Our offices and agents

WELLTEC

SeIII series (60-1800Ton)

The benchmark for high-performance injection moulding machine [Servo- driven]

Welltec Machinery Ltd

www.welltec .com.hk

Version:SeIII -202505W

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Features

- **30%** higher energy saving than using traditional variable pump
- AC servo motors enable smooth low-speed motion control
- Hydraulic energy consumption is minimized, preventing oil temperature rise and significantly reducing cooling water demand
- High-precision injection molding machine special control system
- Being the first in the industry attaining China national safety standard **GB/T22530-2022**

New generation upgrades

Opening stroke
increased by up to
15%

Ejector stroke
increased by up to
20 %

Mould thickness
increased by up to
15%

Max. daylight
increased by up to
55%

Ejector force
increased by up to
40%

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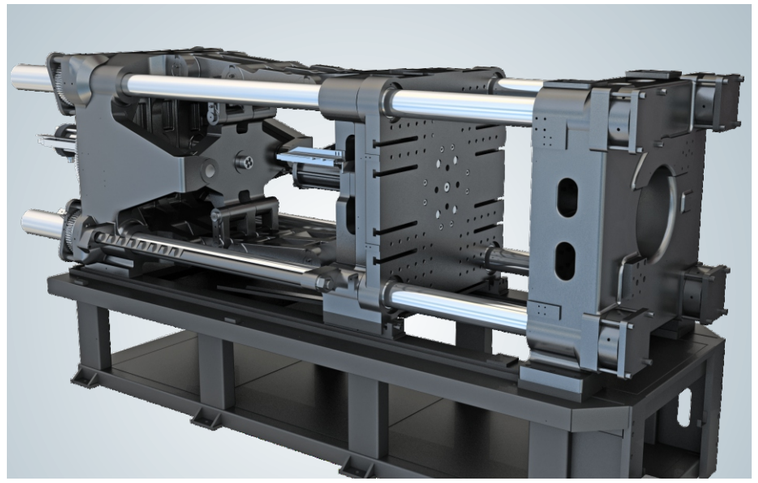
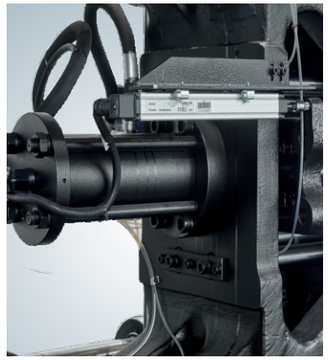
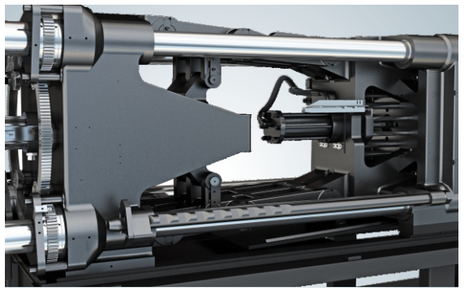
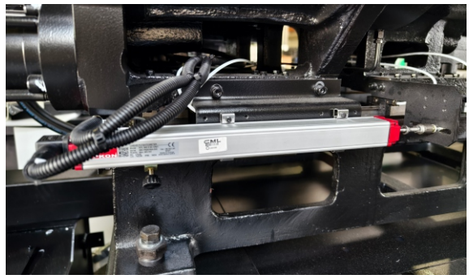




Clamping Unit

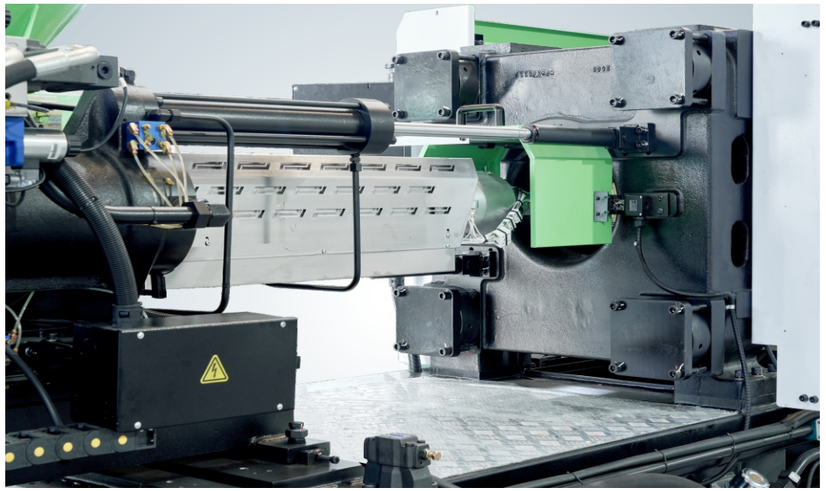
- Extra durability achieved through optimised clamping structure
- Optimised platen design to disperse stress
- Accurate pause and smooth and speedy movement supported by strengthened toggle
- High pressure lubrication system adopted in clamping unit to support machine protection during high speed production
- The toggle's special heat-treated steel case enables higher wear resistance
- High-rigidity frame supports smooth movement

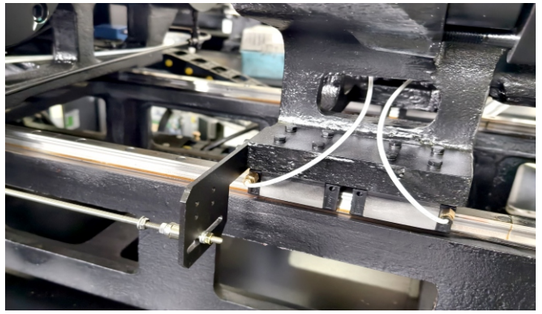


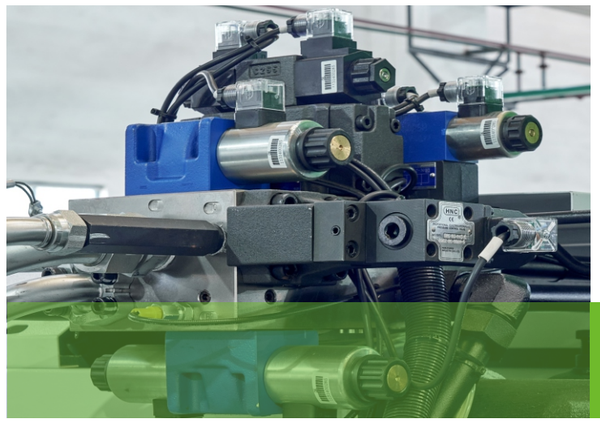


Injection Unit

- Newly optimised injection unit design to enable various production needs
- Diagonally located cylinders to facilitate better stress distribution
- Linear guide rail significantly reduces mechanical wear and tear (90-850SeIII)

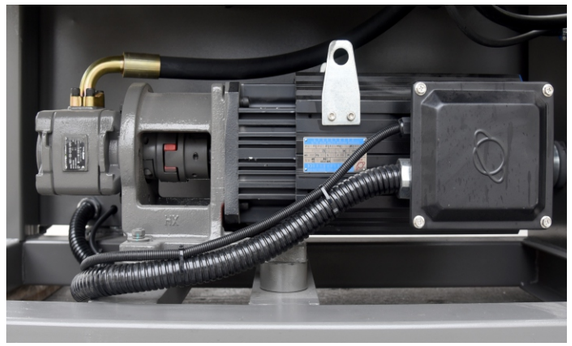


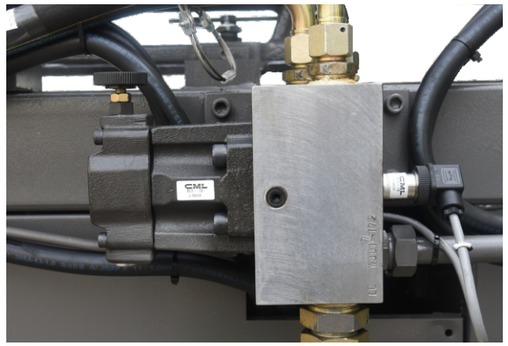




Hydraulic System

- Efficient and stable servo hydraulic system
- Minimised energy loss attained through the advanced hydraulic pipeline design
- Low-noise
- Advanced servo pump improves machine performance





AS10 control system

Software & Functions

- High precision injection molding machine special control system with triple-core processor, main loop processing time is less than 150us. High response and better machine performance.
- 90-320T 10.4". 15'' TFT color touch screen for machine of 400T and above. 9 main functional screens. Easy to operate and maintain.
- Accurate control algorithm. Full closed-loop control for mold opening and clamping, injection, plasticizing and ejector to enable stable and smooth movement of the machine.
- PID algorithm and self-optimization function. Temperature control is stable at ±0.5℃. J and K type thermocouple switching is supported.
- Multi-curve display for mold opening and clamping, injection, plasticizing, temperature and SPC statistics to achieve real-time stability monitoring of the machine.
- More than 10 languages can be switched online, with perfect multi-language display.
- A large number of commonly-used control functions are built in to meet the needs of various different molds, products and molding processes. Easy for customers to use.

Optional: KEBA control system

iSee Facilitates real-time monitoring, remote diagnosis and smart factory management (optional)

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Standard Items

Injection Unit

- Nitrided screw
- Movable hopper(90-320SeIII)
- Fixed hopper(400-660SeIII)
- Barrel protective cover
- Injection/holding pressure/plasticizing setting
- Screw cold-start prevention system
- Automatic heat preservation and heating device
- Anti-drooling function
- Automatic purging system
- Automatic injection failure detection
- Purge guard

Clamping Unit

- High pressure centralized lubrication system
- Hydraulic and electrical safety device
- Ejector mode selection (4 options)
- Fast mold-close function(660-1800SeIII)
- Auto mold height adjustment
- Mold ejector backward device

Hydraulic Unit

- Closed-loop servo control of pressure and flow rate
- Adjustable back pressure control
- Y-strainer for watering cooling
- Special servo motor and servo drive

Control Unit and Electric Components

- AS10 control system
- TFT color LCD display
- Multi-lingual display
- PID temperature control
- Electric heating control: Solid-state relays for 60-660T machines, contactors for 750 T or above machines
- Mold data locking function
- Speed limitation device
- Fault alarm
- SPC analysis
- Robot interface

Optional Items

- Extended nozzle
- Spring-loaded nozzle
- Hydraulic shut-off nozzle
- Mixing head enhances color dispersion
- Bi-metallic screw and barrel
- Energy-Storing Injection
- Ceramic/infrared heater bands
- Core pulling device
- Unscrew device
- Air blast device
- Increase mold thickness range
- Robot interface(EUROMAP 67)
- Autoloader
- Drying hopper
- Gas-assisted injection molding system
- Mold changing cart

* We reserve the right for adjustment due to actual supply and modifications

SeIII

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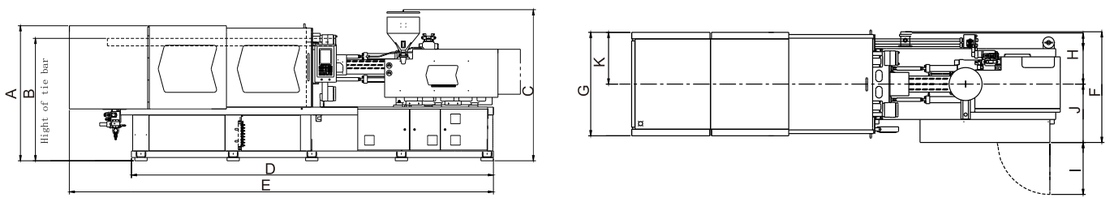
Specifications

ITEM	UNIT	60SeIII	90SeIII			130SeIII			160SeIII		
		600-180	900-312			1300-433			1600-629		
Injection unit											
Screw diameter	mm	25	30	35	40	35	40	45	40	45	50
Theoretical shot volume	cc	69	124	168	220	192	251	318	283	358	442
Shot weight (PS)	g	63	113	153	200	175	229	289	257	326	402
Shot weight (PS)	oz	2.2	4.0	5.4	7.1	6.2	8.1	10.2	9.1	11.5	14.2
Length/diameter ratio	L/D	22	24	20.6	18	23.4	20.5	18.2	22.5	20	18
Injection pressure	MPa	261	254	186	143	225	172	136	223	176	142
Injection rate	cm^3/sec	83	88	120	157	100	130	165	126	159	197
Injection stroke	mm	140	175			200			225		
Max. screw speed	rpm	320	253			219			234		
Plasticising capacity (PS)	g/s	7.9	11.9	13.2	19.4	12.7	17.3	21.3	19.8	25.6	28.7
Injection unit force	Ton	3.4	5.7			5.7			5.7		
Carriage stroke	mm	255	230			300			320		
Clamping unit											
Clamping force	Ton	60	90			130			160		
Max. daylight	mm	740	740			880			1000		
Clamping stroke	mm	360	360			430			480		
Distance btwn. tie bars	mm	360x360	360x360			410x410			470x470		
Min. mould dimension	mm	250x250	250x250			280x280			320x320		
Mould thickness range	mm	120-380	120-380			145-450			150-520		
Ejector force	Ton	4.1	4.1			4.1			7.7		
Ejector stroke	mm	100	100			120			160		
No. of ejector pins	unit	5	5			5			5		
Power unit											
Max. motor power	kW	15.7	17.8			17.8			21.4		
System pressure	MPa	17.5	17.5			17.5			17.5		
Hydraulic pump capacity	L/min	76.8	76.8			76.8			96		
No. of heating zones	unit	3+1+1	3+1+1			3+1+1			4+1+1		
Heating power	kW	6.02	7.41			9.3			11.48		
Total power	kW	22.72	26.21			28.1			33.88		
Total current	A	31.1	35.8			38.4			46.3		
General											
Machine weight	Ton	3.1	3.27			4.16			5.68		
Oil filling capacity	L	200	200			200			280		
Machine dimensions (L*W*H)	mm	4387*1210*1615				4886*1260*1670			5365*1468*1758		

■ We are always working on improvement and reserve the rights to change design and specifications without prior notice

Machine Dimensions

60-160SeIII

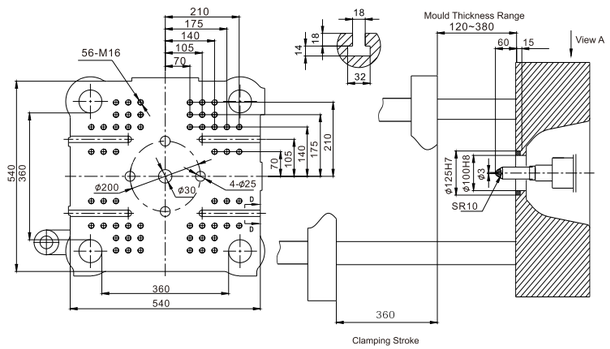


Model	A	B	C	D	E	F	G	H	I	J	K
60SeIII	1615	1400	1963	3560	4220	1054	1152	625	800	635	576
90SeIII	1615	1400	1963	3560	4220	1054	1152	625	800	635	576
130SeIII	1700	1486	1936	3878	4586	1104	1203	650	800	660	601.5
160SeIII	1758	1567	2050	4513	5215	1349	1302	717	800	789	651

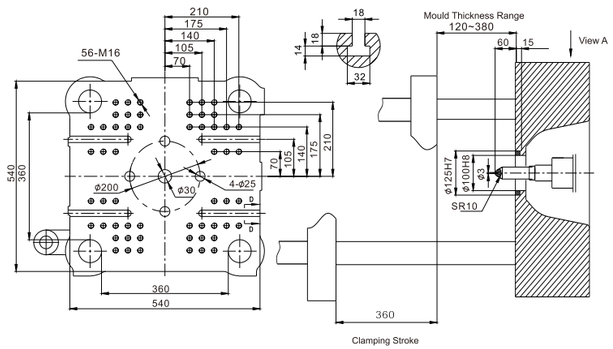
Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

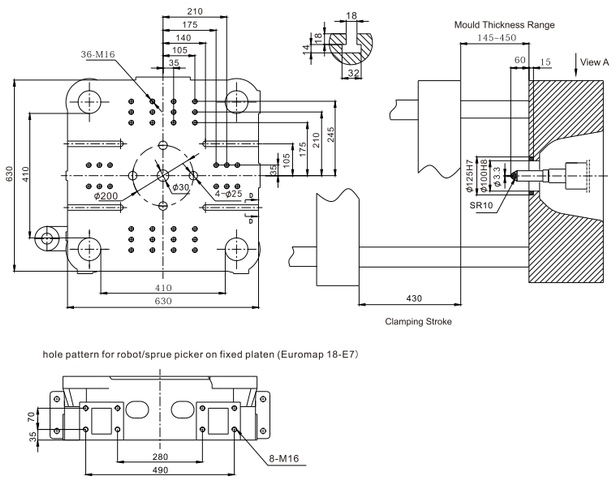
60SeIII



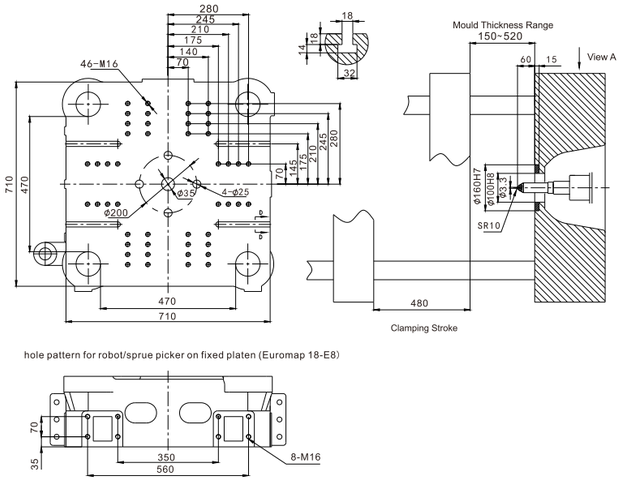
90SeIII



130SeIII



160SeIII



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Specifications

ITEM	UNIT	200SeIII			260SeIII			320SeIII			400SeIII		
		2000-871			2600-1507			3200-1930			4000-2868		
Injection unit													
Screw diameter	mm	45	50	60	55	60	70	60	65	75	65	75	85
Theoretical shot volume	cc	398	491	707	713	848	1155	919	1078	1436	1244	1657	2128
Shot weight (PS)	g	362	447	643	649	772	1051	836	981	1307	1132	1508	1936
Shot weight (PS)	oz	12.8	15.8	22.7	22.9	27.3	37.1	29.5	34.7	46.2	40.0	53.3	68.4
Length/diameter ratio	L/D	24	21.6	18	22.9	21	18	22.5	20.8	18	23.9	20.7	18.3
Injection pressure	MPa	219	177	123	211	178	131	210	179	134	231	173	135
Injection rate	cm^3/sec	160	197	284	265	315	429	333	391	521	380	505	649
Injection stroke	mm	250			300			325			375		
Max. screw speed	rpm	197			240		196	245			214		
Plasticising capacity (PS)	g/s	24.0	29.8	36.5	44.2	65.1	59.0	53.8	60.4	85.0	72.9	97.9	126.5
Injection unit force	Ton	9.1			9.1			9.1			12		
Carriage stroke	mm	350			400			400			435		
Clamping unit													
Clamping force	Ton	200			260			320			400		
Max. daylight	mm	1090			1210			1400			1530		
Clamping stroke	mm	540			600			700			780		
Distance btwn. tie bars	mm	535x535			580x580			680x680			740x740		
Min. mould dimension	mm	370x370			400x400			470x470			520x520		
Mould thickness range	mm	175-550			195-610			250-700			250-750		
Ejector force	Ton	9.9			11.1			11.1			16.6		
Ejector stroke	mm	170			195			200			210		
No. of ejector pins	unit	9			13			13			13		
Power unit													
Max. motor power	kW	21.4			29.3			47.7			51.3		
System pressure	MPa	17.5			17.5			17.5			17.5		
Hydraulic pump capacity	L/min	120			192			240			300		
No. of heating zones	unit	4+1+1			5+1			5+1			5+1		
Heating power	kW	14.25			18.9			22.15			28.99		
Total power	kW	36.65			49.2			70.85			81.29		
Total current	A	50.1			67.3			96.9			111.2		
General													
Machine weight	Ton	6.97			8.55			11.52			14.68		
Oil filling capacity	L	300			450			540			700		
Machine dimensions (L*W*H)	mm	5872*1530*1833			6422*1580*1961			6950*1695*2078			8038*1970*2231		

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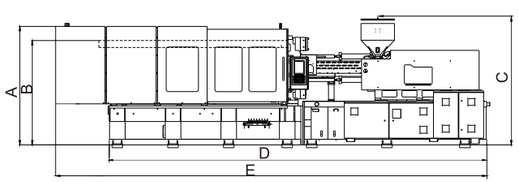
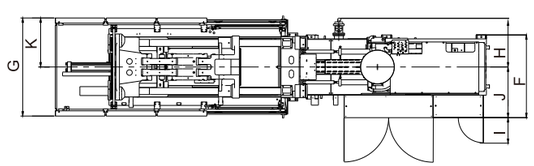
Machine Dimensions

200-400SeIII



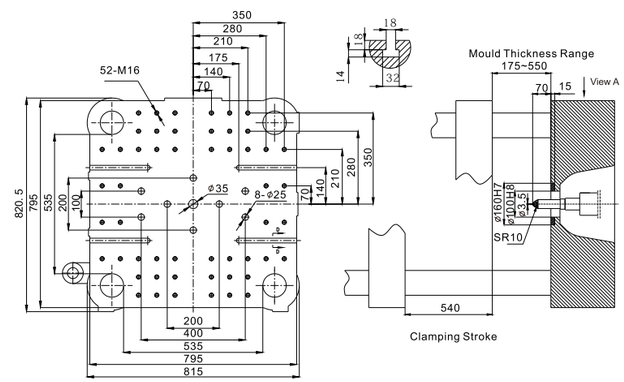


Model	A	B	C	D	E	F	G	H	I	J	K
200SeIII	1833	1645	2103	4753	5598	1364	1414	752	800	824	707
260SeIII	1961	1757	2185	5030	6072	1417	1462	810	800	852	731
320SeIII	2078	1884	2267	5575	6601	1517	1592	865	800	902	796
400SeIII	2176	1923	2284	6780	7744	1783	1760	874	800	909	880

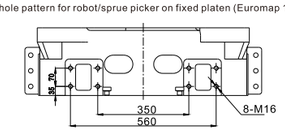
Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

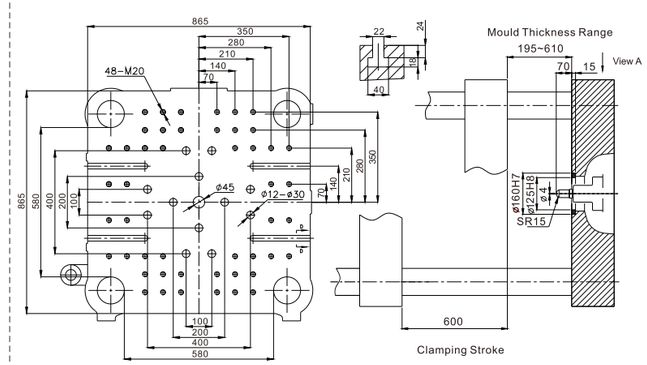
200SeIII



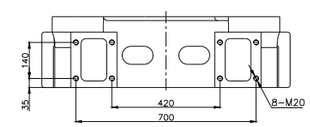
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E9)



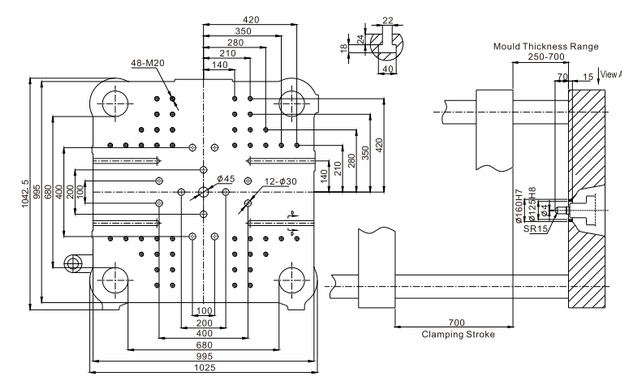
260SeIII



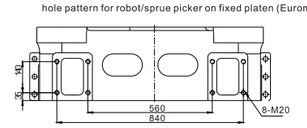
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E10)



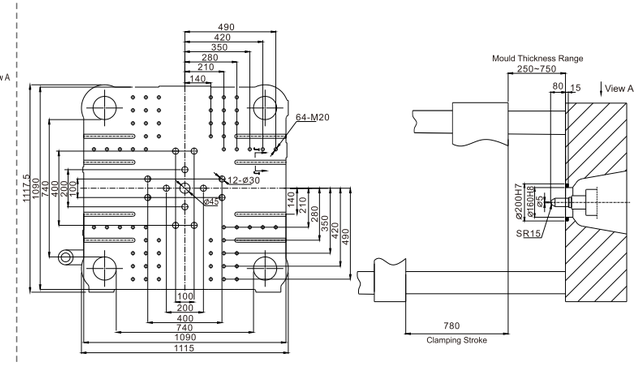
320SeIII



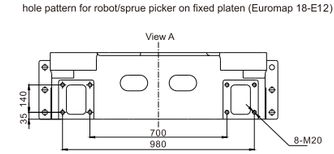
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E10)

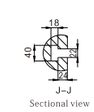


400SeIII



hole pattern for robot/sprue picker on fixed platen (Euromap 18-E12)





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WELLTEC

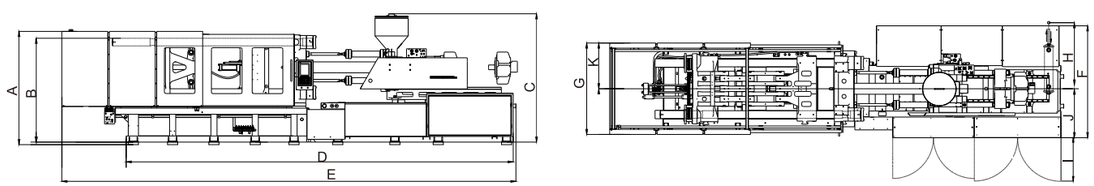
Specifications

ITEM	UNIT	480 SeIII			530 SeIII			660 SeIII		
		4800-3508			5300-4762			6600-4762		
Injection unit										
Screw diameter	mm	70	80	94	80	90	105	80	90	105
Theoretical shot volume	cc	1539	2011	2776	2212	2799	3810	2212	2799	3810
Shot weight (PS)	g	1401	1830	2526	1991	2519	3429	1991	2519	3429
Shot weight (PS)	oz	49.5	64.7	89.3	70.3	89.0	121.2	70.3	89.0	121.2
Length/diameter ratio	L/D	24.2	21.2	18	23.6	21	18	23.6	21	18
Injection pressure	MPa	228	174	126	215	170	125	215	170	125
Injection rate	cm^3/sec	384	502	692	520	658	896	520	658	896
Injection stroke	mm	400			440			440		
Max. screw speed	rpm	186			161			161		
Plasticising capacity (PS)	g/s	79.3	102.8	143.2	87.7	106.4	160.9	87.7	106.4	160.9
Injection unit force	Ton	12			20.4			20.4		
Carriage stroke	mm	480			600			600		
Clamping unit										
Clamping force	Ton	480			530			660		
Max. daylight	mm	1600			1700			1830		
Clamping stroke	mm	780			850			910		
Distance btwn. tie bars	mm	820x800			840x830			920 x920		
Min. mould dimension	mm	570X560			580X580			645x645		
Mould thickness range	mm	300-820			300-850			350-920		
Ejector force	Ton	16.6			16.6			16.6		
Ejector stroke	mm	240			240			290		
No. of ejector pins	unit	13			17			21		
Power unit										
Max. motor power	kW	51.3			74			74.0		
System pressure	MPa	17.5			17.5			17.5		
Hydraulic pump capacity	L/min	300			384			384		
No. of heating zones	unit	5+1			5+1			5+1		
Heating power	kW	35.04			35.73			35.73		
Total power	kW	87.34			110.73			110.73		
Total current	A	119.4			151.4			134.6		
General										
Machine weight	Ton	16.72			23			26		
Oil filling capacity	L	720			775			800		
Machine dimensions (L*W*H)	mm	8452*1880*2300			9318*1895*2328			9242*2205*2280		

■ We are always working on improvement and reserve the rights to change design and specifications without prior notice

Machine Dimensions

480-660 SeIII

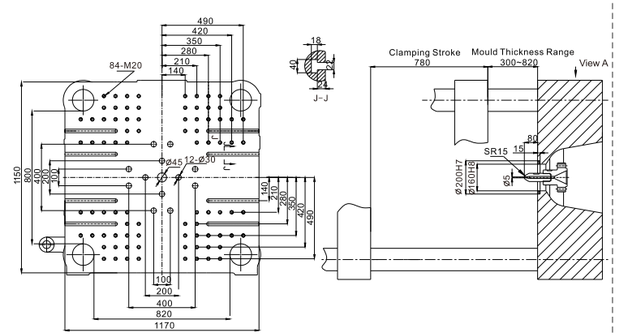


Model	A	B	C	D	E	F	G	H	I	J	K
480SeIII	2246	1985	2336	7006	8025	1797	1874	855	800	942	937
530SeIII	2244	2005	2495	7846	8995	1809	1900	865	800	945	950
660SeIII	2280	2125	2545	7783	9157	2193	1942	1420	850	960	971

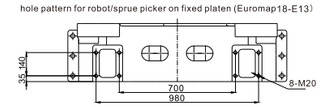
Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

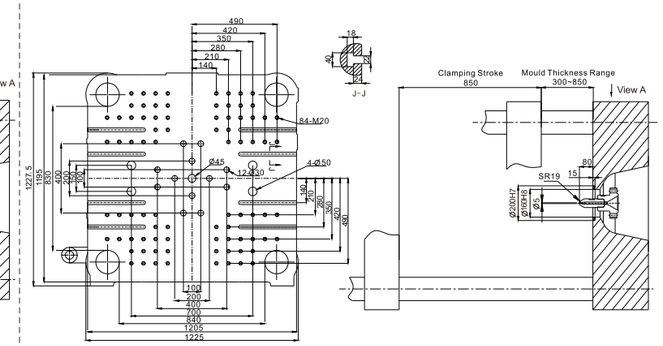
480 SeIII



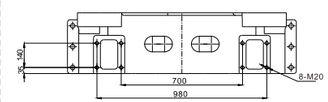
hole pattern for robot/sprue picker on fixed platen (Euromap18-E13)



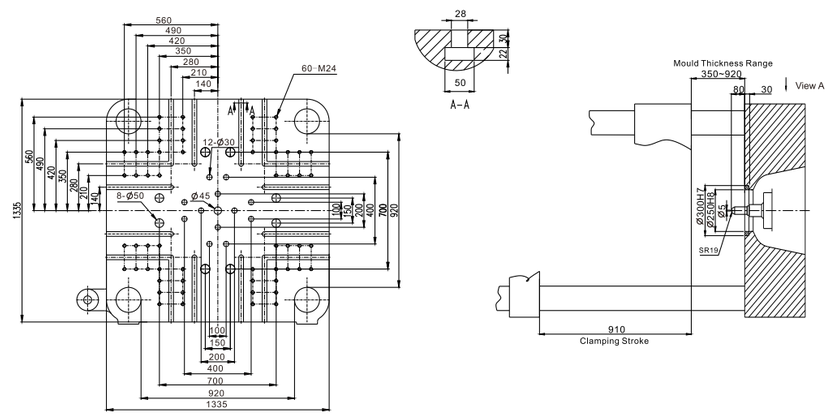
530 SeIII



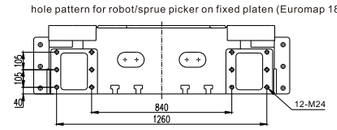
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E13)



660 SeIII



hole pattern for robot/sprue picker on fixed platen (Euromap 18-E15)



SeIII series (60-1800Ton)

The benchmark for high-performance injection moulding machine

Specifications

ITEM	UNIT	750 SeIII			850SeIII			1000 SeIII			
Injection unit											
Screw diameter	mm	90	100	110	90	100	110	100	110	120	130
Theoretical shot volume	cc	2990	3691	4467	2990	3691	4467	4163	5037	5994	7035
Shot weight (PS)	g	2721	3359	4065	2721	3359	4065	3788	4583	5455	6402
Shot weight (PS)	oz	96	119	144	96	119	144	134	162	193	226
Length/diameter ratio	L/D	22.6	20.0	18.0	22.6	20.0	18.0	24.2	22	20.2	18.6
Injection pressure	MPa	212	171	142	212	171	142	216	178	150	128
Injection rate	cm^3/sec	597	737	892	597	737	892	670	810	964	1132
Injection stroke	g/s	74	101	123	74	101	123	106	129	124	146
Max. screw speed	mm	470			470			530			
Plasticising capacity (PS)	rpm	125			125			115	115	93	93
Injection unit force	Ton	19.8			19.8			20			
Carriage stroke	mm	600			600			700			
Clamping unit											
Clamping force	Ton	750			850			1000			
Max. daylight	mm	2050			2200			2380			
Clamping stroke	mm	1025			1100			1220			
Distance btwn. tie bars	mm	1000x1000			1060x1060			1160×1160			
Min. mould dimension	mm	700x700			740x740			780×780			
Mould thickness range	mm	350~1025			450~1100			450~1160			
Ejector force	Ton	25			25			25			
Ejector stroke	mm	350			350			320			
No. of ejector pins	unit	21			21			21			
Power unit											
Max. motor power	kW	83.8			83.8			99			
System pressure	MPa	17			17			17.5			
Hydraulic pump capacity	L/min	446			446			495			
No. of heating zones	unit	5+1			5+1			5+1			
Heating power	kW	53			53			67			
Total power	kW	137.8			137.8			167			
Total current	A	167.5			167.5			203			
General											
Machine weight	Ton	39.1			43.0			47			
Oil filling capacity	L	1100			1100			1200			
Machine dimensions (L*W*H)	m	10.19X2.3X2.54			10.52X2.34X2.42			11.70X2.57X2.70			

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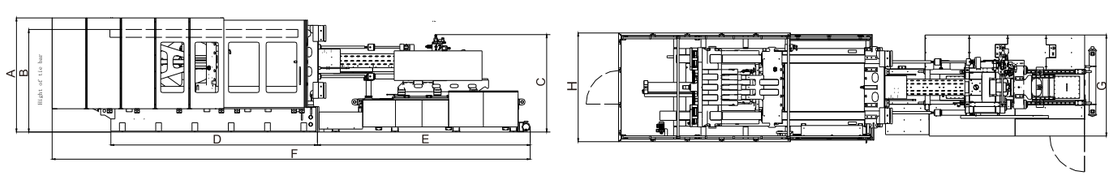
Machine Dimensions

750-1000SeIII

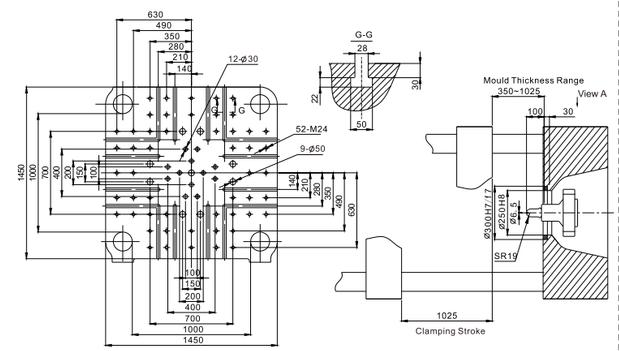


Model	A	B	C	D	E	F	G	H
750SeIII	2539	2227	2635	4318	4497	10192	1410	2295
850SeIII	2420	2300	2635	4668	4497	10514	1410	2340
1000SeIII	2697	2424	2303	5054	5206	11697	2569	2388

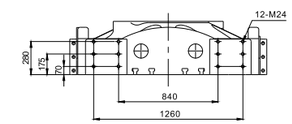
Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

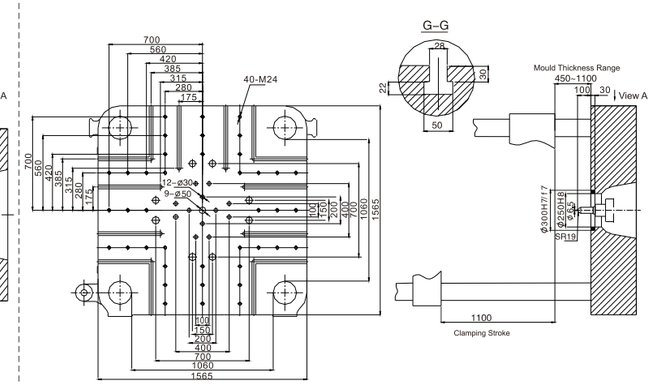
750 SeIII



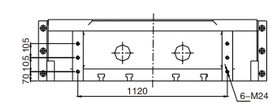
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E15)



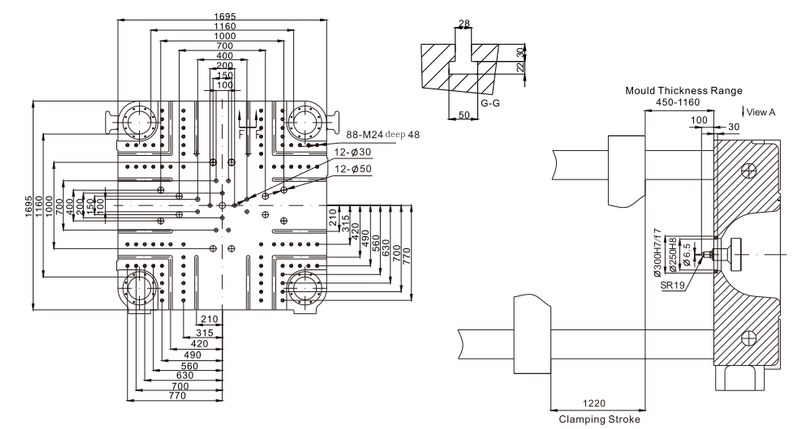
850SeIII



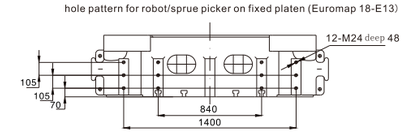
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E13)



1000 SeIII



hole pattern for robot/sprue picker on fixed platen (Euromap 18-E13)



SeIII series (60-1800Ton)

The benchmark for high-performance injection moulding machine

WELLTEC

Specifications

ITEM	UNIT	1200 SeIII				1400 SeIII				1800 SeIII		
Injection unit												
Screw diameter	mm	100	110	120	130	110	120	130	140	135	145	160
Theoretical shot volume	cc	4163	5037	5994	7035	5417	6447	7566	8774	9232	10651	12969
Shot weight (PS)	g	3788	4583	5455	6402	4929	5866	6885	7985	8402	9692	11801
Shot weight (PS)	oz	134	162	193	226	174	207	243	282	297	342	417
Length/diameter ratio	L/D	24.2	22	20.2	18.6	24	22	20.3	18.9	21.1	19.7	17.8
Injection pressure	MPa	216	178	150	128	204	171	146	126	187	162	133
Injection rate	cm^3/sec	744	900	1071	1257	897	1067	1253	1453	1053	1215	1480
Injection stroke	g/s	117	143	138	162	118	140	152	176	189	225	235
Max. screw speed	mm	530				570				645		
Plasticising capacity (PS)	rpm	128	128	104	104	118	118	92	92	105		89
Injection unit force	Ton	20				20				28.8		
Carriage stroke	mm	700				750				850		
Clamping unit												
Clamping force	Ton	1200				1400				1800		
Max. daylight	mm	2550				2900				3000		
Clamping stroke	mm	1300				1500				1500		
Distance btwn. tie bars	mm	1250×1250				1450×1350				1600x1400		
Min. mould dimension	mm	875×875				980×980				1100x980		
Mould thickness range	mm	500~1250				650~1400				700~1500		
Ejector force	Ton	25				33				33		
Ejector stroke	mm	320				350				380		
No. of ejector pins	unit	21				25				33		
Power unit												
Max. motor power	kW	99				121.7				146.7		
System pressure	MPa	17.5				17.5				17		
Hydraulic pump capacity	L/min	550				627				715		
No. of heating zones	unit	5+1				5+1				5+1		
Heating power	kW	67				83				91		
Total power	kW	167				205.7				238.7		
Total current	A	203				250				290.1		
General												
Machine weight	Ton	60				88				125.0		
Oil filling capacity	L	1200				1400				2000		
Machine dimensions (L*W*H)	m	12.06X2.74X2.87				13.57X3.04X3.06				13.44X3.21X2.81		

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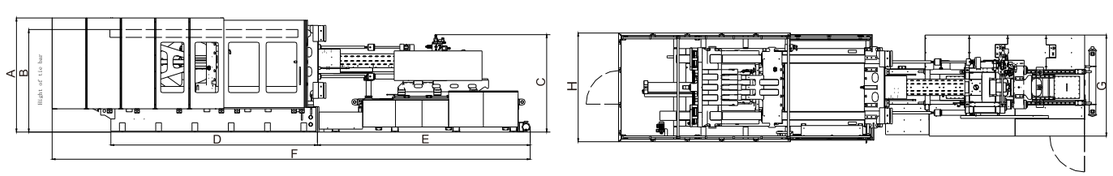
Machine Dimensions

1200 -1800 SeIII

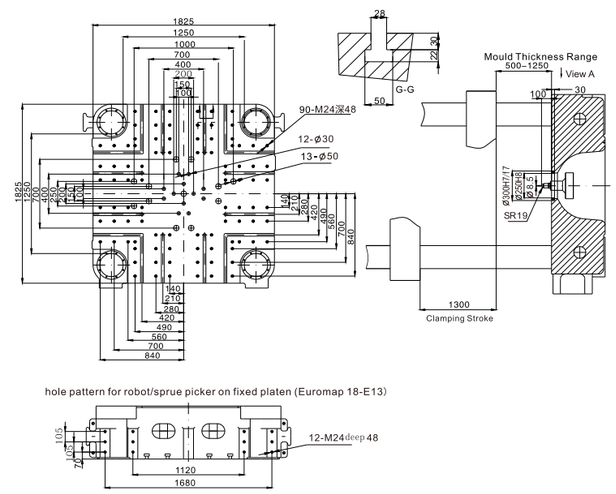


Model	A	B	C	D	E	F	G	H
1200SeIII	2865	2528	2342	5338	5206	12058	2746	2418
1400SeIII	3064	2698	2457	6088	5666	13570	3036	2418
1800SeIII	2808	2720	3200	6340	5360	13439	1340	3210

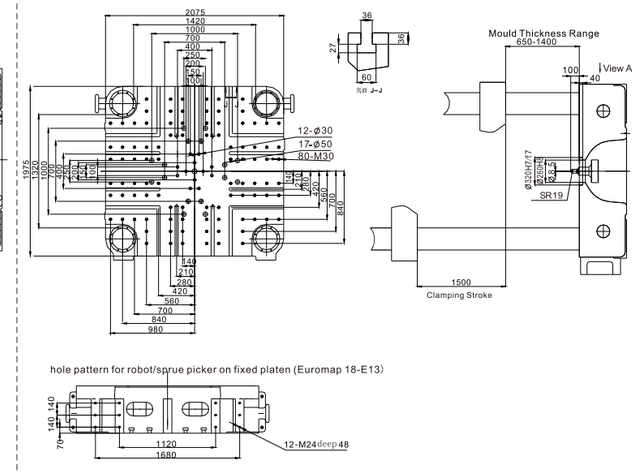
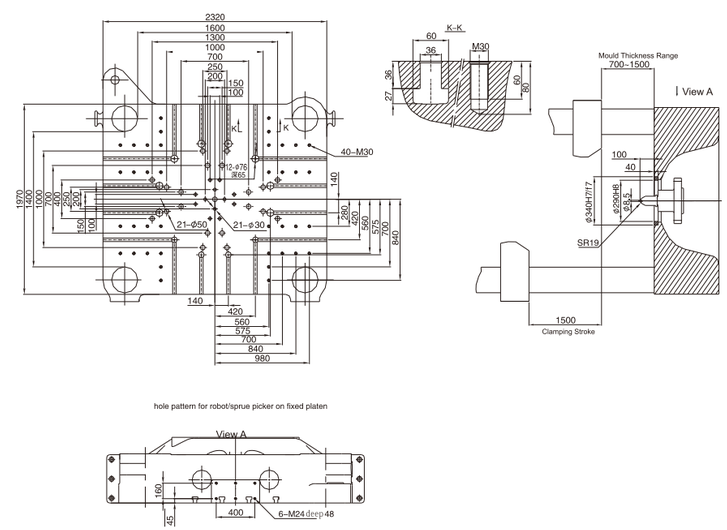
Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

1200 SeIII



1400 SeIII



1800 SeIII