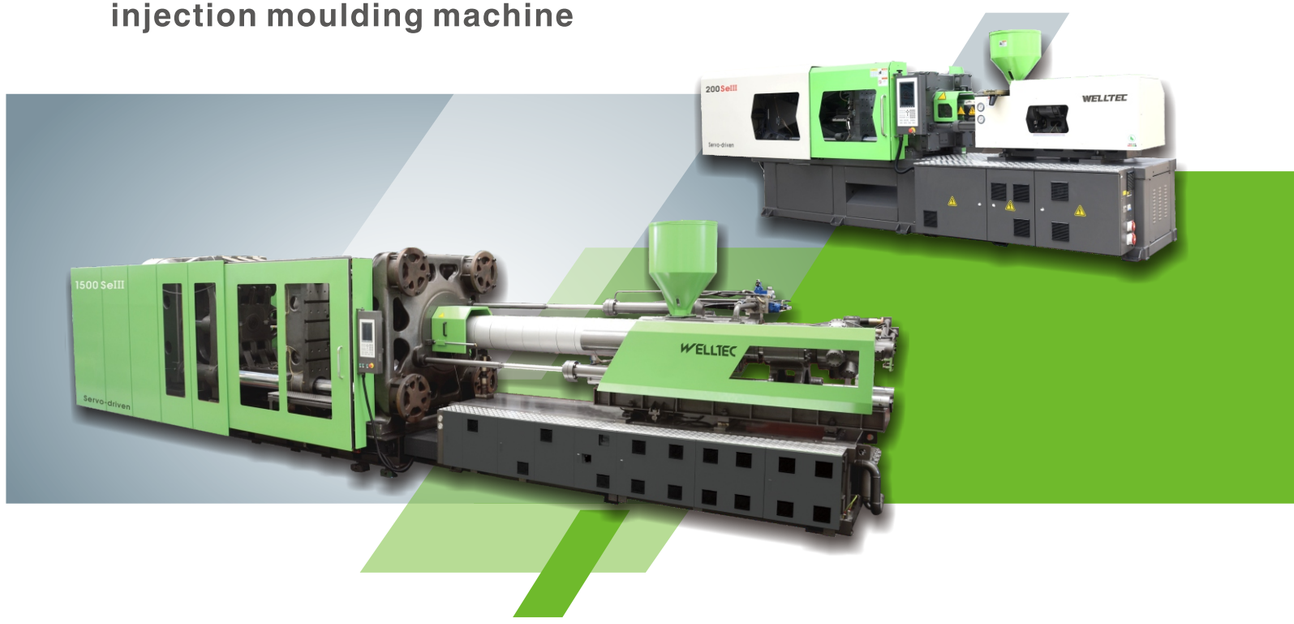
Our offices and agents

SeIII series (60-2200Ton)

The benchmark for high-performance injection moulding machine



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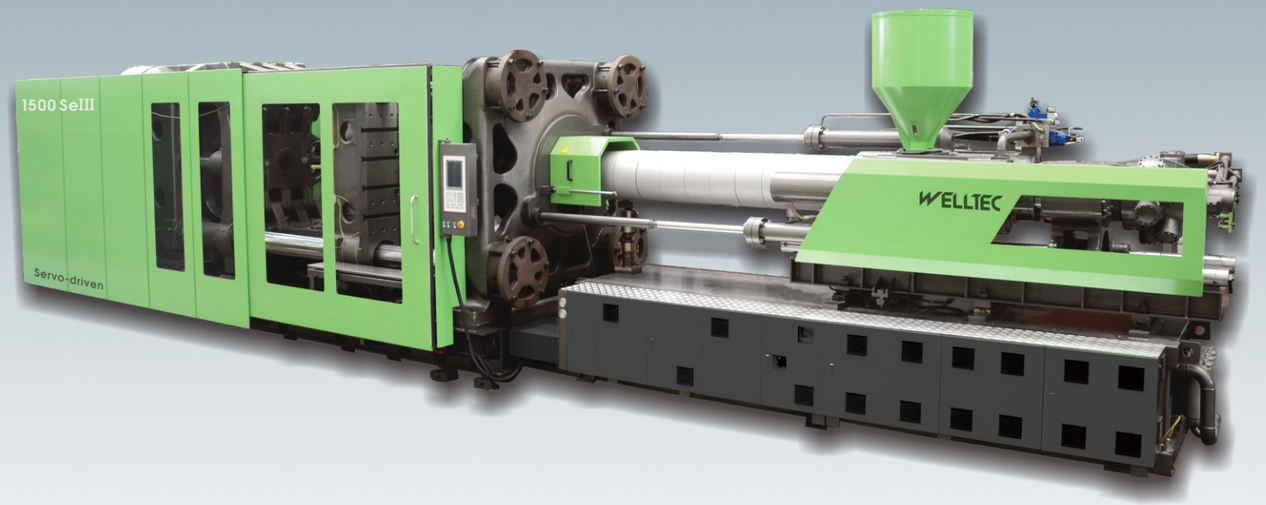
Version: SeIII-202009W

www.welltec.com.hk

SeIII series (60-2200Ton)

The benchmark for high-performance injection moulding machine



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%

Upgraded components with SeIII

- Guide rail added for injection unit
- Mould height adjustment by gear for 90-160T
- Hopper sliding device for 90- 320T
- European style ejector
- Built-in oil cooler
- Fully enclosed injection unit

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

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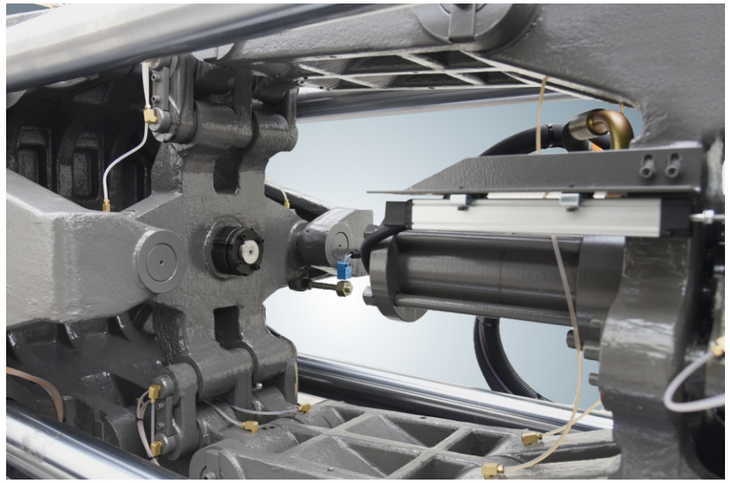
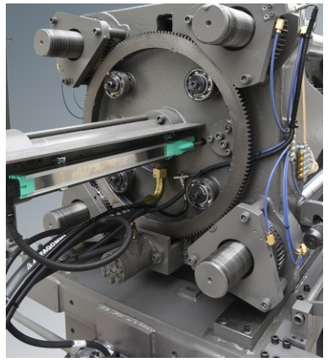
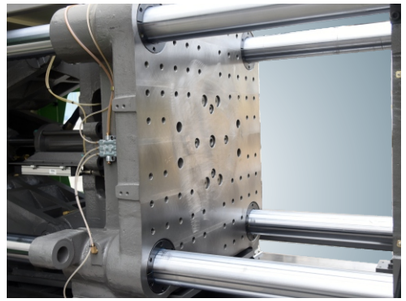




Clamping Unit

- 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



SeIII

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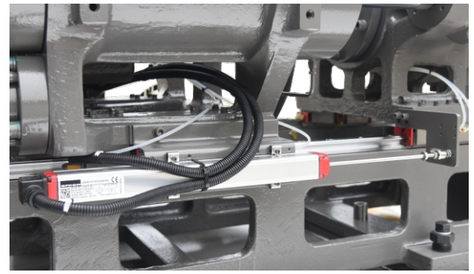
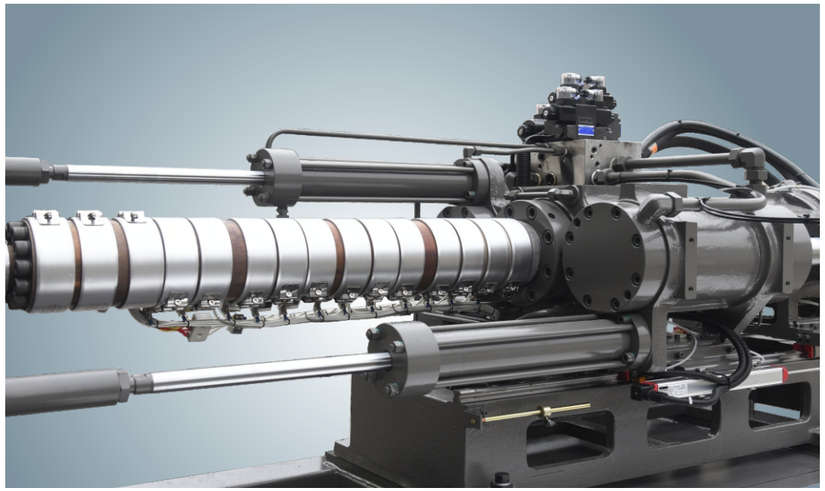
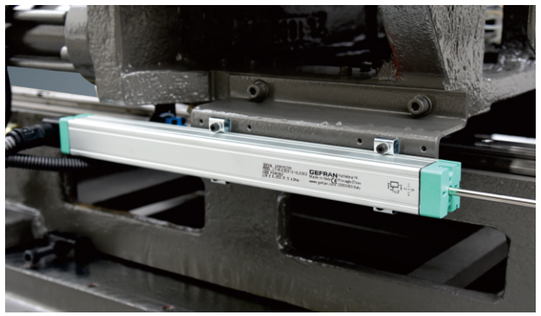
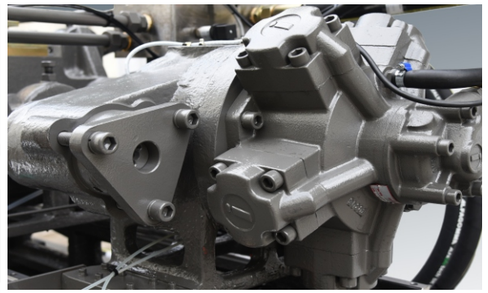


Injection Unit

- 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)

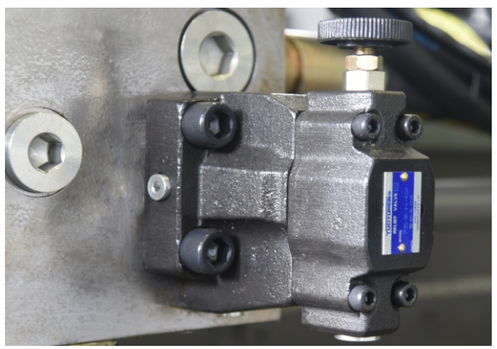






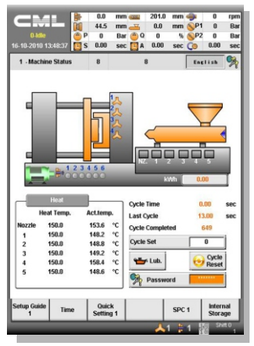
Hydraulic System

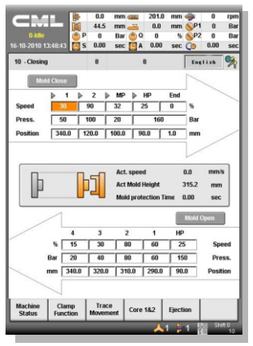
- Efficient and stable servo hydraulic system
- Minimised energy loss attained through the advanced hydraulic pipeline design
- Low-noise
- Advanced servo pump improves machine performance



Software & Functions

S09 smart control system





- High performance European B&R control system
- 10.4” TFT colour LCD display
- Users can identify the changes of parameter and sources of the changes
- Parameter data statistics for quality control
- Auto control of temperature by PID
- Mould parameter can be stored in USB devices and used in another injection moulding machine
- Remote motoring of parameter and operation sequence by MODEM or Ethernet
- Multi-language selection

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

SeIII series (60-2200Ton)

The benchmark for high-performance injection moulding machine

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	○
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 (160- 2200 T)	●
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	○
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	○

SeIII series (60-2200Ton)

The benchmark for high-performance injection moulding machine

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Specifications

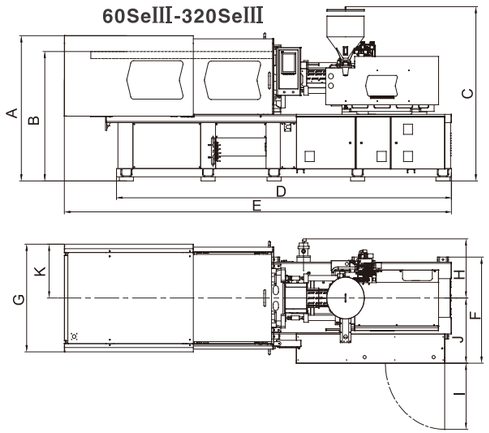
ITEM	UNIT	60SeIII		90SeIII			130SeIII			160SeIII			200SeIII		
		600/90		900/153			1300/229			1600/326			2000/447		
Injection unit															
Screw diameter	mm	25	30	30	35	40	35	40	45	40	45	50	45	50	60
Theoretical shot volume	cc	69	99	124	168	220	192	251	318	283	358	442	398	491	707
Shot weight (PS)	g	63	90	113	153	200	175	229	289	257	326	402	362	447	643
Shot weight (PS)	oz	2.2	3.2	4.0	5.4	7.1	6.2	8.1	10.2	9.1	11.5	14.2	12.8	15.8	22.7
Length/diameter ratio	L/D	22	18.3	24	20.6	18	23.4	20.5	18.2	22.5	20	18	24	21.6	18
Injection pressure	MPa	261	181	254	186	143	225	172	136	223	176	142	219	177	123
Injection rate	cm^3/sec	78	113	83	113	147	93	122	154	147	187	230	150	185	266
Injection stroke	mm	140		175			200			225			250		
Max. screw speed	rpm	300		237			205			274			185		
Plasticising capacity (PS)	g/s	7.4	12.4	11.2	12.4	18.2	11.9	16.2	20.0	23.2	30.0	33.6	22.5	28.0	34.2
Injection unit force	Ton	3.4		5.7			5.7			5.7			9.1		
Carriage stroke	mm	255		230			300			320			350		
Clamping unit															
Clamping force	Ton	60		90			130			160			200		
Max. daylight	mm	740		740			880			1000			1090		
Clamping stroke	mm	360		360			430			480			540		
Distance between tie bars	mm	360x360		360x360			410x410			470x470			535x535		
Min. mould dimension	mm	250x250		250x250			280x280			320x320			370x370		
Mould thickness range	mm	120–380		120–380			145–450			150–520			175–550		
Ejector force	Ton	4.1		4.1			4.1			7.7			9.9		
Ejector stroke	mm	100		100			120			160			170		
No. of ejector pins	unit	5		5			5			5			9		
Power unit															
Max. motor power	kW	13.4		13.4			13.4			16.4			16.4		
System pressure	MPa	17.5		17.5			17.5			17.5			17.5		
Hydraulic pump capacity	L/min	72		72			72			112.5			112.5		
No. of heating zones	unit	3+1+1		3+1+1			3+1+1			4+1+1			4+1+1		
Heating power	kW	6.02		7.41			9.3			11.48			14.25		
Total power	kW	20.42		21.81			23.7			28.88			31.65		
Total current	A	27.9		29.8			32.4			39.5			43.3		
General															
Machine net weight	Ton	3.1		3.27			4.16			5.68			6.97		
Oil filling capacity	L	200		200			200			320			360		

260SeIII			320SeIII			380SeIII			450SeIII			500SeIII			560SeIII			660SeIII		
2600/772			3200/981			3800/1508			4500/1830			5000/1830			5600/2519			6600/2519		
55	60	70	60	65	75	65	75	85	70	80	94	70	80	94	80	90	105	80	90	105
713	848	1155	919	1078	1436	1244	1657	2128	1539	2011	2776	1539	2011	2776	2212	2799	3810	2212	2799	3810
649	772	1051	836	981	1307	1132	1508	1936	1401	1830	2526	1401	1830	2526	1991	2519	3429	1991	2519	3429
22.9	27.3	37.1	29.5	34.7	46.2	40.0	53.3	68.4	49.5	64.7	89.3	49.5	64.7	89.3	70.3	89.0	121.2	70.3	89.0	121.2
22.9	21	18	22.5	20.8	18	23.9	20.7	18.3	24.2	21.2	18	24.2	21.2	18	23.6	21	18	23.6	21	18
211	178	131	210	179	134	231	173	135	228	174	126	228	174	126	215	170	125	215	170	125
237	282	384	306	359	477	348	463	595	352	460	635	352	460	635	521	660	898	521	660	898
300			325			375			400			400			440			440		
175			224			170			170			170			161			161		
32.3	47.6	52.9	49.3	55.4	77.9	57.9	77.8	100.5	72.7	94.3	131.3	72.7	94.3	131.3	87.9	106.7	161.3	87.9	106.7	161.3
9.1			9.1			12			12			12			20.4			20.4		
350			400			435			480			480			600			600		
260			320			380			450			500			560			660		
1210			1400			1530			1600			1700			1730			1830		
600			700			780			780			850			880			910		
580x580			680x680			740x740			820x800			840x830			860x840			920x920		
400x400			470x470			520x520			570x560			580x580			600x590			645x645		
195–610			250–700			250–750			300–820			300–850			350–850			350–920		
11.1			11.1			16.6			16.6			16.6			16.6			16.6		
195			200			210			240			240			240			290		
13			13			13			17			17			17			21		
26.7			40.9			50.7			50.7			50.7			67.1			67.1		
17.5			17.5			17.5			17.5			17.5			17.5			17.5		
172			220			275			275			275			385			385		
5+1			5+1			5+1			5+1			5+1			5+1			5+1		
18.9			22.15			28.99			34.94			34.94			35.66			35.66		
46.6			64.05			80.69			86.64			86.64			103.76			103.76		
63.7			87.6			110.3			118.5			118.5			126.1			126.1		
8.55			11.52			14.68			16.72			18.66			23			26		
480			550			700			700			700			1000			1000		

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

Machine Dimensions

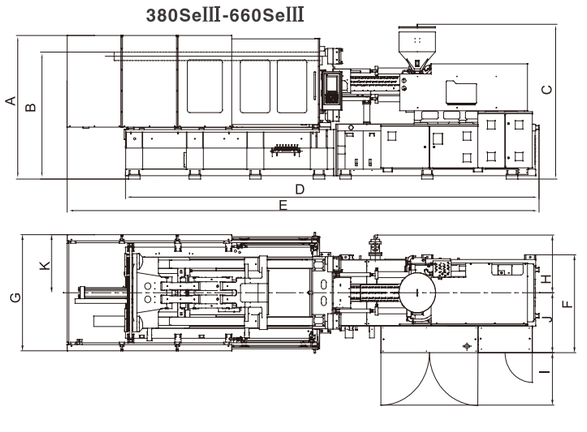
60SeIII-320SeIII



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
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

Remark: C-hopper height for reference only

380SeIII-660SeIII



Model	A	B	C	D	E	F	G	H	I	J	K
380SeIII	2176	1923	2284	6831	7795	1484	1760	874	800	909	880
450SeIII	2246	1985	2336	7061	8025	1550	1874	907	800	942	937
500SeIII	2244	2005	2337	7196	8250	1550	1900	907	800	942	950
560SeIII	2220	2085	2545	7643	8903	2193	1791	1420	850	960	895.5
660SeIII	2280	2125	2545	7783	9157	2193	1942	1420	850	960	971

Remark: C-hopper height for reference only

SeIII series (60-2200Ton)

The benchmark for high-performance injection moulding machine

WELLTEC

Specifications

ITEM	UNIT	750SeIII			850SeIII			1000SeIII			1250SeIII			1500SeIII			1800SeIII			2200SeIII		
		7500/3322			8500/3322			10000/4191			12500/6152			15000/8309			18000/9586			22000/13210		
Injection unit																						
Screw diameter	mm	90	100	110	90	100	110	100	110	125	110	125	140	125	135	145	135	145	160	140	160	180
Theoretical shot volume	cc	2990	3691	4467	2990	3691	4467	3848	4657	6013	5293	6835	8574	7915	9232	10651	9232	10651	12969	11238	14678	18576
Shot weight (PS)	g	2691	3322	4020	2691	3322	4020	3464	4191	5412	4764	6152	7717	7124	8309	9586	8309	9586	11672	10114	13210	16719
Shot weight (PS)	oz	95	117	142	95	117	142	122	148	191	168	217	273	252	294	339	294	339	412	357	467	591
Length/diameter ratio	L/D	22.6	20.0	18.0	22.6	20.0	18.0	22.3	20.0	17.7	21.6	20.0	18.5	23.0	21.1	19.7	21.1	19.7	17.8	24.9	22.0	19.5
Injection pressure	MPa	212	171	142	212	171	142	209	173	134	233	180	144	218	187	162	187	162	133	221	169	134
Injection rate	cm^3/sec	572	706	854	572	706	854	651	787	1017	650	839	1052	695	810	935	1053	1215	1480	1024	1338	1693
Plasticising capacity (PS)	g/s	73	100	121	73	100	121	93	118	154	106	151	184	11 7	146	1 73	189	225	235	144	203	26 1
Injection stroke	mm		470			470			490			557			645			645			730	
Max. screw speed	rpm		124			124			115			104			81		105	105	89		70	
Injection unit force	Ton		19.8			19.8			19.8			19.8			28.8			28.8			29.0	
Carriage stroke	mm		600			600			650			800			800			850			1080	
Clamping unit																						
Clamping force	Ton		750			850			1000			1250			1500			1800			2200	
Max. daylight	mm		2050			2200			2300			2600			2900			3000			3700	
Clamping stroke	mm		1025			1100			1150			1300			1500			1500			1900	
Distance between tie bars	mm		1000x1000			1060x1060			1100x1100			1250x1250			1400x1400			1600x1400			1800x1600	
Min. mould dimension	mm		700x700			740x740			780x780			875x875			980x980			1100x980			1260x1100	
Mould thickness range	mm		350~1025			450~1100			450~1150			500~1300			600~1400			700~1500			900~1800	
Ejector force	Ton		25			25			25			25			33			33			39	
Ejector stroke	mm		350			350			350			350			350			380			450	
No. of ejector pins	unit		21			21			21			21			33			33			33	
Power unit																						
Max. motor power	kW		67.6			67.6			77.4			91.6			91.6			104.1			132.5	
System pressure	MPa		17			17			17			17			17			17			17	
Hydraulic pump capacity	L/min		440			440			495			550			550			715			825	
No. of heating zones	unit		5+1			5+1			5+1			5+1			5+1			5+1			5+1	
Heating power	kW		50			50			58			74			92			92			123	
Total power	kW		118.3			118.3			136.6			166.6			184.6			197.1			256	
Total current	A		143.8			143.8			166			202.5			224.4			239.6			311.2	
General																						
Machine net weight	Ton		39.1			43.0			52.0			68.2			100.0			125.0			169.0	
Oil filling capacity	L		1500			1500			1600			1600			2000			2000			2300	

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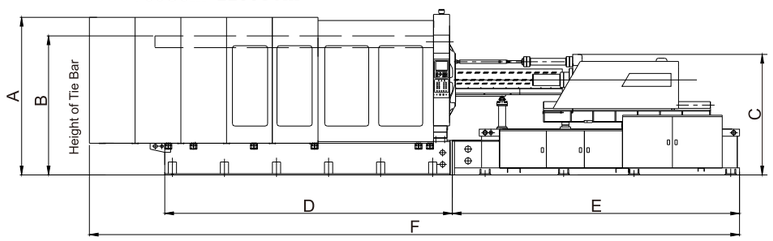
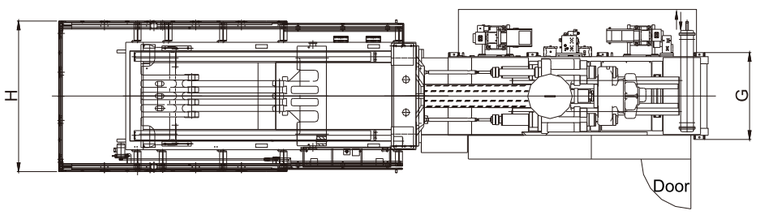
Machine Dimensions

750SeIII -2200SeIII





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	2687	2370	2717	4904	4900	11090	1482	2569
1250SeIII	2867	2530	2853	5485	5060	12149	1482	2812
1500SeIII	2808	2700	3200	6158	5360	13290	1340	2971
1800SeIII	2808	2720	3200	6340	5360	13439	1340	3210
2200SeIII	3267	3240	3580	7675	7298	16724	1555	4085

Remark: C-hopper height for reference only

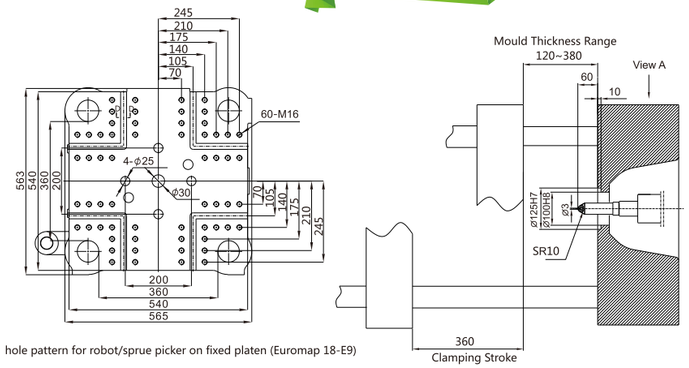
SeIII series (60-2200Ton)

The benchmark for high-performance injection moulding machine

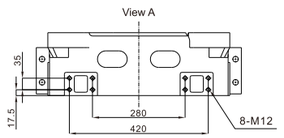
WELLTEC

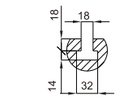
Platen/Nozzle Dimensions

60SeIII



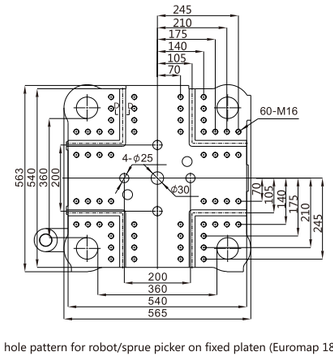
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E9)



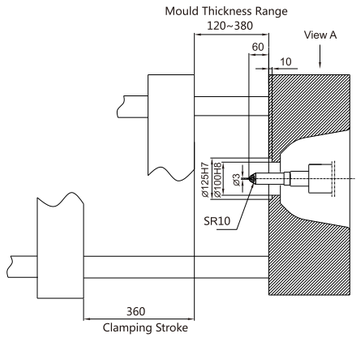


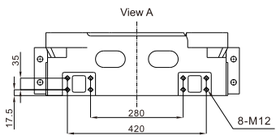
Cross-sectional view D-D

90SeIII



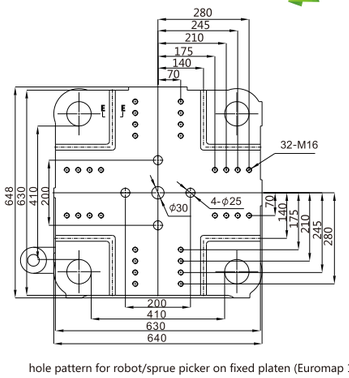
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E9)



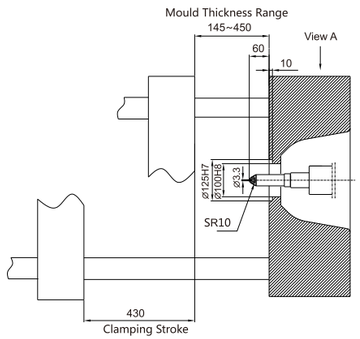


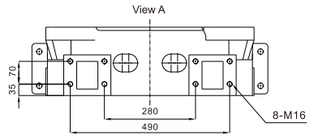
Cross-sectional view D-D

130SeIII



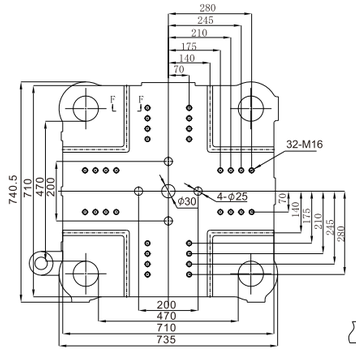
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E9)



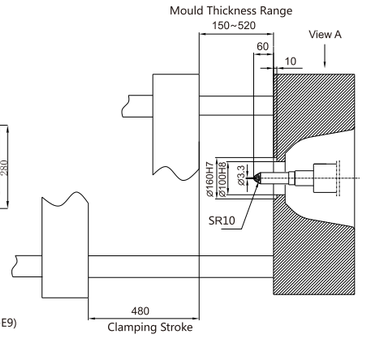


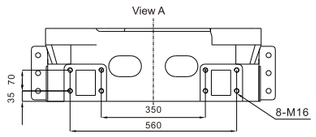
Cross-sectional view E-E

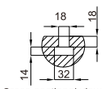
160SeIII



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

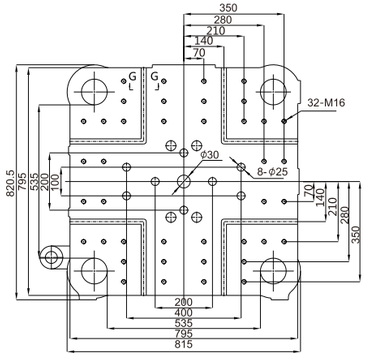




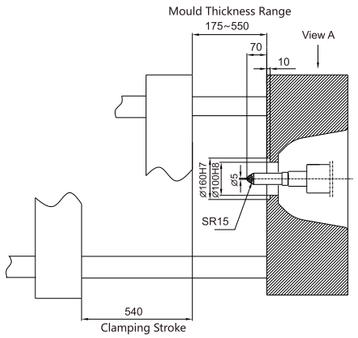


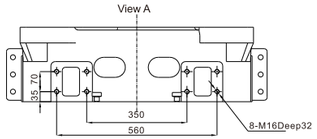
Cross-sectional view F-F

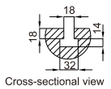
200SeIII



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

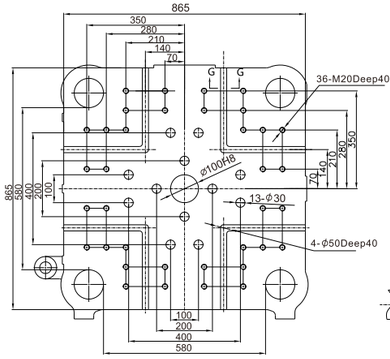




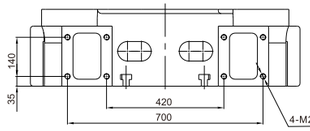


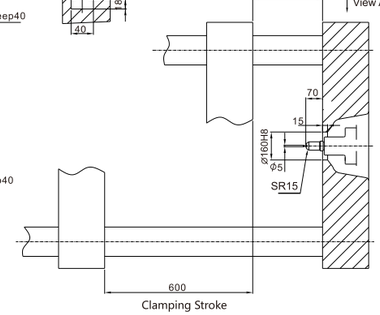
Cross-sectional view G-G

260SeIII



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





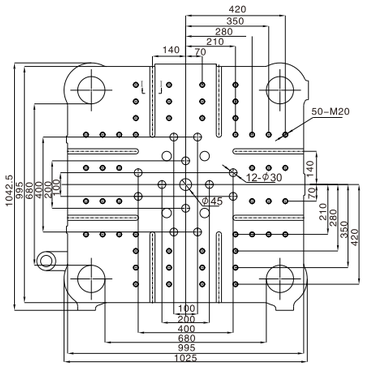
SeIII series (60-2200Ton)

The benchmark for high-performance injection moulding machine

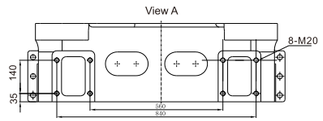
WELLTEC

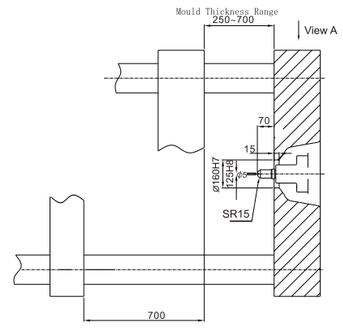
Platen/Nozzle Dimensions

320SeIII



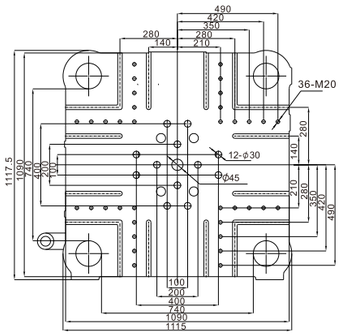
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E10)



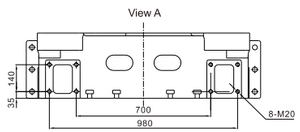


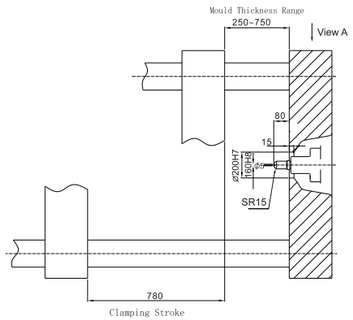
Cross-sectional view I-I

380SeIII



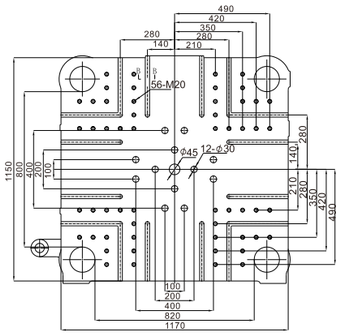
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E12)



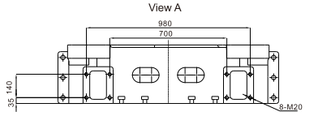


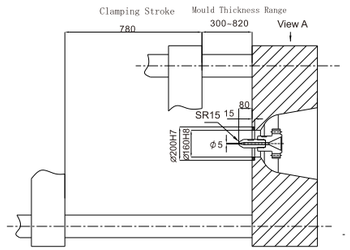
Cross-sectional view J-J

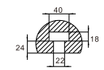
450SeIII



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

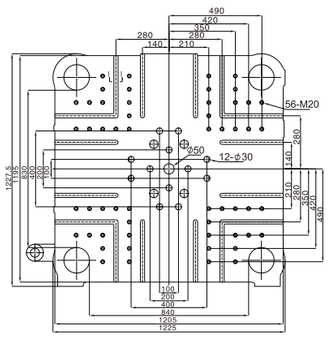




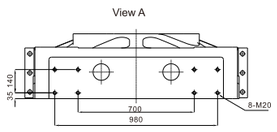


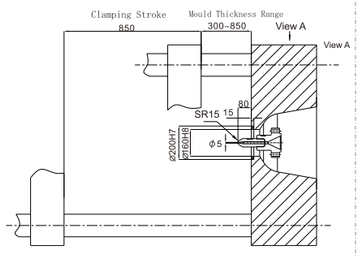
Cross-sectional view B-B

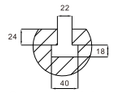
500SeIII



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

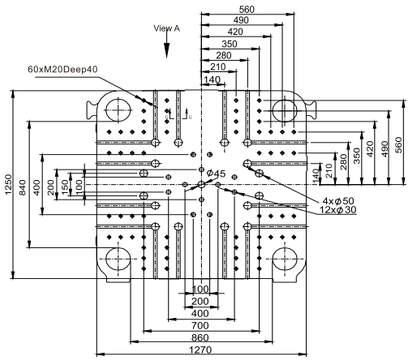




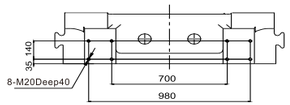


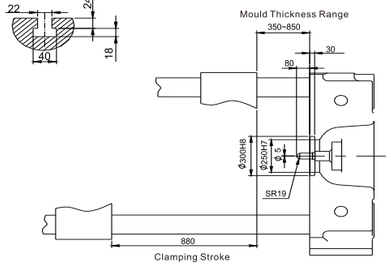
Cross-sectional view I-I

560SeIII

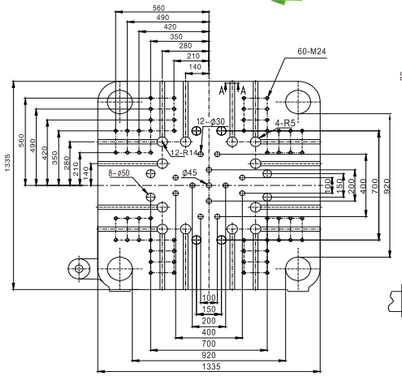


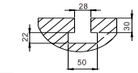
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E15)

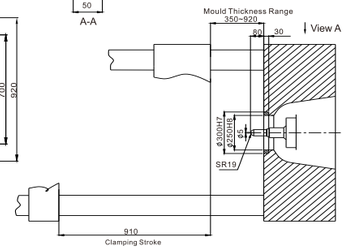




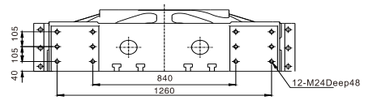
660SeIII







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



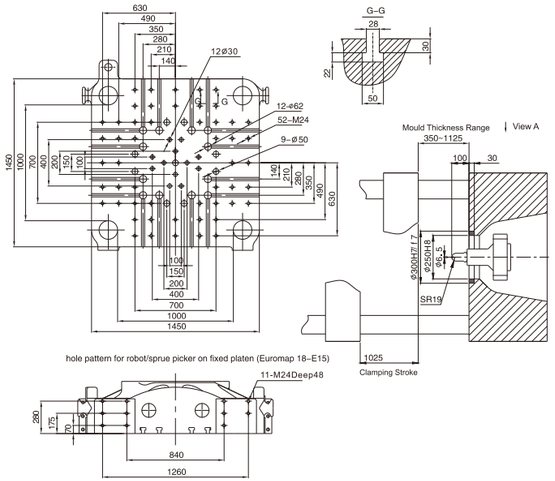
SeIII series (60-2200Ton)

The benchmark for high-performance injection moulding machine

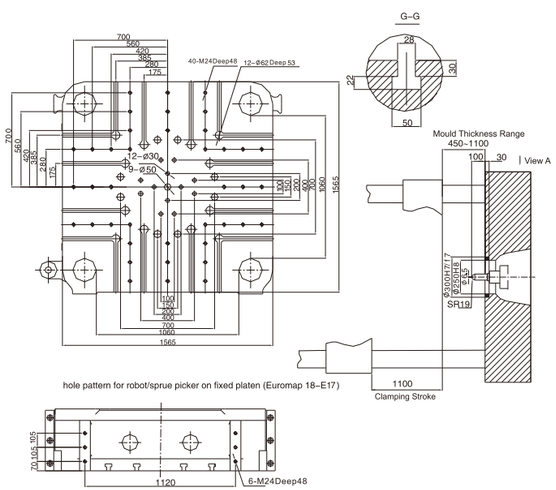
WELLTEC

Platen/Nozzle Dimensions

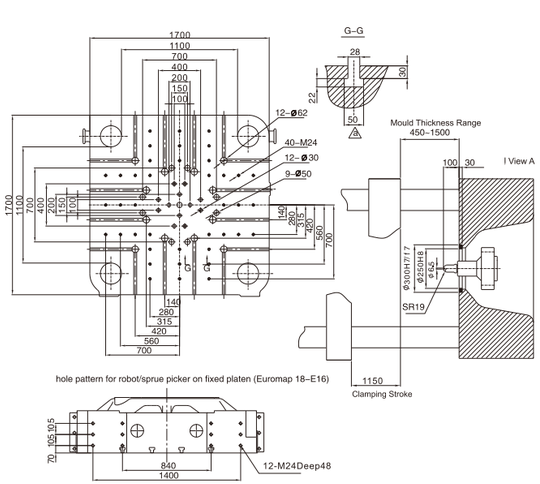
750SeIII



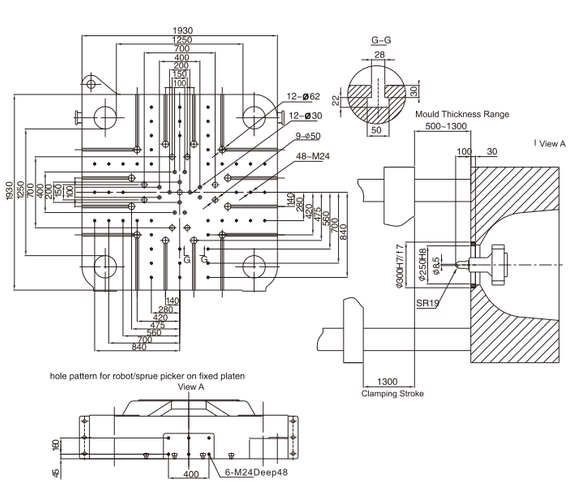
850SeIII



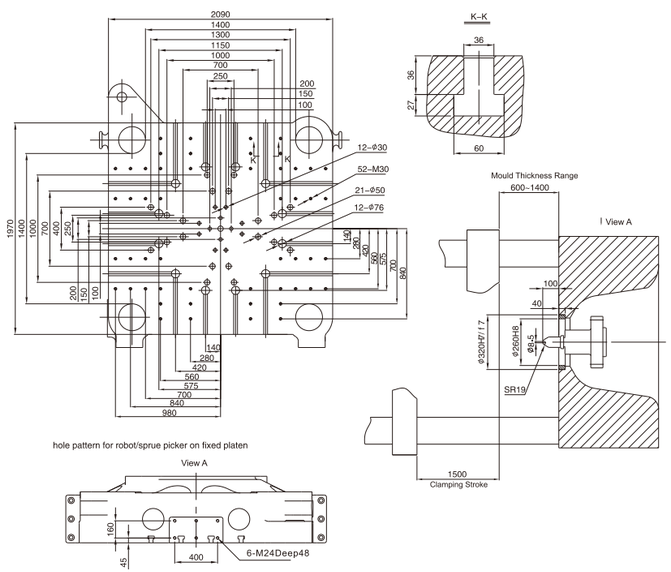
1000SeIII



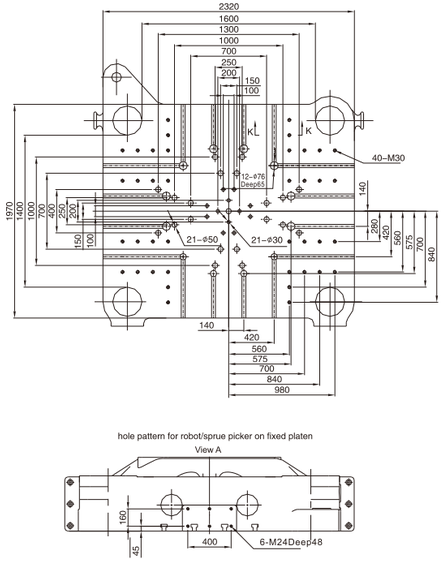
1250SeIII



1500SeIII



1800SeIII



2200SeIII