



Sell series (60-1800Ton)

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



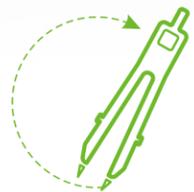
Welltec Machinery Ltd



www.welltec.com.hk



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%



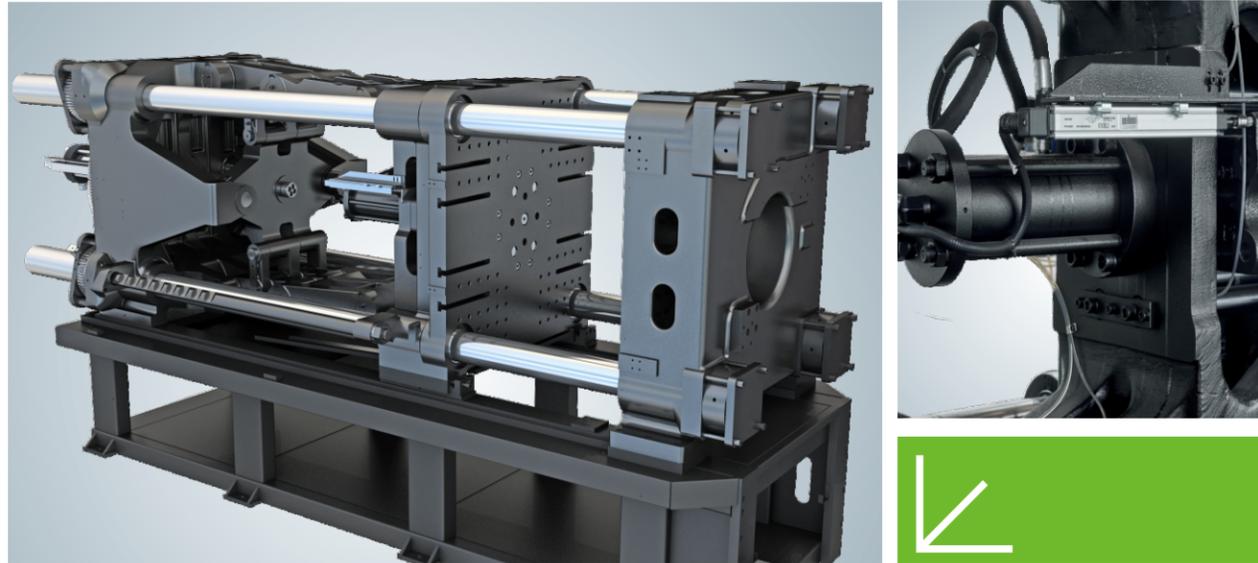
Ejector force
increased by up to
40%

Features

- **30%** higher energy saving than using traditional variable pump
- Stable and smooth movement supported by AC servo motor
- Effective reduction of energy consumption due to reduced oil and cooling water attained by hydraulic system
- High performance European B&R control system
- Being the first in the industry attaining China national safety standard **GB / T22530-2022** (whole series accredited)

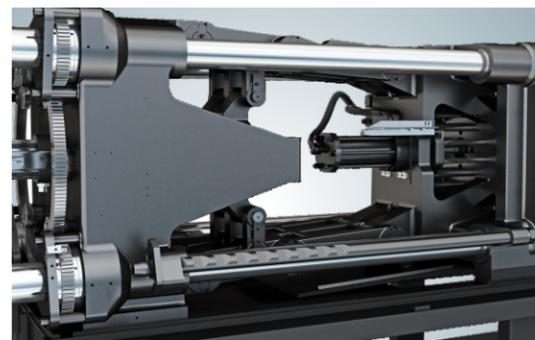
SeIII series (60-1800Ton)

The benchmark for high-performance injection moulding machine



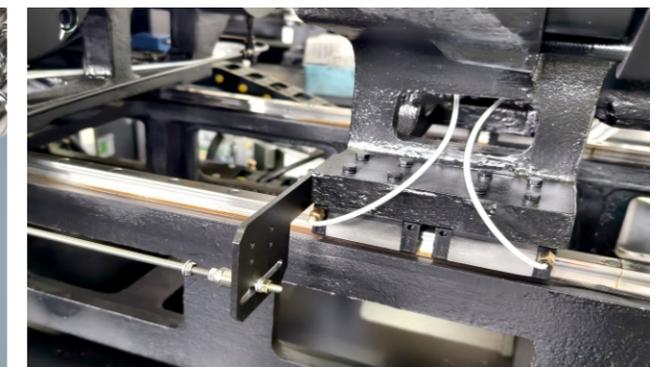
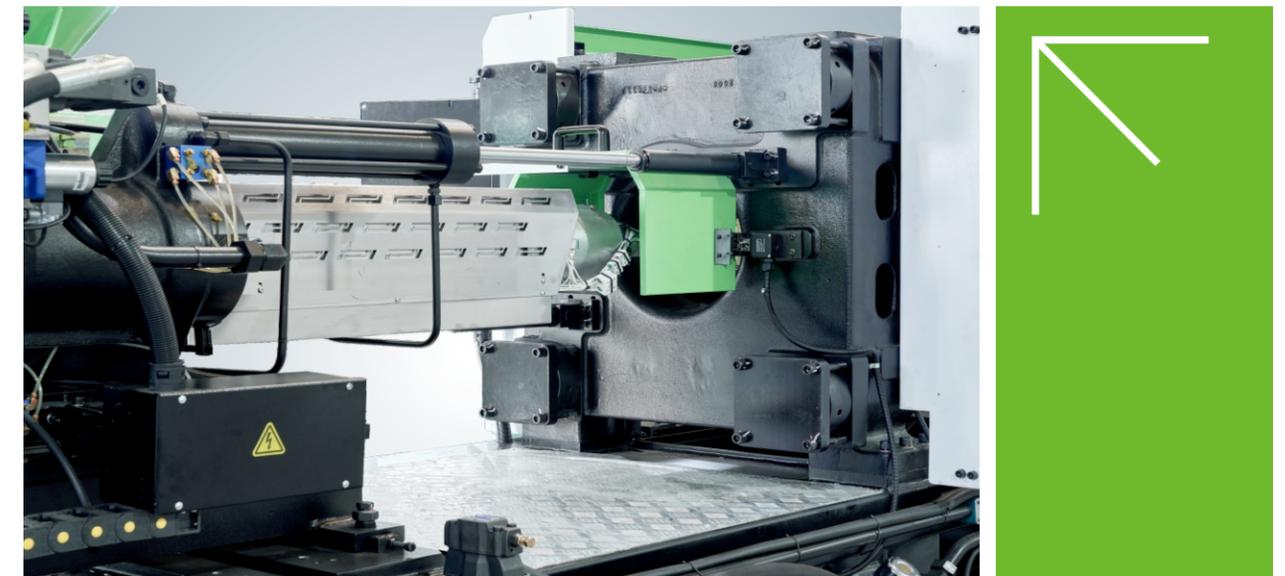
Clamping Unit

- 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

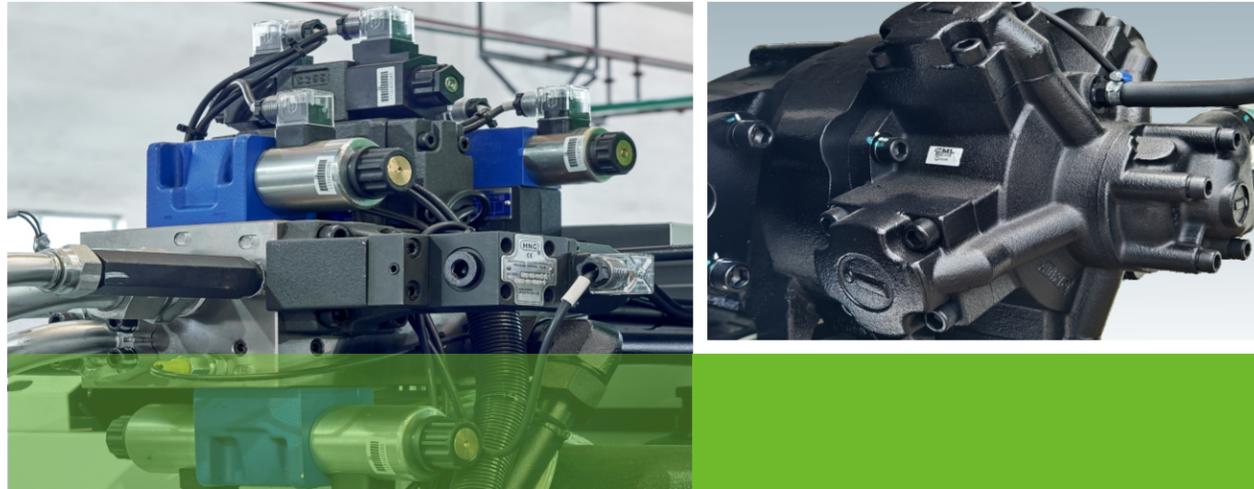
- Newly optimised injection unit design to enable various production needs
- Diagonally located cylinders to facilitate better stress distribution
- Linear guide rail significantly reduces mechanical wear and tear (90-850SeIII)



SeIII series (60-1800Ton)

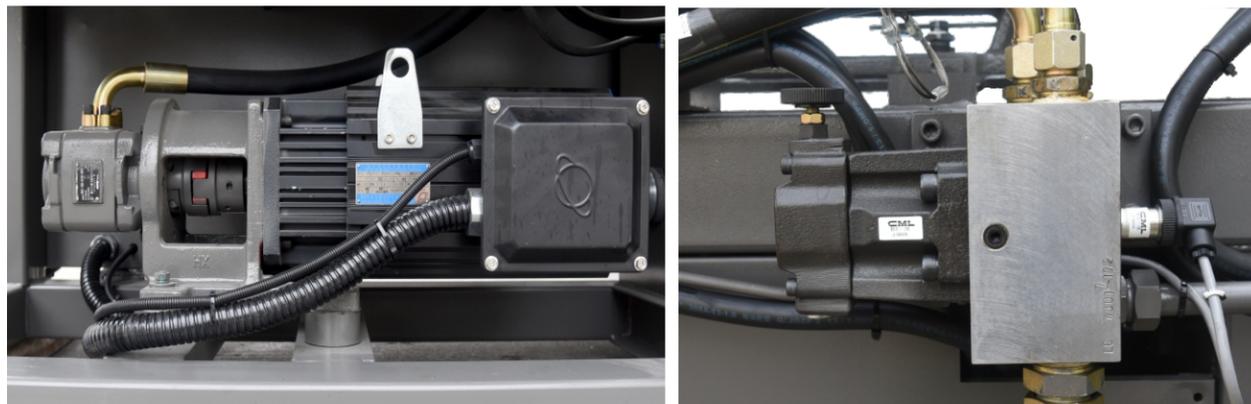
The benchmark for high-performance injection moulding machine

WELLTEC



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



S09 control system

(60-850T)

Software & Functions

- High performance European B&R control system
- 10.4" TFT colour LCD display Multi-language selection
- Parameter data statistics for quality control
- Automatic control of temperature parameter by PID



AS10 control system

(1000-1800T)

Software & Functions

- Special control system for high precision injection molding machine, with fast response and better machine control performance
- 10.4" TFT color touchscreen display. 9 main function screen, convenient for operation and maintenance
- Closed-loop control for mold open/close, injection, plasticizing and ejector to ensure the machine to run smoothly and accurately



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

Standard and Optional Features

standard ● optional ○

Injection Unit

Nitrided screw	●
Movable hopper (90-320T)	●
Fixed hopper (380-660T)	●
Barrel protective cover	●
Injection / holding pressure/ plasticising setting	●
Screw cold- start prevention system	●
Automatic heat preservation and heating device	●
Anti-drooling function	●
Automatic purging system	●
Automatic injection failure detection	●
Purge guard	●
Reduced/ enlarged ONE STEP injection unit	○
Bimetallic Screw and Barrel	○
Extended nozzle	○
Spring-loaded nozzle	○
Hydraulic/ Pneumatic shut-off nozzle	○
Material loading platform	○
Electric plasticising	○
Linear transducer for injection carriage	○
Wide varieties of screw and barrels for engineering, recycled and glass fiber composed resins	○

Clamping Unit

High pressure centralised lubrication system	●
Hydraulic and electrical safety device	●
Multi-function ejector control	●
Fast mould-close function (660-1800T)	●
Auto mould height adjustment	●
Mould ejector backward device	●
Increase mould thickness range	○
SPI mounting hole platens	○
Quick mould change system (T-slot necessary)	○
Increase ejector force	○
Increase ejector stroke	○
Retractable tie bar	○
Mould hanger	○

Hydraulic Unit

Closed-loop servo control of pressure and flow rate	●
Adjustable back pressure control	●
Y- strainer for water cooling	●
Special servo motor and servo drive	●
High-performance servo pump	●
Core pulling (fixed / movable platen)	○
Unscrew device with motor	○

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

Oil level sensor and alarm	○
Plasticising during mould opening	○
Ejector on fly	○
Injection accumulator	○
Proportional direction valves for clamping	○
Hydraulic / Pneumatic sequential injection	○
Enlarged motor & pump (hydraulic circuit)	○
Solenoid valve for oil cooler to control water flow	○
Extra air blast	○

Control Unit and Electric Components

TFT colour LCD display	●
B&R control system	●
Multi-lingual display	●
PID temperature control	●
Heating control contactor	●
Mould data locking function	●
Speed limitation device	●
Fault alarm	●
SPC analysis	●
Robot interface	●
Individual power plug of different voltages	○
Voltage stabiliser	○
Power meter	○
Solid state relays	○
Hot runner control	○
Ceramic / Infrared heater bands	○
Robot interface (EUROMAP 12/ 67)	○
Lighting inside electric cabinet	○
Electric unscrew (Device interface)	○
Air conditioner for electric cabinet	○
Circuits check for heater bands	○
iSee software - intelligent management system	○

Others

Water flow regulator	○
Widened guard door	○
Full guard cover (for top of tail platen)	○
Sliding top cover	○
Electric automatic guard door	○
Non-standard machine colour	○

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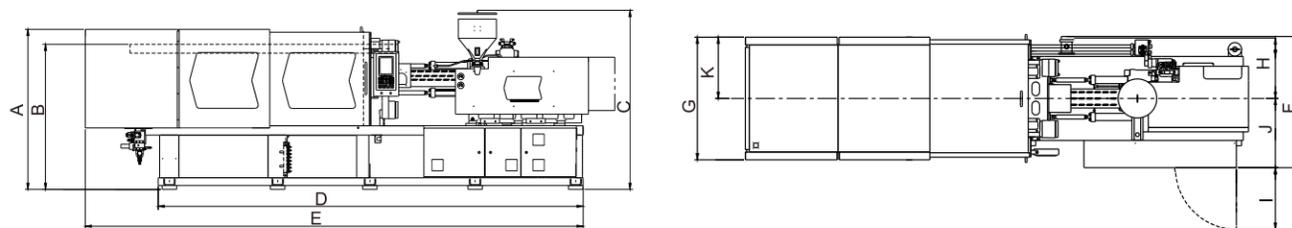
Specifications

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	78	83	113	147	93	122	154	147	187	230
Injection stroke	mm	140	175			200				225	
Max. screw speed	rpm	300	237			205				274	
Plasticising capacity (PS)	g/s	7.4	11.2	12.4	18.2	11.9	16.2	20.0	23.2	30.0	33.6
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	13.4	13.4			13.4				16.4	
System pressure	MPa	17.5	17.5			17.5				17.5	
Hydraulic pump capacity	L/min	72	72			72				112.5	
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	20.42	21.81			23.7				28.88	
Total current	A	27.9	29.8			32.4				39.5	
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)	m	4.22X1.15X1.96				4.59X1.2X1.94				5.21X1.3X2.05	

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

Machine Dimensions

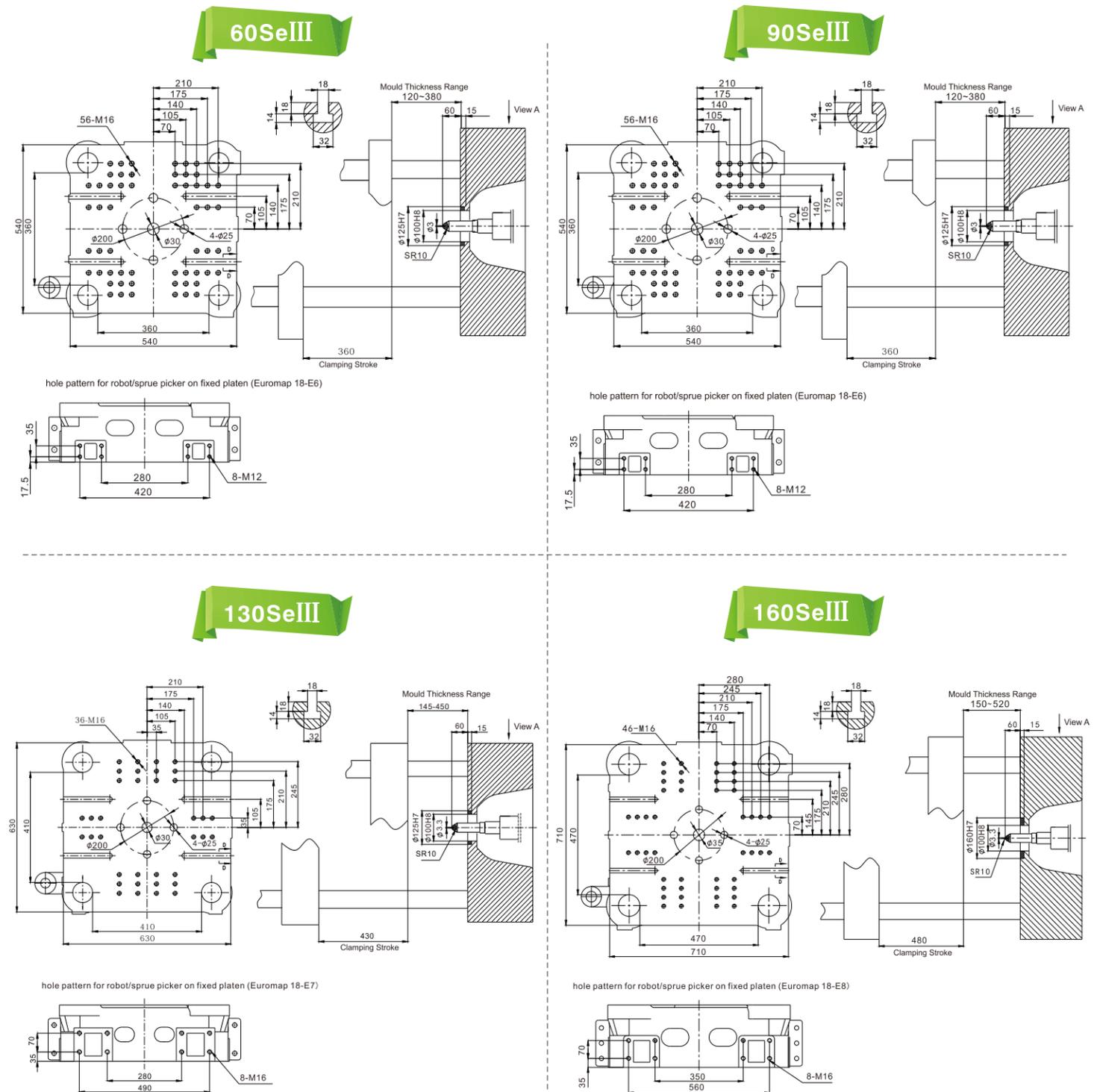
60SeIII-160SeIII



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



SeIII series (60-1800Ton)

The benchmark for high-performance injection moulding machine



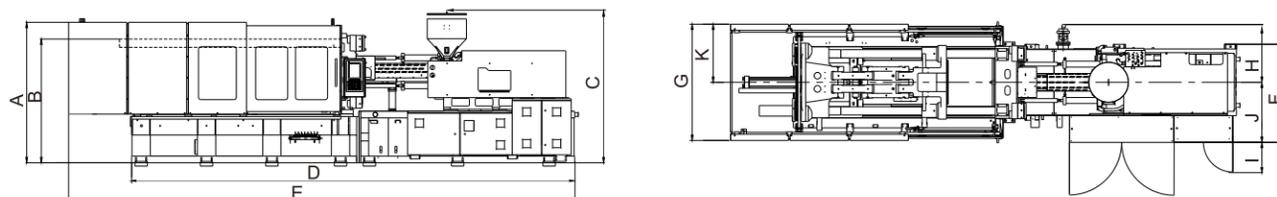
Specifications

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	150	185	266	237	282	384	306	359	477	348	463	595
Injection stroke	mm	250		300		325		375					
Max. screw speed	rpm	185		215		175		224		196			
Plasticising capacity (PS)	g/s	22.5	28.0	34.2	39.6	58.3	52.9	49.3	55.4	77.9	66.8	89.7	116.0
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	16.4		26.7		40.9		50.7					
System pressure	MPa	17.5		17.5		17.5		17.5					
Hydraulic pump capacity	L/min	112.5		172		220		275					
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	31.65		46.6		64.05		80.69					
Total current	A	43.3		63.7		87.6		110.3					
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)	m	5.6X1.41X2.1		6.07X1.46X2.19		6.6X1.6X2.27		7.74X1.76X2.28					

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Machine Dimensions

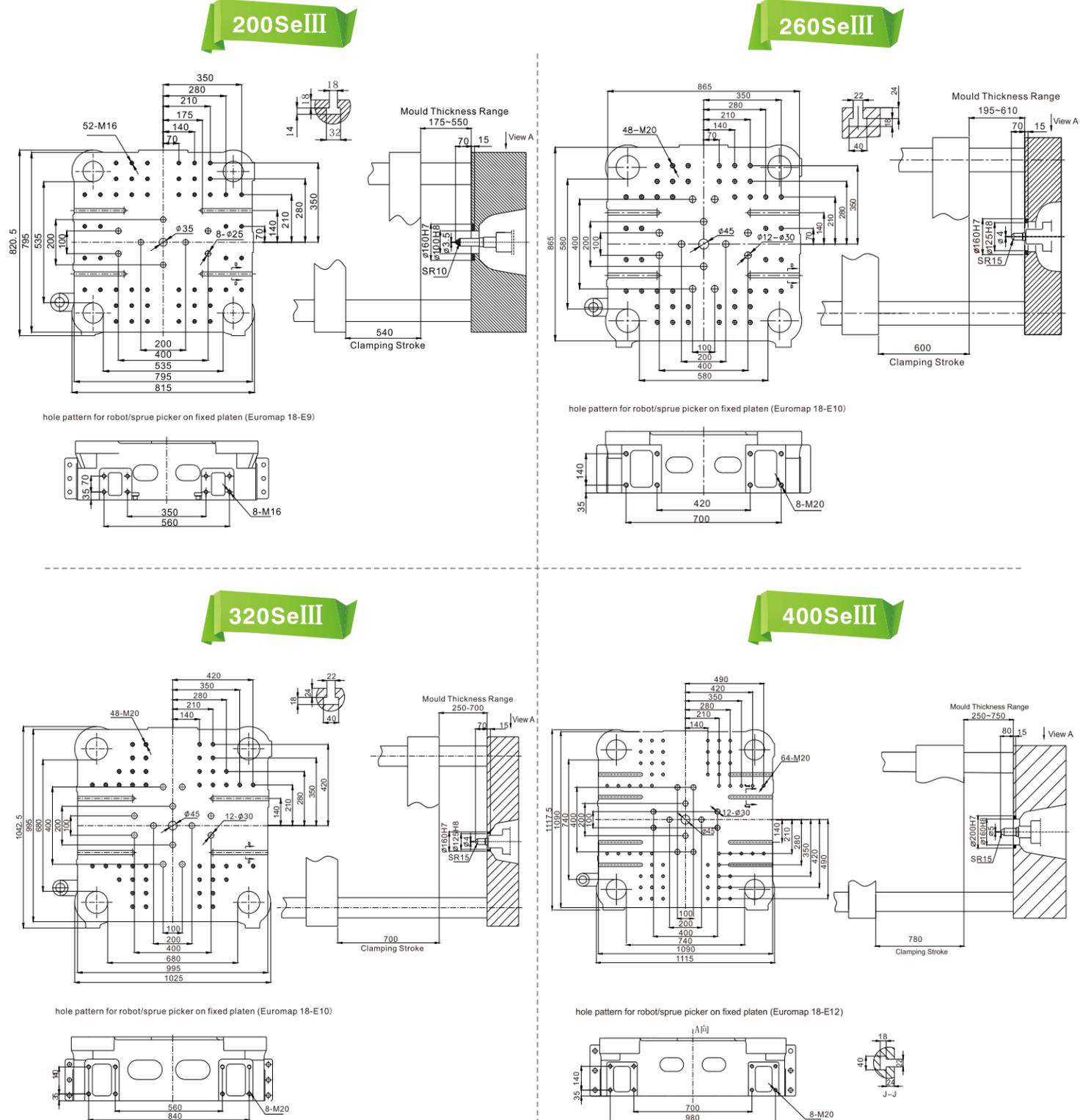
200SeIII-400SeIII



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



SeIII series (60-1800Ton)

The benchmark for high-performance injection moulding machine



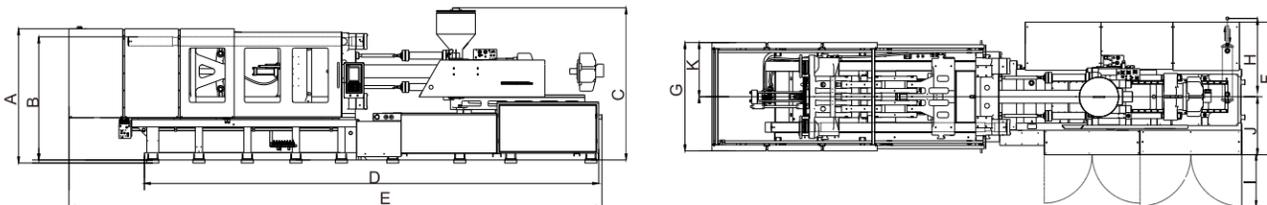
Specifications

ITEM	UNIT	480SeIII			530SeIII			660SeIII		
		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	352	460	635	477	603	821	521	660	898
Injection stroke	mm		400			440			440	
Max. screw speed	rpm		170			148			161	
Plasticising capacity (PS)	g/s	72.7	94.3	131.3	80.4	97.5	147.5	87.9	106.7	161.3
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			920x920	
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		50.7			71.2			67.1	
System pressure	MPa		17.5			17.5			17.5	
Hydraulic pump capacity	L/min		275			352			385	
No. of heating zones	unit		5+1			5+1			5+1	
Heating power	kW		35.04			35.73			35.73	
Total power	kW		86.74			107.93			103.83	
Total current	A		118.6			147.6			126.2	
General										
Machine weight	Ton		16.72			23			26	
Oil filling capacity	L		720			775			1140	
Machine dimensions (L*W*H)	m		8.02X1.87X2.34			9X1.9X2.5			9.16X1.94X2.55	

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Machine Dimensions

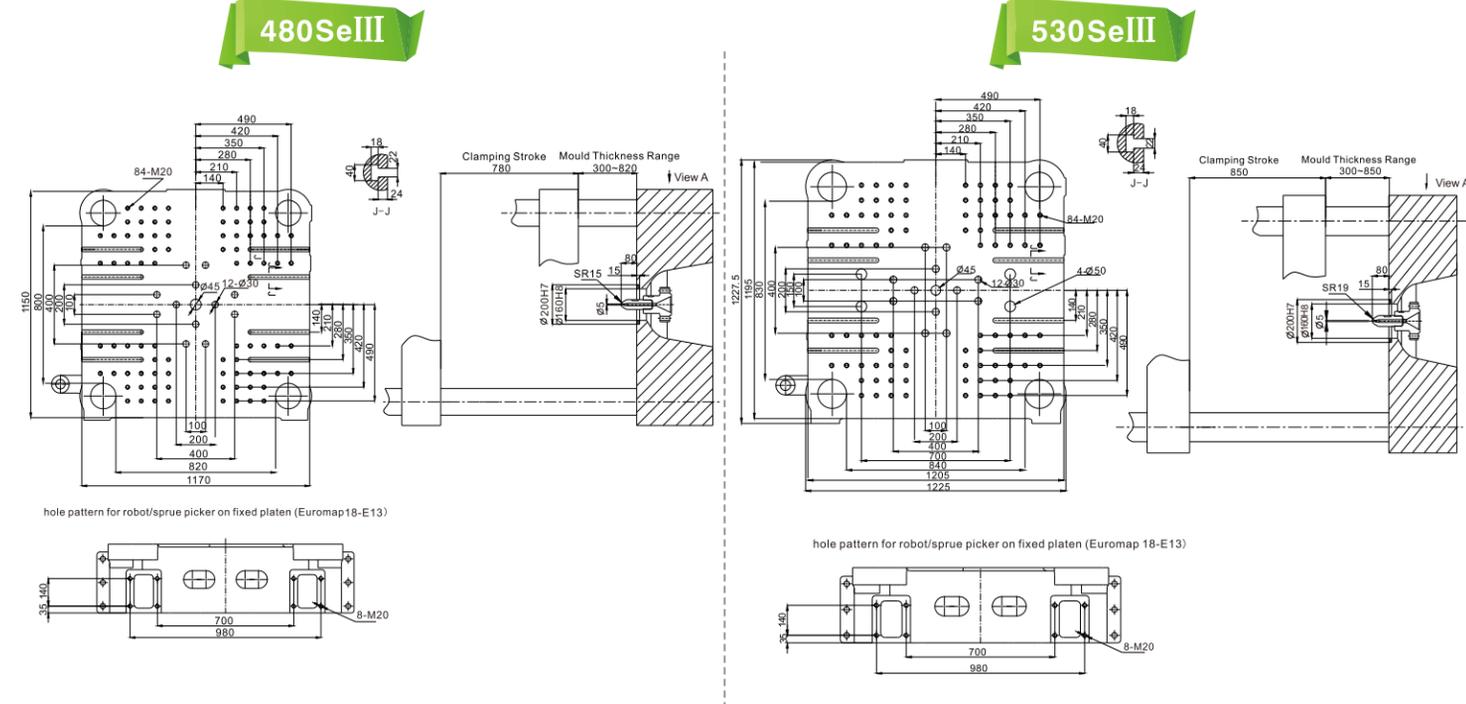
480SeIII-660SeIII



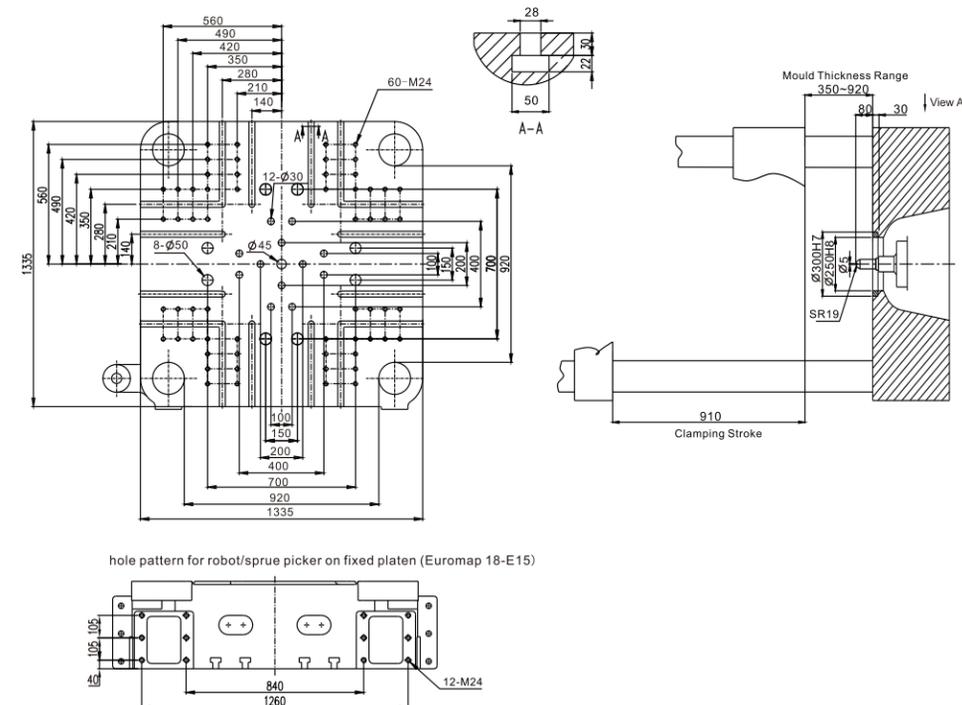
Model	A	B	C	D	E	F	G	H	I	J	K
480SeIII	2246	1985	2336	7006	8025	1797	1874	855	800	942	937
530SeIII	2244	2005	2495	7846	8995	1809	1900	865	800	945	950
660SeIII	2280	2125	2545	7783	9157	2193	1942	1420	850	960	971

Remark: C-hopper height for reference only

Platen/Nozzle Dimensions



660SeIII



SeIII series (60-1800Ton)

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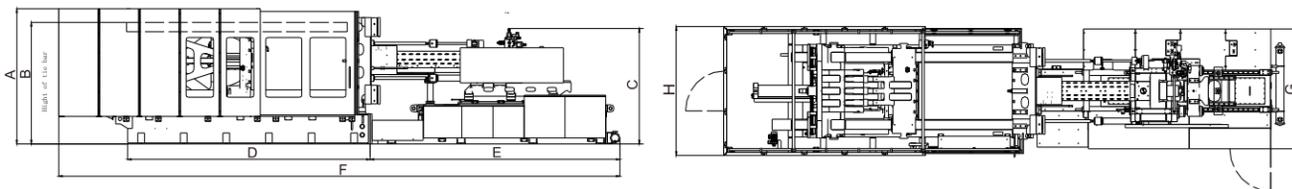
Specifications

ITEM	UNIT	750SeIII			850SeIII			1000SeIII			
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	589	728	880	589	728	880	670	810	964	1132
Plasticising capacity (PS)	g/s	73	100	121	73	100	121	106	129	124	146
Injection stroke	mm		470		470		530				
Max. screw speed	rpm		124		124		115		115		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		1160x1160				
Min. mould dimension	mm		700x700		740x740		780x780				
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		94.2				
System pressure	MPa		17		17		17.5				
Hydraulic pump capacity	L/min		440		440		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		162.2				
Total current	A		167.5		167.5		197				
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

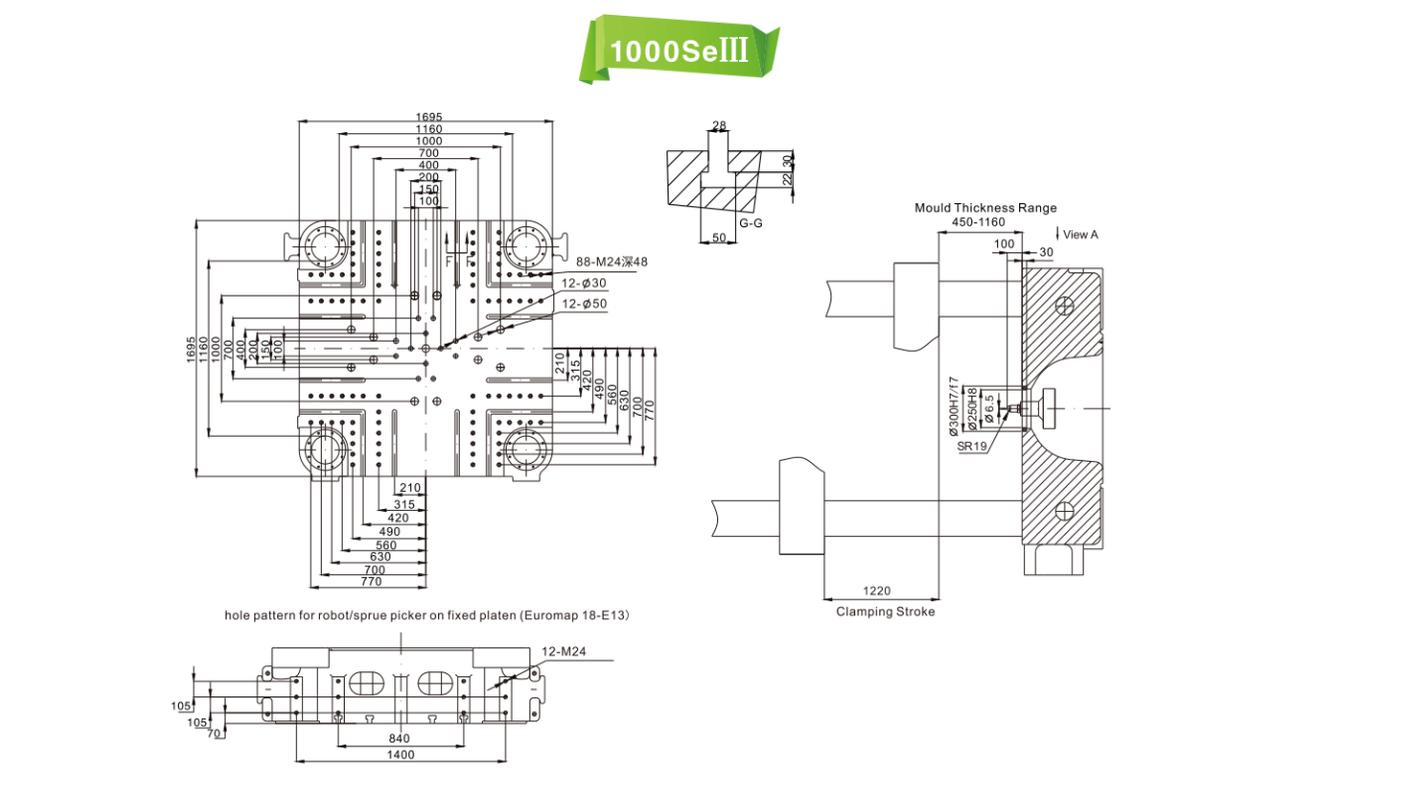
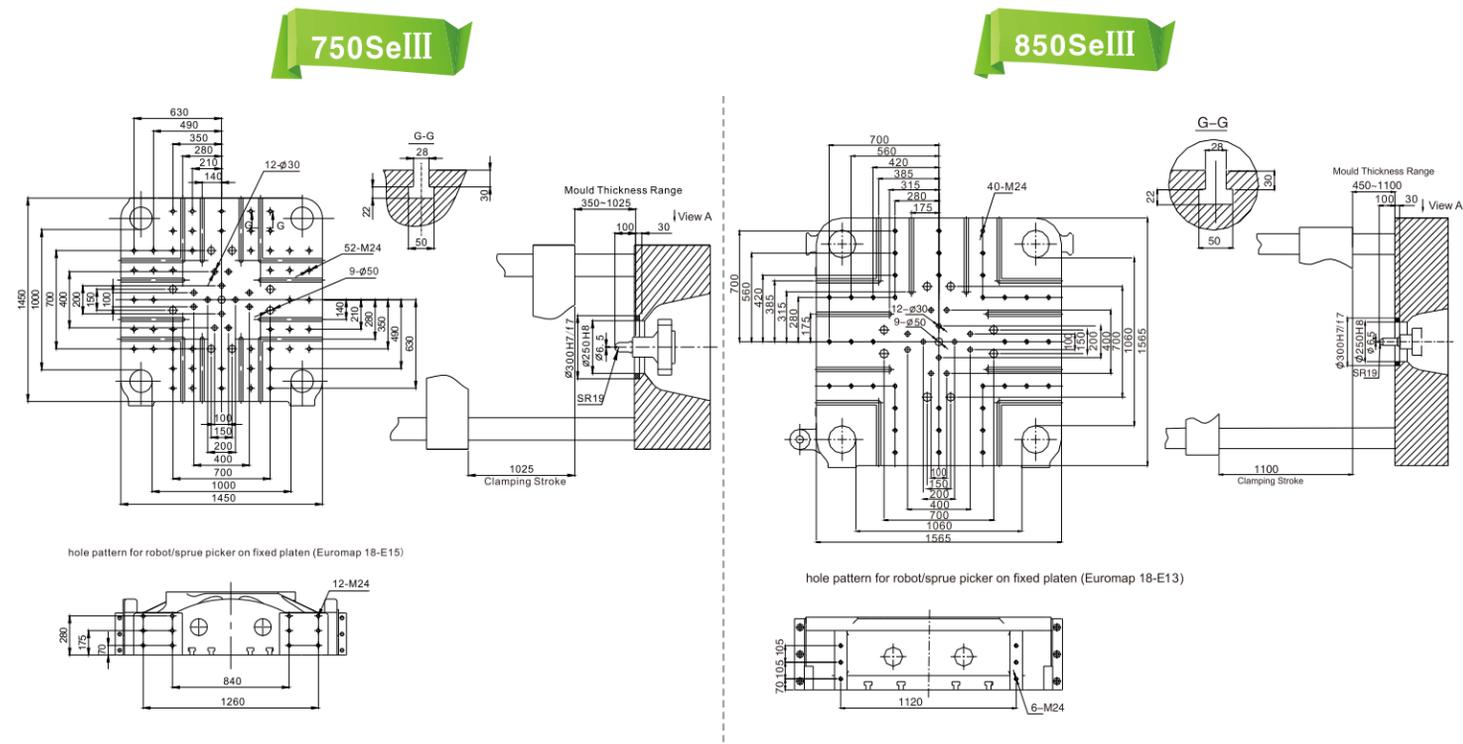
750SeIII-1000SeIII



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



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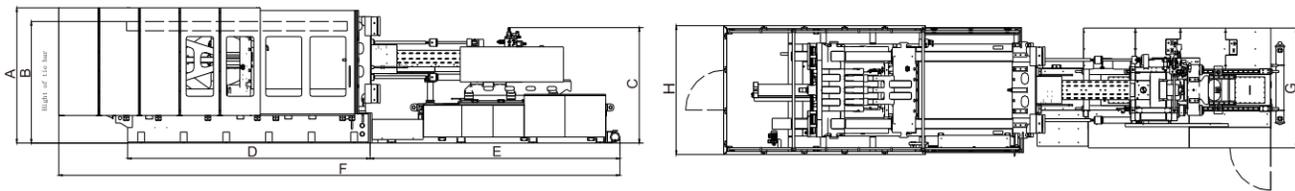
Specifications

ITEM	UNIT	1200SeIII				1400SeIII				1800SeIII			
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	
Plasticising capacity (PS)	g/s	117	143	138	162	118	140	152	176	189	225	235	
Injection stroke	mm	530				570				645			
Max. screw speed	rpm	128	128	104	104	118	118	92	92	105			
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				1600×1400			
Min. mould dimension	mm	875×875				980×980				1100×980			
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	102.6				119.1				131.9			
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	170.6				203.1				223.9			
Total current	A	207				247				272.2			
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			

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

Machine Dimensions

1200SeIII-1800SeIII

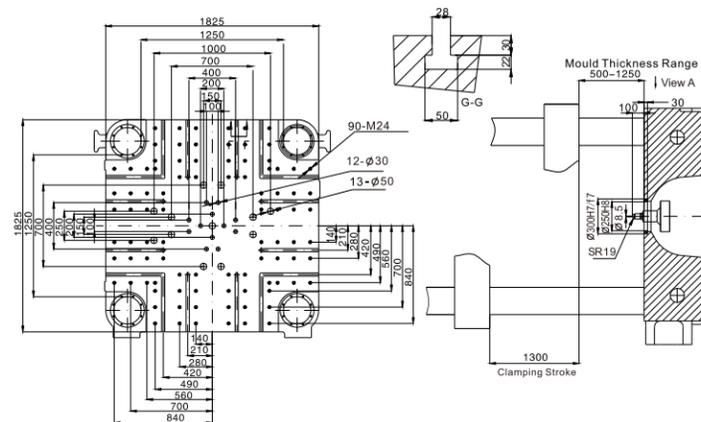


Model	A	B	C	D	E	F	G	H
1200SeIII	2865	2528	2342	5338	5206	12058	2746	2418
1400SeIII	3064	2698	2457	6088	5666	13570	3036	2418
1800SeIII	2808	2720	3200	6340	5360	13439	1340	3210

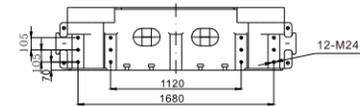
Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

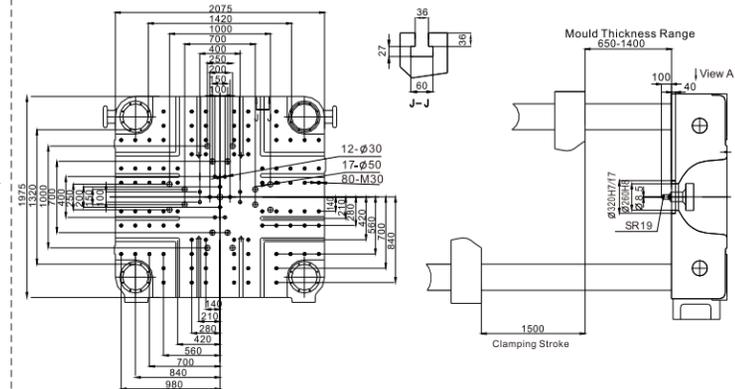
1200SeIII



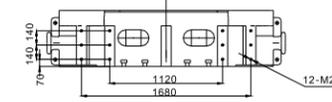
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E13)



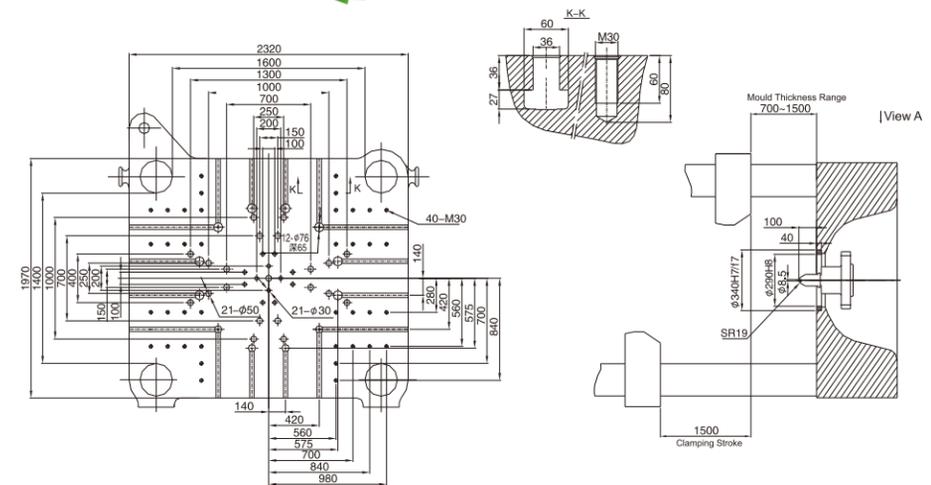
1400SeIII



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



1800SeIII



hole pattern for robot/sprue picker on fixed platen

