PARAMETER	UNIT	HMD EM130									
合模装置		CLAMPING UNIT										
锁模力	Clamping force	kN	1300									
移模行程	Mold opening stroke	mm	400									
模板尺寸	Platen size	mm	705 × 705									
拉杆内间距	Dist. between tie bars (H × V)	mm	470 × 470									
模板最大距离	Max. daylight	mm	900									
容模量 (最小-最大)	Mold thickness (Min-Max)	mm	150 ~ 500									
顶出行程	Ejector stroke	mm	100									
顶出力	Ejector tonnage	kN	30									
注射装置	INJECTION UNIT		C160h			C210h			C315h			
理论注射容量	Injection volume (theoretical)	cm³	64	74	96	86	113	142	129	163	201	
注射重量	Injection weight (PS)	g (克)	58	67	88	78	102	130	117	148	183	
		oz (盎司)	2.05	2.36	3.1	2.75	3.6	4.59	4.13	5.22	6.46	
注射速度	Injection speed	mm/s	350			350			350			
注射速率	Injection rate (PS)	g/s	169	196	256	196	256	324	256	324	400	
螺杆直径	Screw diameter	mm	26	28	32	28	32	36	32	36	40	
注射压力	Injection pressure	MPa	247	213	163	276	211	167	259	205	166	
连续保压压力	Hold force	MPa	185	160	122	207	158	125	194	154	124	
螺杆长径比	Screw L/D ratio	— —	21.5	20	18.7	23.4	20.5	18.2	23	20.5	18.5	
螺杆行程	Screw stroke	mm	120			140			160			
螺杆转速	Screw speed	r/ min	400			400			400			
动力/电热		POWER UNIT										
电器总容量	Connection power	kW	31			35.8			40			
外形尺寸 (L × W × H)	Machine dimension (L × W × H)	m	5.5 × 1.5 × 2.1			5.5 × 1.5 × 2.1			5.5 × 1.5 × 2.1			
机器重量	Machine weight	Ton	5.2			5.3			5.3			
温度控制区数	Number of temp control zones	— —	4			4			4			

说明：由于产品改进，技术参数的变更，恕不另行通知。
Remark: We reserve the right to make any technical improvement without prior notice.

EM130机器尺寸 MACHINE DIEMENSION



EM130模板尺寸 PLATEN DIMENSION

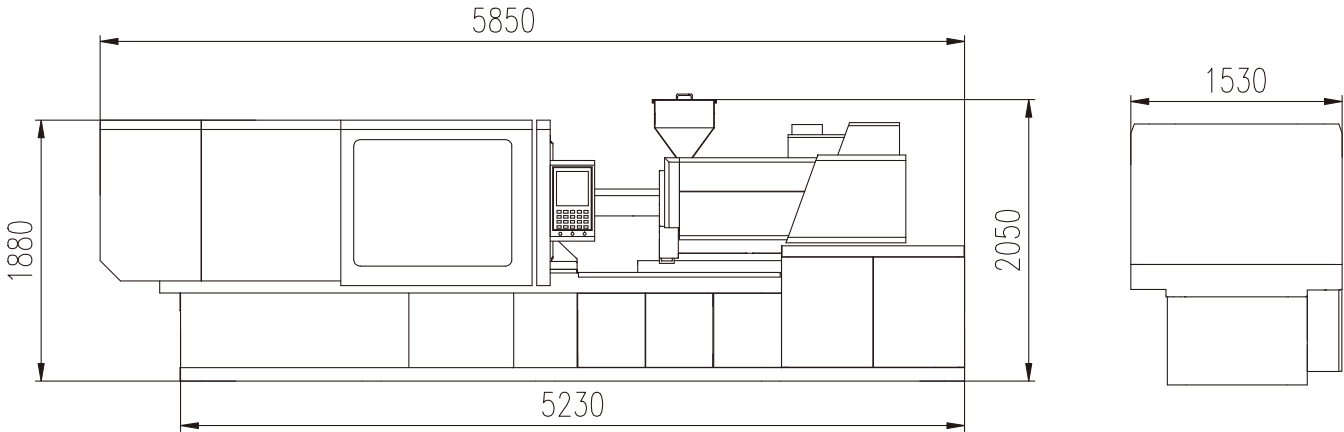


技术参数表 SPECIFICATIONS

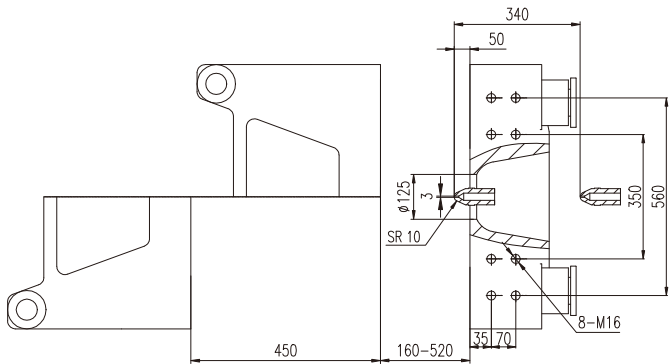
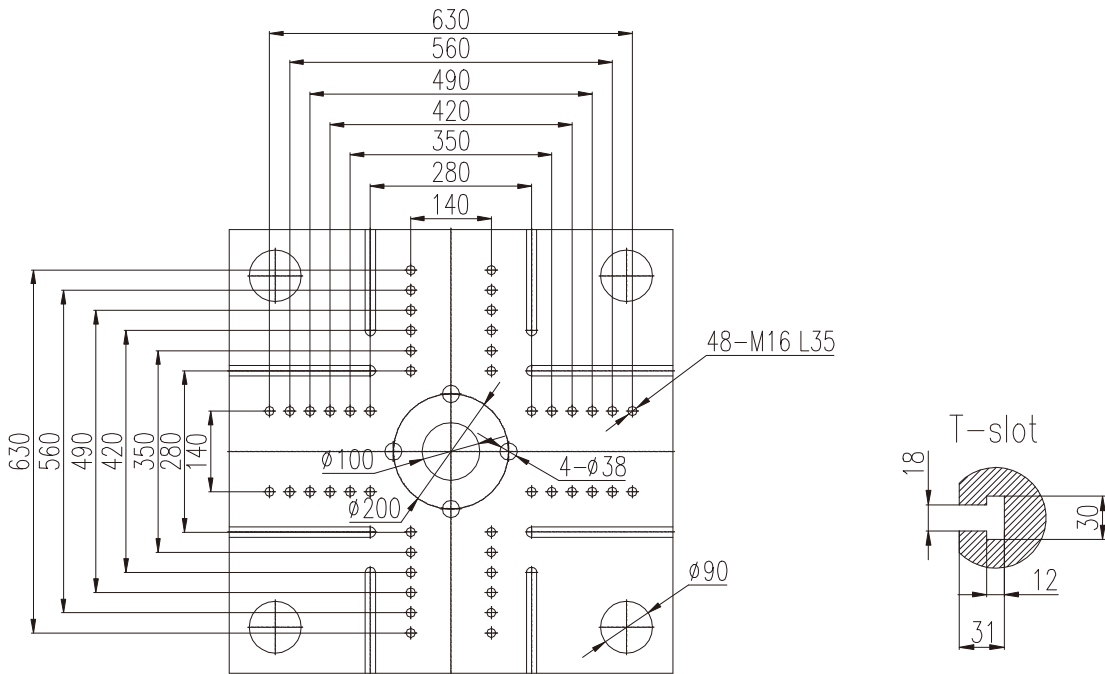
参数	PARAMETER	UNIT	HMD EM170								
合模装置			CLAMPING UNIT								
锁模力	Clamping force	kN	1700								
移模行程	Mold opening stroke	mm	450								
模板尺寸	Platen size	mm	770 × 770								
拉杆内间距	Dist. between tie bars (H × V)	mm	520 × 520								
模板最大距离	Max. daylight	mm	970								
容模量 (最小-最大)	Mold thickness (Min-Max)	mm	160 ~ 520								
顶出行程	Ejector stroke	mm	120								
顶出力	Ejector tonnage	kN	35								
注射装置	INJECTION UNIT		C210h			C315h			C430h		
理论注射容量	Injection volume (theoretical)	cm³	86	113	142	129	163	201	183	226	286
注射重量	Injection weight (PS)	g (克)	78	102	130	117	148	183	167	206	260
		oz (盎司)	2.75	3.6	4.59	4.13	5.22	6.46	5.89	7.27	9.17
注射速度	Injection speed	mm/s	350			350			350		
注射速率	Injection rate (PS)	g/s	196	256	324	256	324	400	324	400	506
螺杆直径	Screw diameter	mm	28	32	36	32	36	40	36	40	45
注射压力	Injection pressure	MPa	276	211	167	259	205	166	248	201	160
连续保压压力	Hold force	MPa	207	158	125	194	154	124	186	151	120
螺杆长径比	Screw L/D ratio	— —	23.4	20.5	18.2	23	20.5	18.5	23.3	21	18.6
螺杆行程	Screw stroke	mm	140			160			180		
螺杆转速	Screw speed	r/ min	400			400			400		
动力/电热			POWER UNIT								
电器总容量	Connection power	kW	35.8			40			42.5		
外形尺寸 (L × W × H)	Machine dimension (L × W × H)	m	5.9 × 1.6 × 2.1			5.9 × 1.6 × 2.1			5.9 × 1.6 × 2.1		
机器重量	Machine weight	Ton	6.8			7.0			7.0		
温度控制区数	Number of temp control zones	— —	4			4			4		

说明：由于产品改进，技术参数的变更，恕不另行通知。
Remark: We reserve the right to make any technical improvement without prior notice.

EM170机器尺寸 MACHINE DIEMENSION



EM170模板尺寸 PLATEN DIMENSION

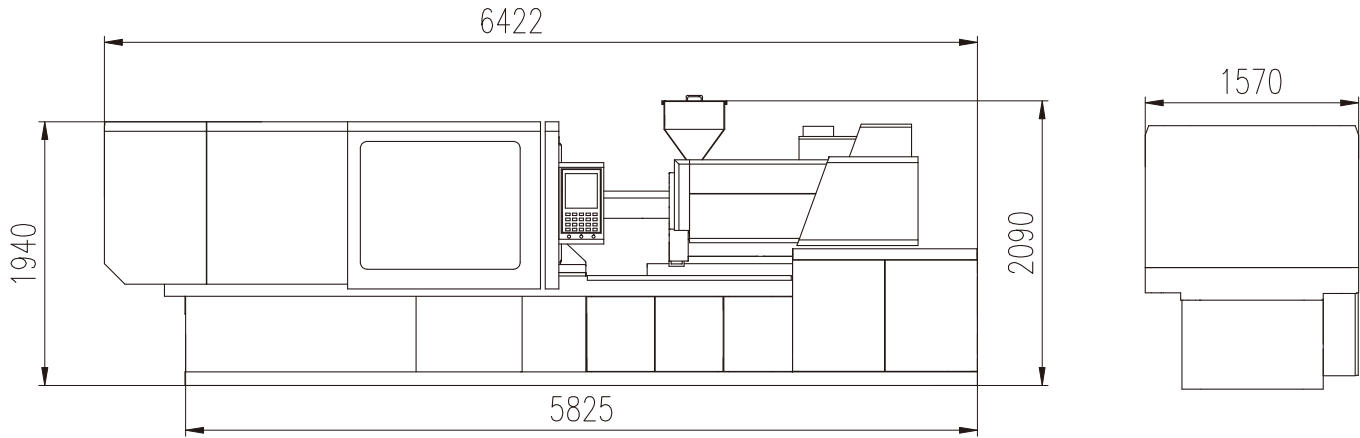


技术参数表 SPECIFICATIONS

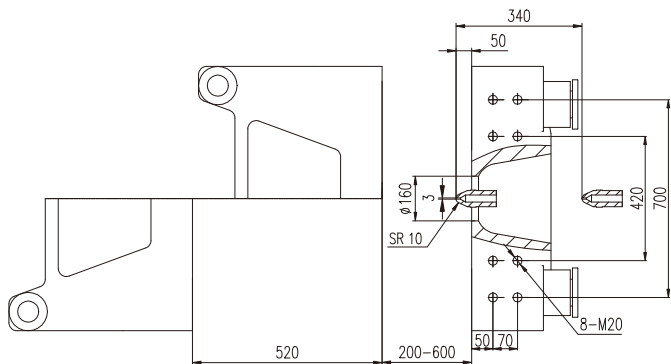
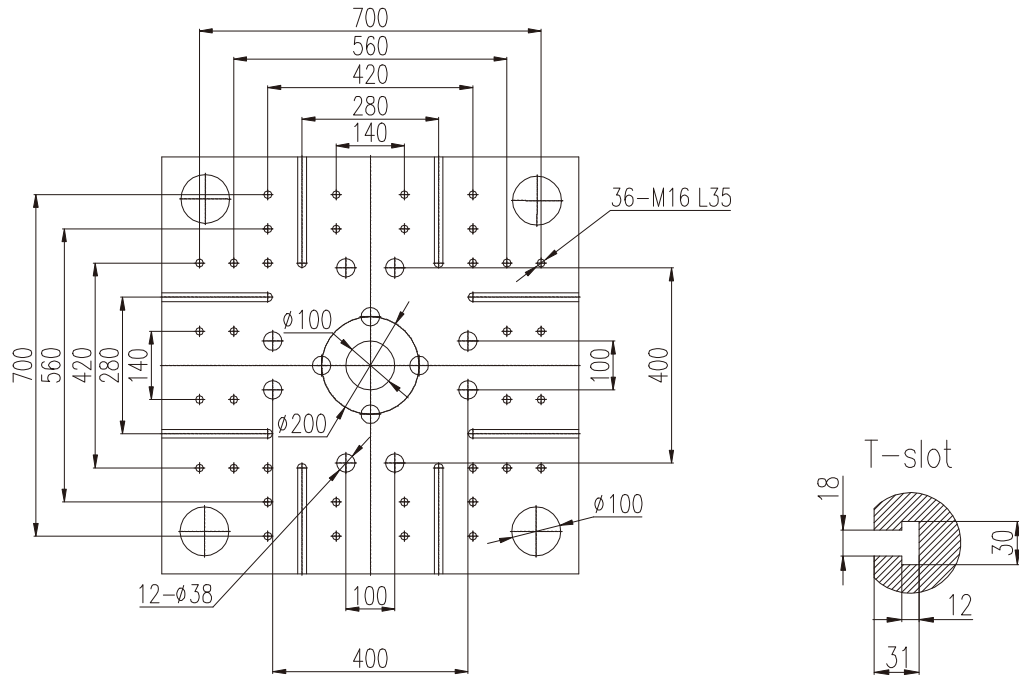
参数	PARAMETER	UNIT	HMD EM200									
合模装置		CLAMPING UNIT										
锁模力	Clamping force	kN	2000									
移模行程	Mold opening stroke	mm	520									
模板尺寸	Platen size	mm	855 × 855									
拉杆内间距	Dist. between tie bars (H × V)	mm	580 × 580									
模板最大距离	Max. daylight	mm	1120									
容模量 (最小-最大)	Mold thickness (Min-Max)	mm	200 ~ 600									
顶出行程	Ejector stroke	mm	140									
顶出力	Ejector tonnage	kN	45									
注射装置	INJECTION UNIT		C315h			C430h			C620h			
理论注射容量	Injection volume (theoretical)	cm³	129	163	201	183	226	286	251	318	392	
注射重量	Injection weight (PS)	g (克)	117	148	183	167	206	260	228	289	357	
		oz (盎司)	4.13	5.22	6.46	5.89	7.27	9.17	8.47	10.72	13.23	
注射速度	Injection speed	mm/s	350			350			300			
注射速率	Injection rate (PS)	g/s	256	324	400	324	400	506	342	433	535	
螺杆直径	Screw diameter	mm	32	36	40	36	40	45	40	45	50	
注射压力	Injection pressure	MPa	259	205	166	248	201	160	251	198	160	
连续保压压力	Hold force	MPa	194	154	124	186	151	120	188	148	120	
螺杆长径比	Screw L/D ratio	— —	23	20.5	18.5	23.3	21	18.6	23.6	21	18.9	
螺杆行程	Screw stroke	mm	160			180			200			
螺杆转速	Screw speed	r/ min	400			400			300			
动力/电热		POWER UNIT										
电器总容量	Connection power	kW	42.5			46			50			
外形尺寸 (L × W × H)	Machine dimension (L × W × H)	m	6.4 × 1.6 × 2.1			6.4 × 1.6 × 2.1			6.4 × 1.6 × 2.1			
机器重量	Machine weight	Ton	8.8			9.1			9.3			
温度控制区数	Number of temp control zones	— —	4			4			4			

说明：由于产品改进，技术参数的变更，恕不另行通知。
Remark: We reserve the right to make any technical improvement without prior notice.

EM200机器尺寸 MACHINE DIEMENSION



EM200模板尺寸 PLATEN DIMENSION

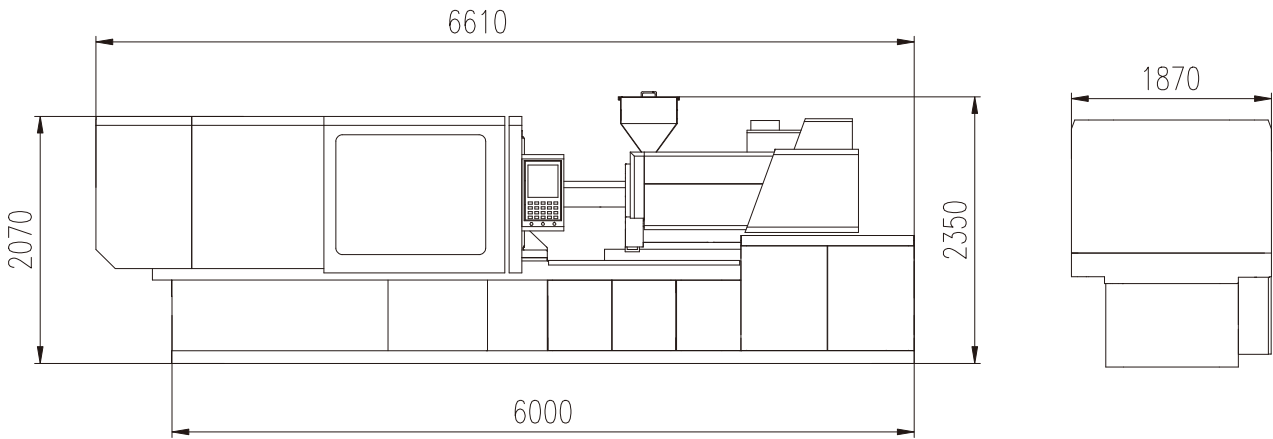


技术参数表 SPECIFICATIONS

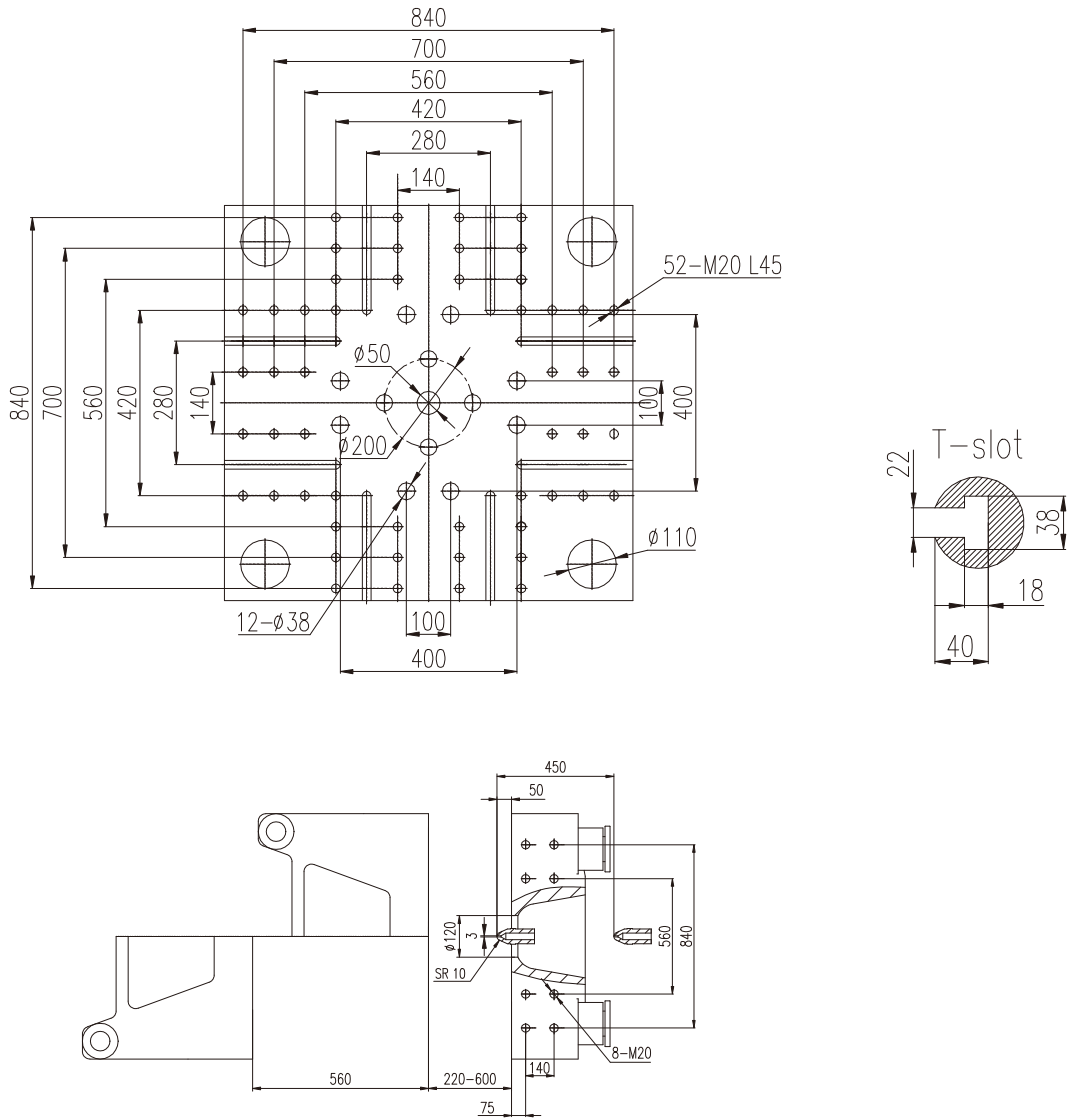
参数	PARAMETER	UNIT	HMD EM250									
合模装置		CLAMPING UNIT										
锁模力	Clamping force	kN	2500									
移模行程	Mold opening stroke	mm	560									
模板尺寸	Platen size	mm	925 × 925									
拉杆内间距	Dist. between tie bars (H × V)	mm	630 × 630									
模板最大距离	Max. daylight	mm	1160									
容模量 (最小-最大)	Mold thickness (Min-Max)	mm	220 ~ 600									
顶出行程	Ejector stroke	mm	150									
顶出力	Ejector tonnage	kN	50									
注射装置	INJECTION UNIT		C430h			C620h			C850			
理论注射容量	Injection volume (theoretical)	cm³	183	226	286	251	318	392	342	422	511	
注射重量	Injection weight (PS)	g (克)	167	206	260	228	289	357	311	384	465	
		oz (盎司)	5.89	7.27	9.17	8.47	10.72	13.23	11.0	13.5	16.4	
注射速度	Injection speed	mm/s	350			300			200			
注射速率	Injection rate (PS)	g/s	324	400	506	342	433	535	289	357	432	
螺杆直径	Screw diameter	mm	36	40	45	40	45	50	45	50	55	
注射压力	Injection pressure	MPa	248	201	160	251	198	160	250	203	167	
连续保压压力	Hold force	MPa	186	151	120	188	148	120	200	162	134	
螺杆长径比	Screw L/D ratio	— —	23.3	21	18.6	23.6	21	18.9	23.3	21	19.1	
螺杆行程	Screw stroke	mm	180			200			215			
螺杆转速	Screw speed	r/ min	400			300			300			
动力/电热		POWER UNIT										
电器总容量	Connection power	kW	46			50			55			
外形尺寸 (L × W × H)	Machine dimension (L × W × H)	m	6.6 × 1.9 × 2.4			6.6 × 1.9 × 2.4			6.6 × 1.9 × 2.4			
机器重量	Machine weight	Ton	12.5			12.7			12.7			
温度控制区数	Number of temp control zones	— —	4			4			6			

说明：由于产品改进，技术参数的变更，恕不另行通知。
Remark: We reserve the right to make any technical improvement without prior notice.

EM250机器尺寸 MACHINE DIEMENSION



EM250模板尺寸 PLATEN DIMENSION

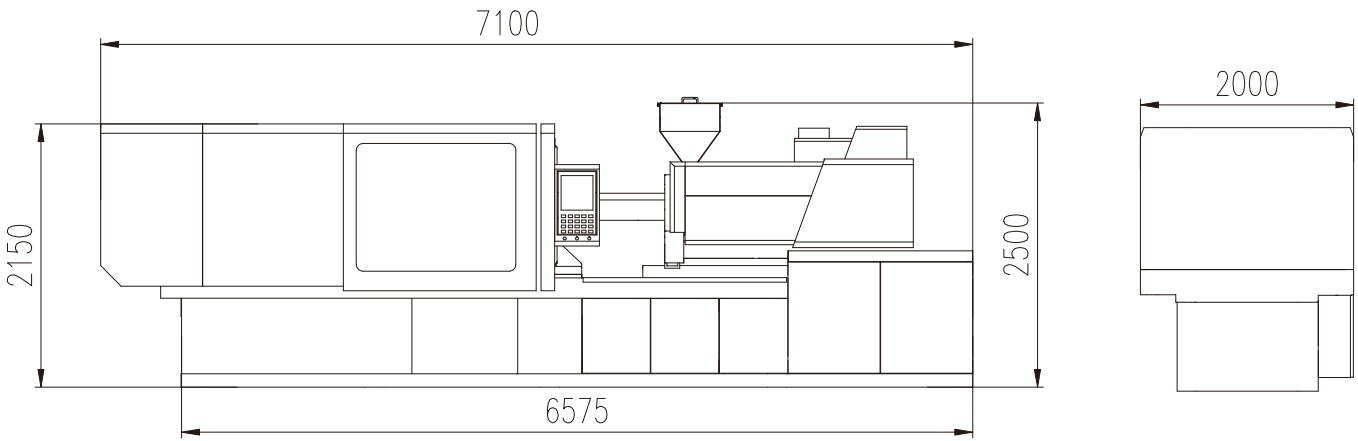


技术参数表 SPECIFICATIONS

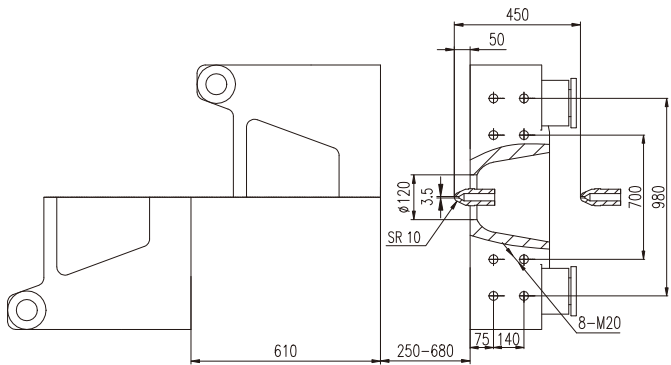
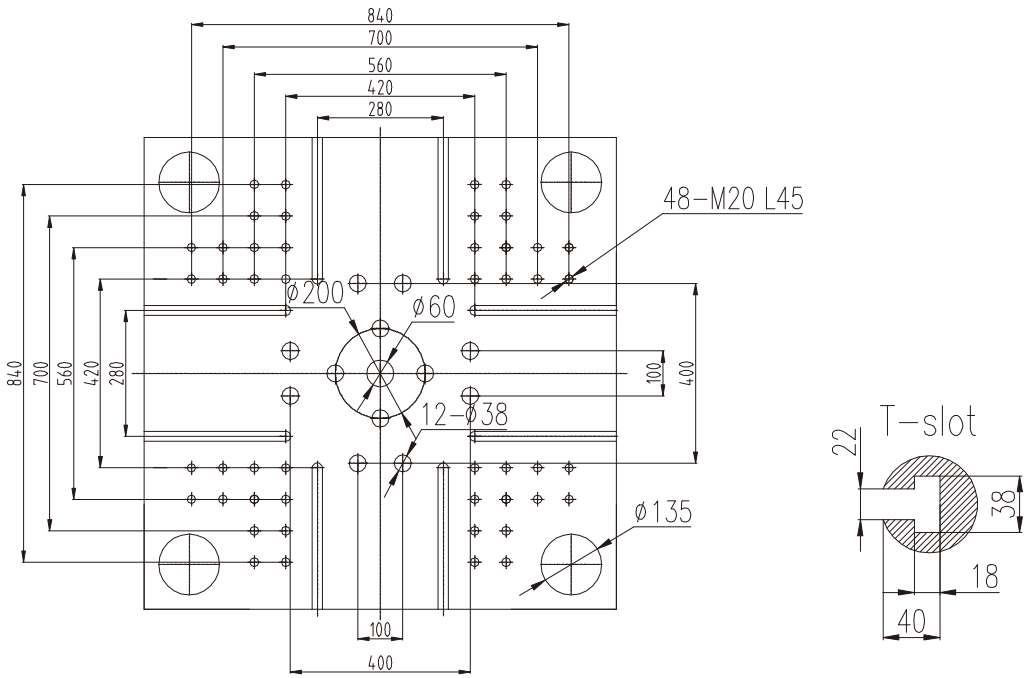
参数	PARAMETER	UNIT	HMD EM300									
合模装置		CLAMPING UNIT										
锁模力	Clamping force	kN	3000									
移模行程	Mold opening stroke	mm	610									
模板尺寸	Platen size	mm	1050 × 1050									
拉杆内间距	Dist. between tie bars (H × V)	mm	730 × 730									
模板最大距离	Max. daylight	mm	1290									
容模量 (最小-最大)	Mold thickness (Min-Max)	mm	250 ~ 680									
顶出行程	Ejector stroke	mm	160									
顶出力	Ejector tonnage	kN	68.6									
注射装置	INJECTION UNIT		C850			C1100			C1400			
理论注射容量	Injection volume (theoretical)	cm³	342	422	511	471	570	678	617	735	862	
注射重量	Injection weight (PS)	g (克)	311	384	465	429	519	617	562	669	785	
		oz (盎司)	11.0	13.5	16.4	15.1	18.3	21.8	19.8	23.6	27.7	
注射速度	Injection speed	mm/s	200			200			200			
注射速率	Injection rate (PS)	g/s	289	357	432	357	432	514	432	514	603	
螺杆直径	Screw diameter	mm	45	50	55	50	55	60	55	60	65	
注射压力	Injection pressure	MPa	250	203	167	220	182	153	215	181	154	
连续保压压力	Hold force	MPa	200	162	134	198	164	138	194	163	139	
螺杆长径比	Screw L/D ratio	— —	23.3	21	19.1	23.1	21	19.3	23	21	19.4	
螺杆行程	Screw stroke	mm	215			240			260			
螺杆转速	Screw speed	r/ min	300			300			300			
动力/电热		POWER UNIT										
电器总容量	Connection power	kW	61			78			78			
外形尺寸 (L × W × H)	Machine dimension (L × W × H)	m	7.2 × 2.2 × 2.5			7.2 × 2.2 × 2.5			7.2 × 2.2 × 2.5			
机器重量	Machine weight	Ton	15			15.5			16			
温度控制区数	Number of temp control zones	— —	6			6			6			

说明：由于产品改进，技术参数的变更，恕不另行通知。
Remark: We reserve the right to make any technical improvement without prior notice.

EM300机器尺寸 MACHINE DIEMENSION



EM300模板尺寸 PLATEN DIMENSION

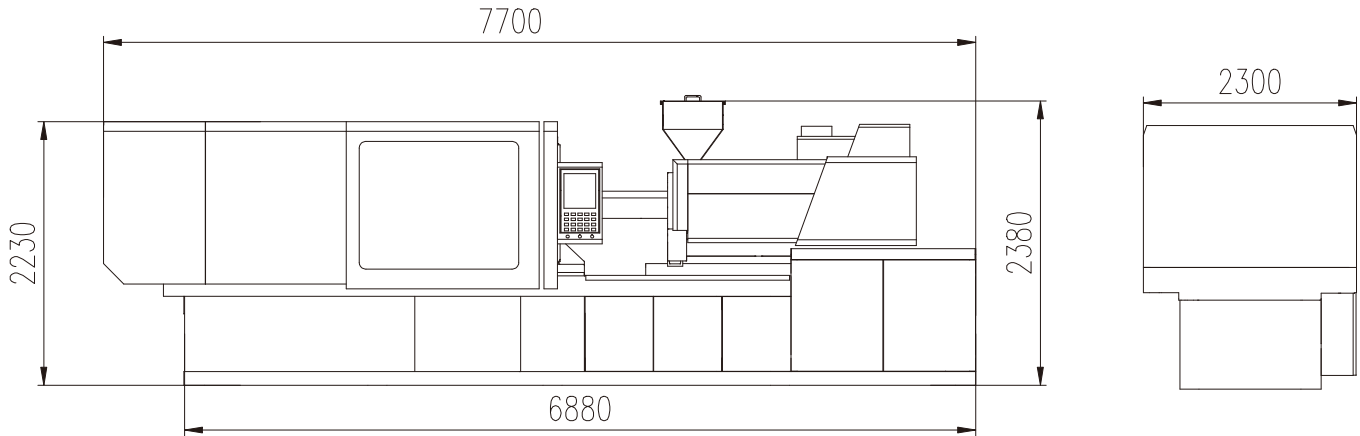


技术参数表 SPECIFICATIONS

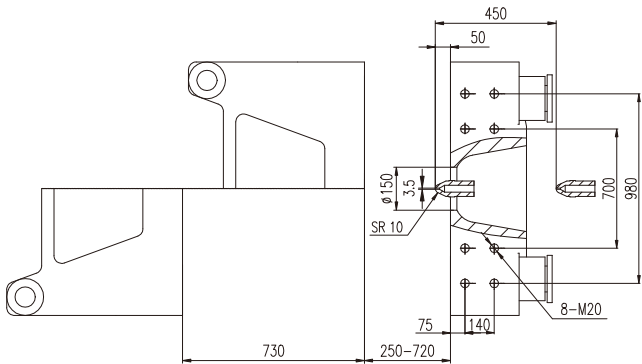
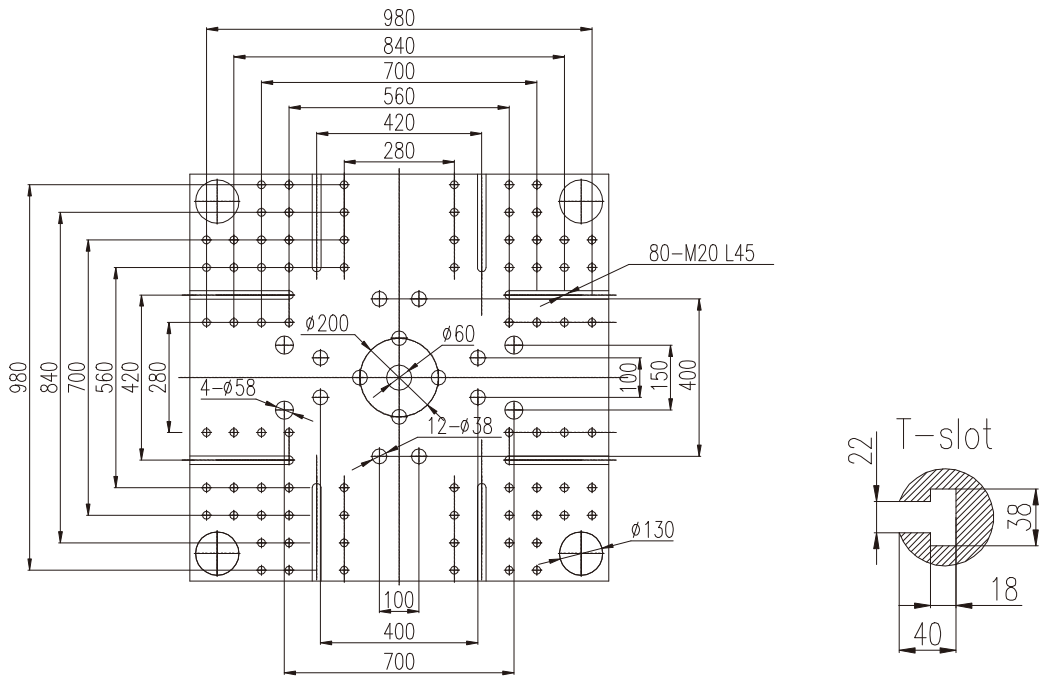
参数	PARAMETER	UNIT	HMD EM370									
合模装置		CLAMPING UNIT										
锁模力	Clamping force	kN	3700									
移模行程	Mold opening stroke	mm	730									
模板尺寸	Platen size	mm	1170 × 1170									
拉杆内间距	Dist. between tie bars (H × V)	mm	830 × 830									
模板最大距离	Max. daylight	mm	1450									
容模量 (最小-最大)	Mold thickness (Min-Max)	mm	250 ~ 720									
顶出行程	Ejector stroke	mm	160									
顶出力	Ejector tonnage	kN	60									
注射装置	INJECTION UNIT		C1100			C1400			C1700			
理论注射容量	Injection volume (theoretical)	cm³	471	570	678	617	735	862	791	929	1077	
注射重量	Injection weight (PS)	g (克)	429	519	617	562	669	785	720	845	980	
		oz (盎司)	15.1	18.3	21.8	19.8	23.6	27.7	25.4	29.8	34.6	
注射速度	Injection speed	mm/s	200			200			200			
注射速率	Injection rate (PS)	g/s	357	432	514	432	514	603	514	603	700	
螺杆直径	Screw diameter	mm	50	55	60	55	60	65	60	65	70	
注射压力	Injection pressure	MPa	220	182	153	215	181	154	210	179	154	
连续保压压力	Hold force	MPa	198	164	138	194	163	139	190	161	139	
螺杆长径比	Screw L/D ratio	— —	23.1	21	19.3	23	21	19.4	23	21.2	19.7	
螺杆行程	Screw stroke	mm	240			260			280			
螺杆转速	Screw speed	r/ min	300			300			300			
动力/电热		POWER UNIT										
电器总容量	Connection power	kW	89			89			99			
外形尺寸 (L × W × H)	Machine dimension (L × W × H)	m	7.7 × 2.3 × 2.4			7.7 × 2.3 × 2.4			7.7 × 2.3 × 2.4			
机器重量	Machine weight	Ton	25.5			26			26.5			
温度控制区数	Number of temp control zones	— —	6			6			6			

说明：由于产品改进，技术参数的变更，恕不另行通知。
Remark: We reserve the right to make any technical improvement without prior notice.

EM370机器尺寸 MACHINE DIEMENSION



EM370模板尺寸 PLATEN DIMENSION



客户备忘录 *MEMORANDUM*

[illegible]