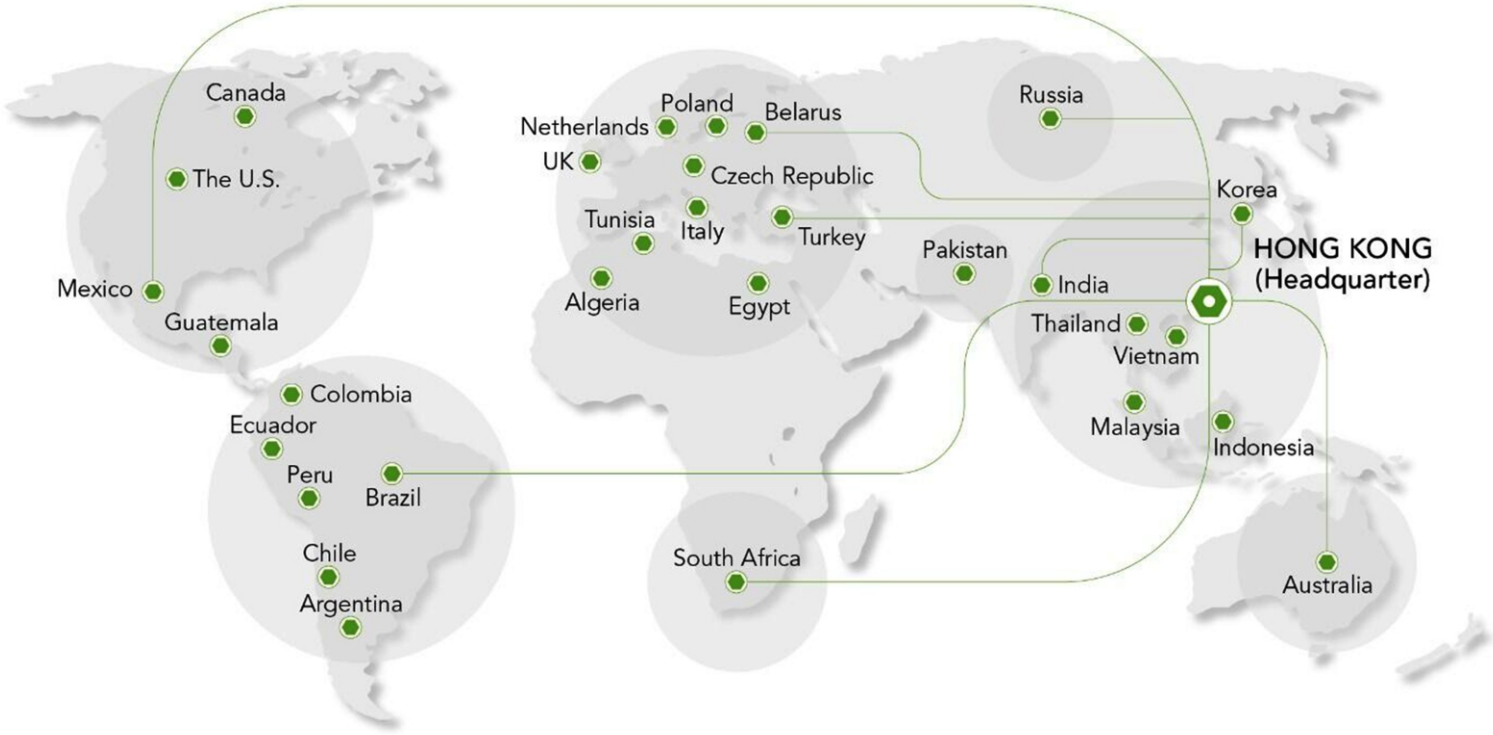


Our offices and agents



Specialist in PVC solutions



PVC Injection Moulding Machine
PVC-SeIII
PVC-SeKII/S
(160-1800Ton)

Welltec Machinery Ltd

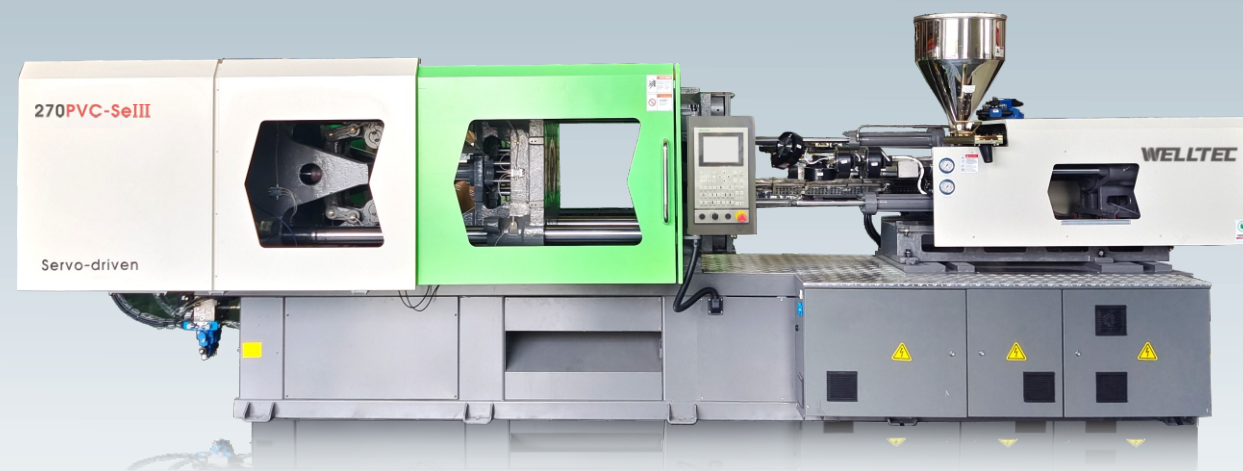
[f](#) [in](#) [Q](#) www.welltec.com.hk

Version: PVC-202403W



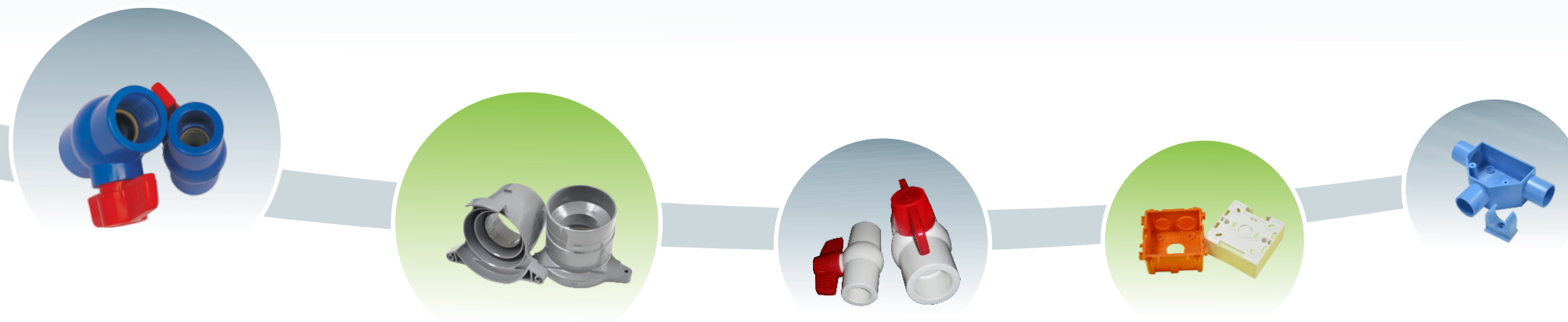
www.welltec.com.hk

Specialist in PVC solutions

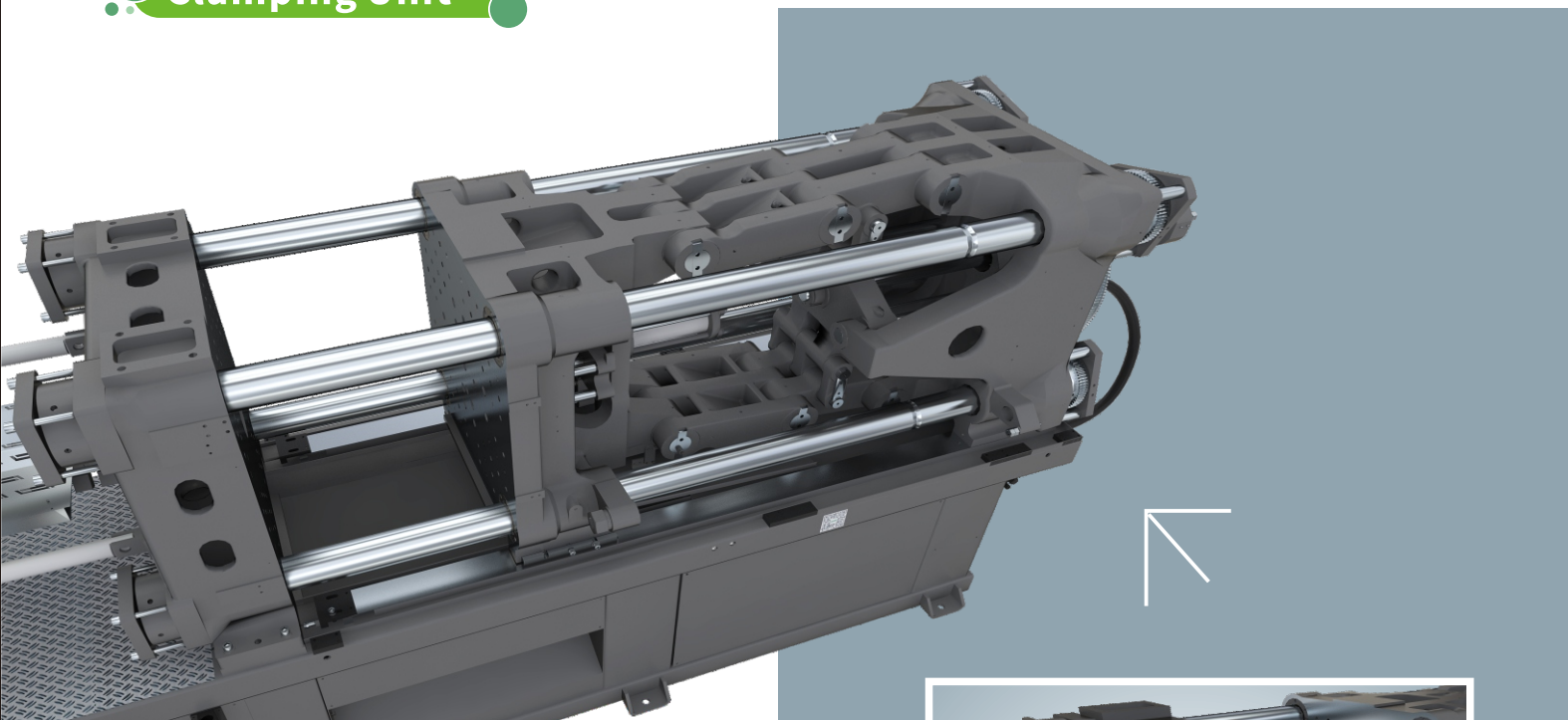


Features

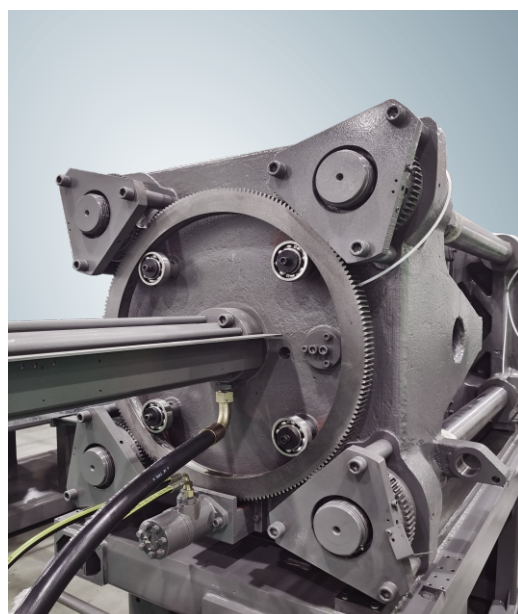
- At least 30% more energy saving than the traditional variable pump system .
- AC servo motor to achieve smooth motion even under low- speed.
- Higher products repeatability with the use of double- closed loop control of flow and pressure.
- Exceptional and stable performance under low pressure and low flow attained by the servo-driven hydraulic pumps.
- Ultra- strong corrosion resistance thanks to the special PVC screw that also enables excellent plasticising.
- Widened guarding between moulding area and movable door with two sets of core pulls to better suit a range of PVC products.



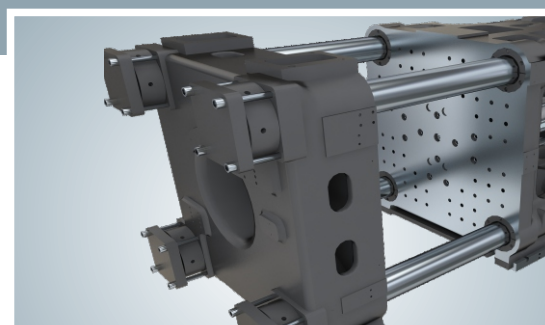
Clamping Unit



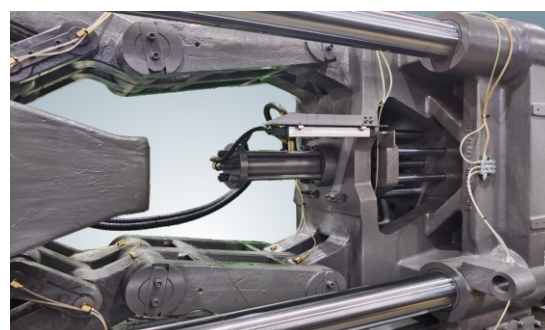
- Extra durability achieved through optimised clamping structure. High-rigidity machine frame minimises vibrations and supports smooth movements that satisfies heavy-duties production needs.



- High precision of mould height adjustment by gear to better protect the mould and improve production efficiency.

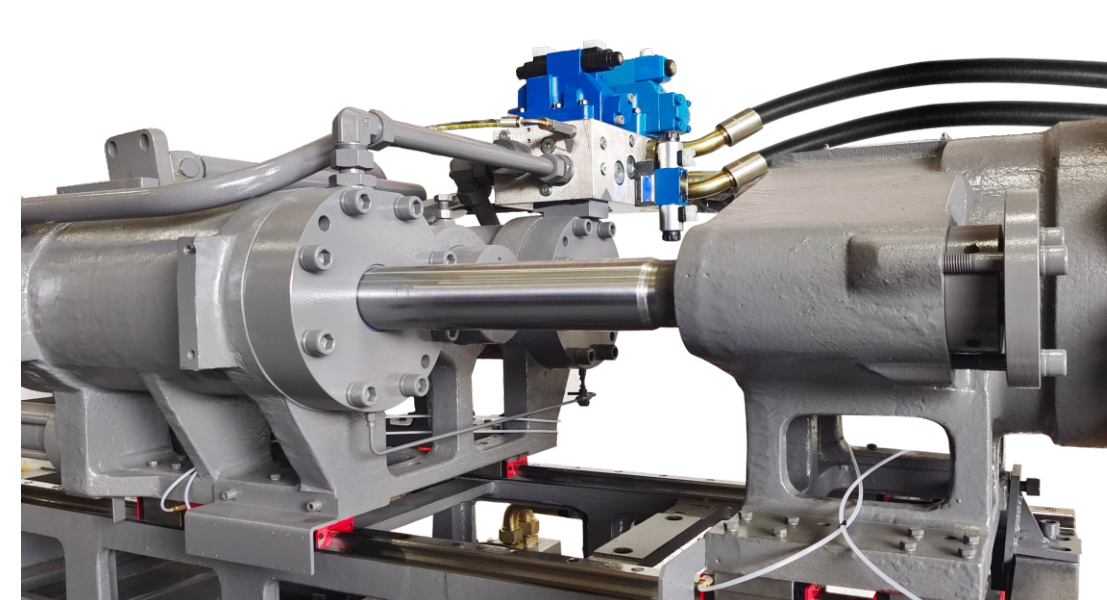


- Optimised platen designs to disperse stress and enhance product repeatability.

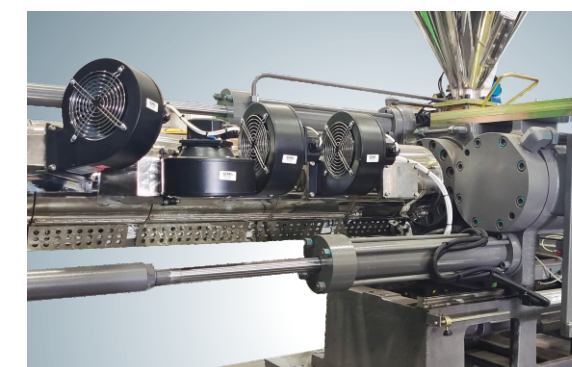


- Optimised toggle designs to ensure smooth platen movements and accurate stopping position.

Injection Unit



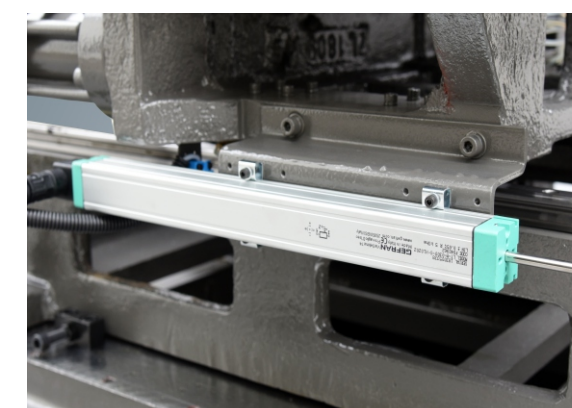
- High rigidity injection unit reduces deformation of carriage and cylinder rods. Spacing between screw and barrel is well maintained to avoid unilateral scratches and over shear-heating.
- Uniform plasticising and injection reduce products burns, oil seals damages and oil tank leaks.



- Injection cylinders are diagonally positioned to effectively disperse stress.



- Linear guide rail realised high precision and low friction carriage movements which effectively lowered mechanical back pressure and overall energy consumption.



- High precision linear transducer ensures stable injection.

Features of PVC Special



Optimised air cooling and temperature control device

- Multiple PID controlled barrel fans to ensure accurate and stable temperature control. Speed-adjustable fans to balance the barrel temperature.
- Optimised barrel thickness is to ensure high heat retention. Thermocouples are properly positioned and probed based on the resin properties to maximise measurement accuracy. High power heater bands are to ensure adequate heating.



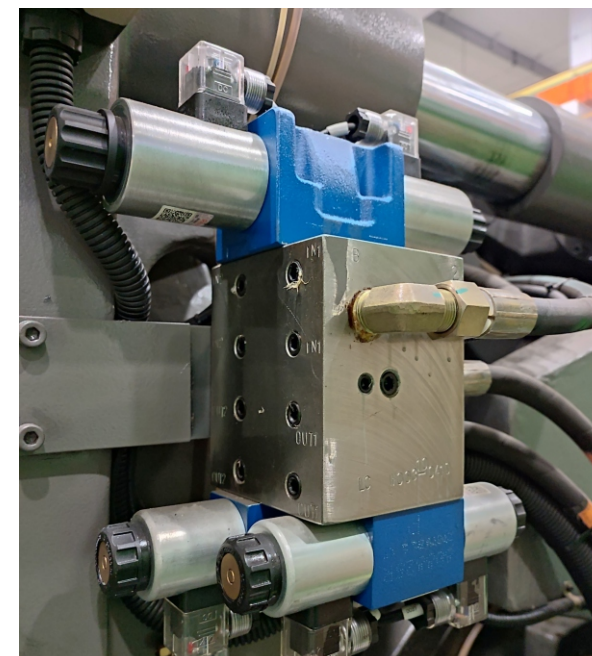
Screw and tip set specialised for PVC

- Adopting chrome-plated screw and nozzle enables higher wear resistance. Special screw material and heat treatment process enables smooth material feeding.
- Screw designs (L/D ratio/compression ratio/ three-section ratio) for different users and products to ensure excellent plasticising and smooth products surface.



Optimal arrangement of high efficiency plasticising motor

- Enlarged plasticising motor is to supply high torque for PVC being high viscosity and low mobility, to ensure stable plasticising.
- Further enlarged plasticising motor is available as an option to cope with CPVC resin being even more viscous and less mobile.

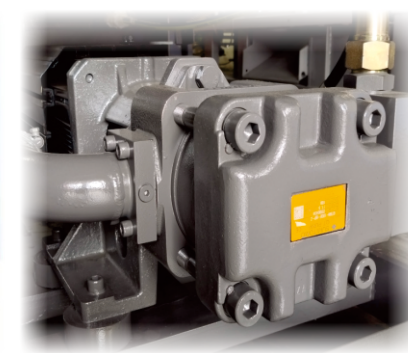


Two sets of core pulls on the moving platen

- Standard two sets of core pulls to work with moulds for fittings.

Abundant injection pressure

- Thickened injection cylinder and strengthened cylinder rod to ensure injection pressure is same high as in small diameter screw to enable PVC being injected by high pressure and lows speed hydraulics.
- Wide range of injection parameter settings are to better protect the servo driver, motor and hydraulic pump and extend the lifespan of screw tip set.



Robust power pack

- Servo driver coupled gear pump to drive stronger system pressure. Excellent handlings for low pressure and low flow rate hydraulics.

Stainless steel hopper

- Convenient replacement of raw materials attained by movable hopper (for specific tonnage).
- Powder-collection tray is located below the hopper mounting for easy cleaning.



Features of PVC Special



Widened guard door

- Widened guard doors at the clamping unit to accommodate extra-long core pulls for fitting moulds.

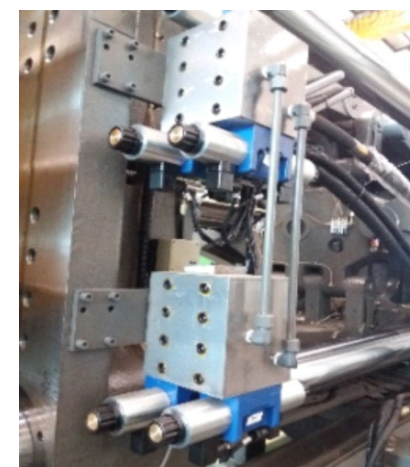


Proportional back pressure

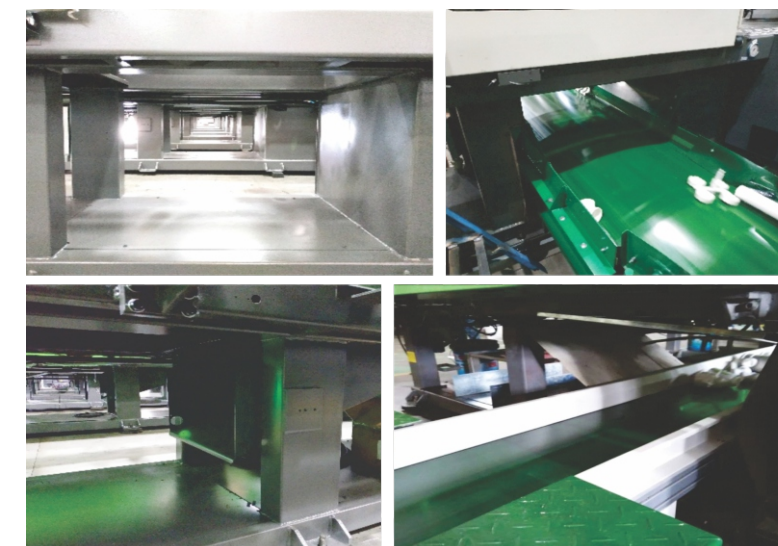
- Back pressure is accurately controlled by digital proportional valve to cope with PVC resin which is highly sensitive to shearing heat.



Optional features



- Three sets or more of core pulls on the moving platen.



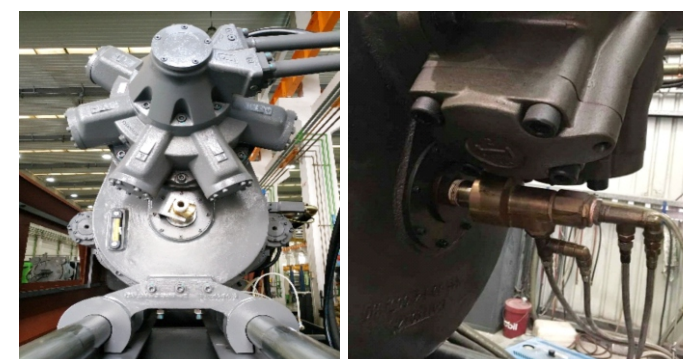
- Machine frame and product-drop area are risen and widened to ensure conveyor is properly aligned to connect the centralised product conveying and collection automated lines.



- PVC (380T and above) equipped with hopper slider.



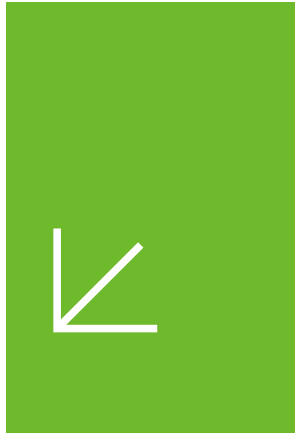
- Adjustable guard door according to the factory layout and floor space.



- Screw driven by gear box in high tonnage PVC machine is to ensure sufficient torque for plasticising.
- Oil cooling circuits run through the screw center for better control of resin temperature to achieve the best plasticising.

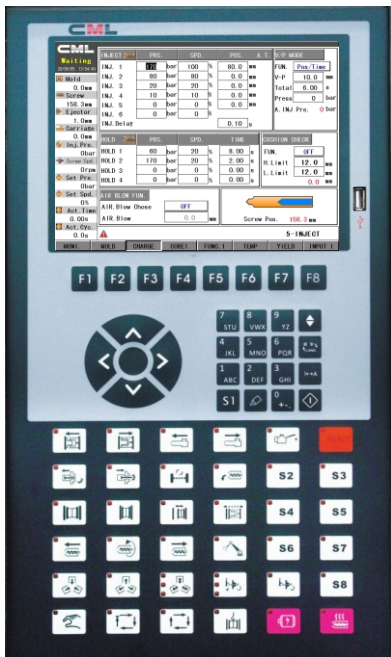
(The above features are equipped as a standard for 1250 T or above model)

PVC-SeIII
AS10 control system

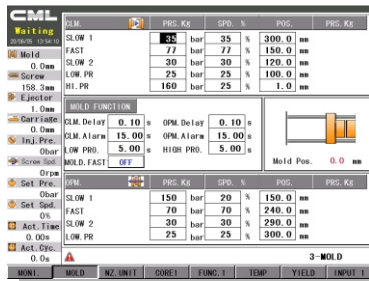
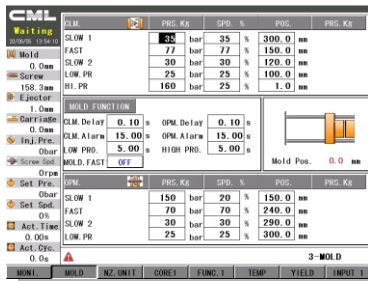
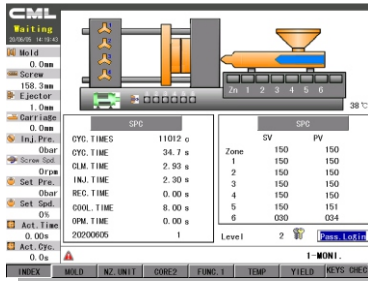
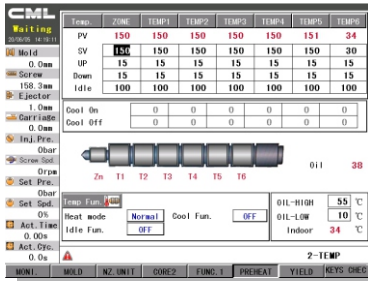
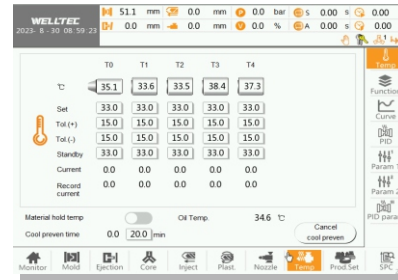
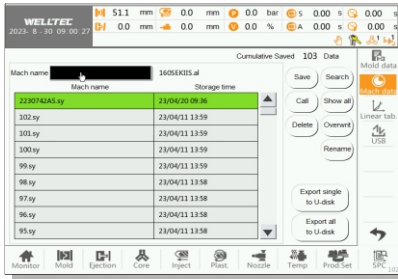


- 8“or 10” (optional) TFT color touchscreen display
- Closed-loop control for mold open/close, injection, plasticizing and ejector
- Intelligent auto-tuning for mold open / close speed, pressure and position to minimize manual adjustments
- 6-stage injection, 5-stage pressure holding, 5- stage plasticizing coupled with pressure - flow curve display
- Screw RPM display and barrel preheating function
- 500 sets of mold data and 2,000 sets of SPC record. Data export to EXCEL for analysis
- Quick system response with high precision control
- Free core-pull programming
- Non battery reliance for permanent system data storage
- USB disk to backup IO, system data, mold data and system software update
- Ready for extension of IO, temperature control and analog modules
- Multi-languages user interface
- iSee 4.0 cloud- based machine monitoring, remote technical diagnosis and supports (optional)

PVC-SeKII/S
GA021 control system



- 8“ TFT colour display
- User-friendly interface
- 4-stage injection. 4-stage holding pressure. 3-stage plasticising
- Pressure flow curve display
- Screw RPM display
- Barrel preheating function
- 100 sets of mould data



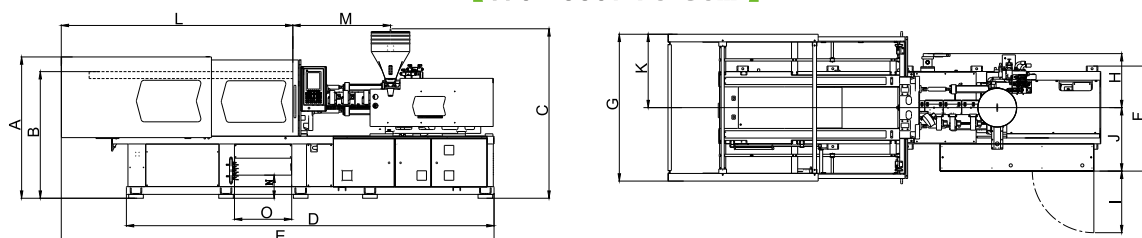
PVC servo pump parameters

Item	Unit	170PVC-SeIII 1700-870	210PVC-SeIII 2100-1055	270PVC-SeIII 2700-1510	330PVC-SeIII 3300-1930
Injection Unit					
Screw diameter	mm	45	50	55	60
Theoretical shot volume	cc	398	491	594	713
Shot weight (PVC)	g	477	589	713	855
Shot weight (PVC)	oz	16.9	20.8	25.2	30.2
Injection pressure	MPa	219	177	215	178
Injection rate	cm³/sec	126	156	184	200
Injection stroke	mm	250	250	300	325
Max. screw speed	rpm	126	115	117	135
Injection unit force	Ton	9.1	9.1	9.1	9.1
Carriage stroke	mm	350	350	400	400
Clamping Unit					
Clamping force	Ton	170	210	270	330
Max. daylight	mm	1000	1090	1210	1400
Clamping stroke	mm	480	540	600	700
Distance btwn. tie bars	mm	470x470	535x535	580x580	680x680
Min. mould dimension	mm	320x320	370x370	400x400	470x470
Mould thickness range	mm	150-520	175-550	195-610	250-700
Ejector force	Ton	7.7	9.9	11.1	11.1
Ejector stroke	mm	160	170	195	195
No. of ejector pins	unit	5	9	13	13
Power Unit					
Max. motor power	kW	16.4	16.4	20.5	26.7
System pressure	MPa	17.5	17.5	17.5	17.5
Hydraulic pump capacity	L/min	95	112.5	145	176
No. of heating zones	unit	4+1	4+1	5+1	5+1
Heating power	kW	14.03	16	18.7	22
Total power	kW	31.43	33.4	40.2	49.7
Total current	A	43.0	45.7	55.0	68.0
General					
Machine weight	Ton	6	7.1	8.55	11.52
Oil filling capacity	L	280	300	450	540

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

Machine Dimensions

【170~330PVC-SeIII】

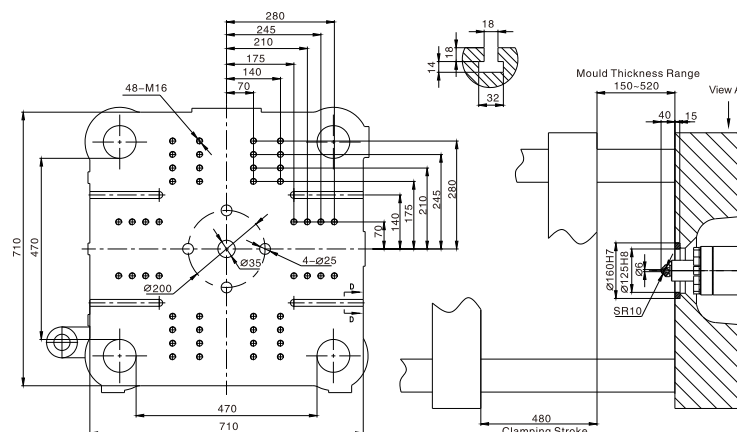


Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
170PVC-SeIII	1762	1567	2161	4513	5252	1284	1737	658	800	789	869	2729	1487	300	680
210PVC-SeIII	1835	1645	2200	4778	5625	1364	1907	702	800	824	954	3009	1269	300	743
270PVC-SeIII	1961	1757	2398	5125	6048	1414	2002	781	800	849	1001	3248	1370	300	848
330PVC-SeIII	2078	1884	2284	5575	6531	1514	2137	805	800	899	1069	3649	1494	320	910

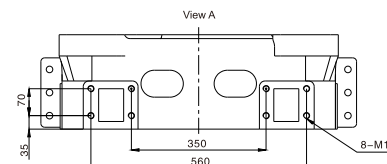
Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

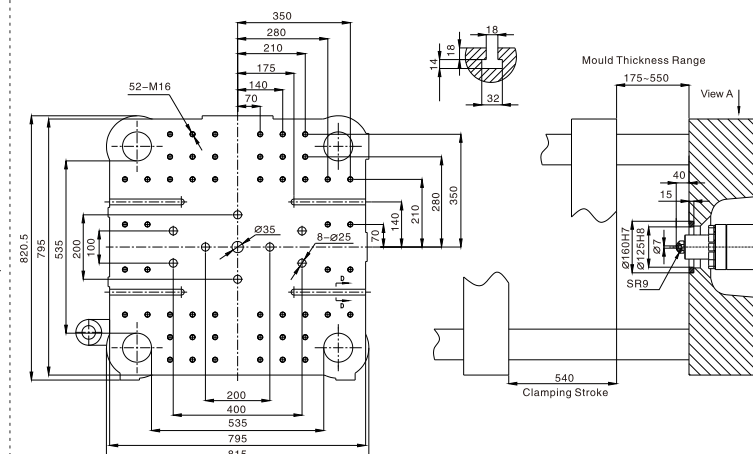
170PVC-SeIII



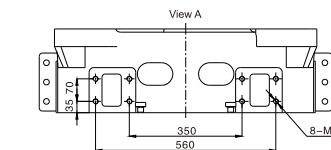
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E8)



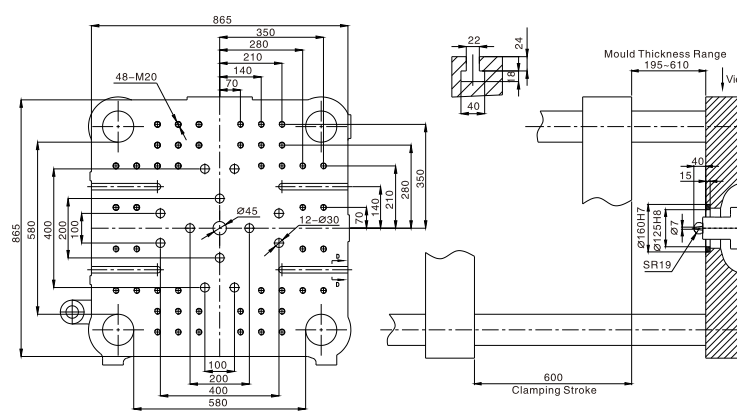
210PVC-SeIII



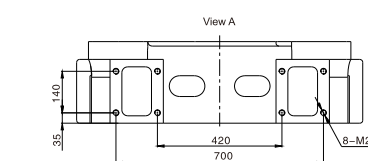
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E9)



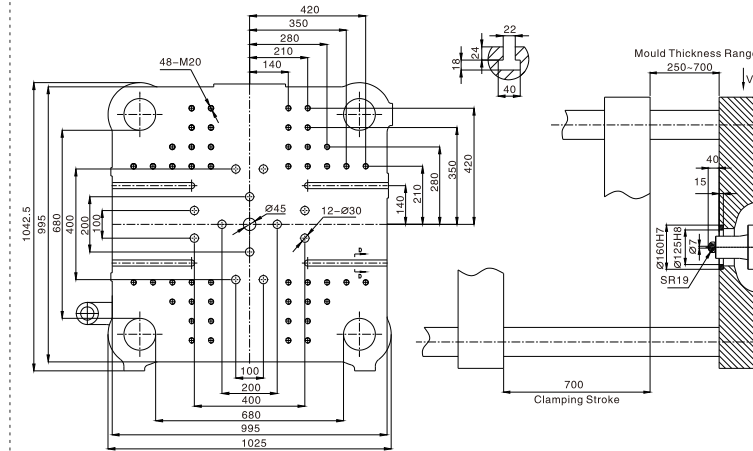
270PVC-SeIII



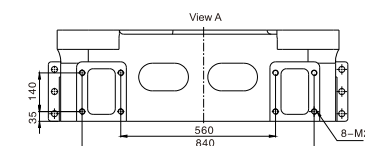
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E10)



330PVC-SeIII



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



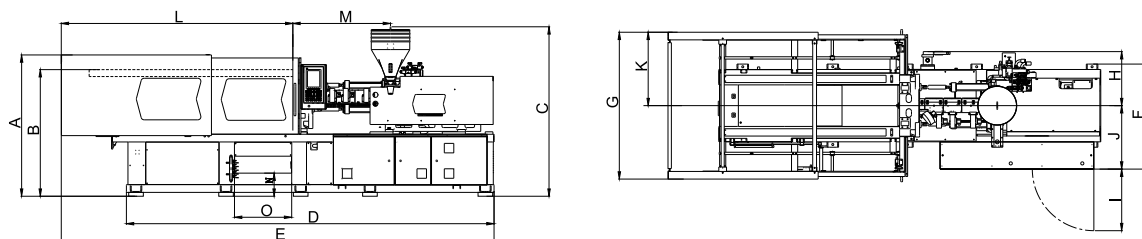
PVC servo pump parameters

Item	Unit	420PVC-SeⅢ		480PVC-SeⅢ		530PVC-SeⅢ		660PVC-SeⅢ	
		4200-2868		4800-3958		5300-5875		6600-5875	
Injection Unit									
Screw diameter	mm	70	75	80	85	90	95	90	95
Theoretical shot volume	cc	1443	1657	2011	2270	2799	3119	2799	3119
Shot weight (PVC)	g	1732	1988	2413	2724	3359	3743	3359	3743
Shot weight (PVC)	oz	61.2	70.2	85.3	96.2	118.7	132.2	118.7	132.2
Injection pressure	MPa	199	173	197	174	210	188	210	188
Injection rate	cm³/sec	323	371	407	460	489	545	535	596
Injection stroke	mm	375		400		440		440	
Max. screw speed	rpm	108		102		102		111	
Injection unit force	Ton	12		12		20.4		20.4	
Carriage stroke	mm	435		480		600		600	
Clamping Unit									
Clamping force	Ton	420		480		530		660	
Max. daylight	mm	1530		1600		1700		1830	
Clamping stroke	mm	780		780		850		910	
Distance btwn. tie bars	mm	740x740		820x800		840x830		920x920	
Min. mould dimension	mm	520x520		570X560		580X580		645x645	
Mould thickness range	mm	250–750		300–820		300–850		350~920	
Ejector force	Ton	16.6		16.6		16.6		16.6	
Ejector stroke	mm	210		240		240		290	
No. of ejector pins	unit	13		13		13		21	
Power Unit									
Max. motor power	kW	40.9		50.7		71.2		67.1	
System pressure	MPa	17.5		17.5		17.5		17.5	
Hydraulic pump capacity	L/min	220		275		352		385	
No. of heating zones	unit	5+1		5+1		5+1		5+1	
Heating power	kW	28.95		35.85		39.7		39.7	
Total power	kW	70.85		87.55		111.9		107.8	
Total current	A	96.9		119.7		153.0		131.0	
General									
Machine weight	Ton	14.68		17		23		26	
Oil filling capacity	L	700		720		775		1140	

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

Machine Dimensions

【420~660PVC-SeⅢ】

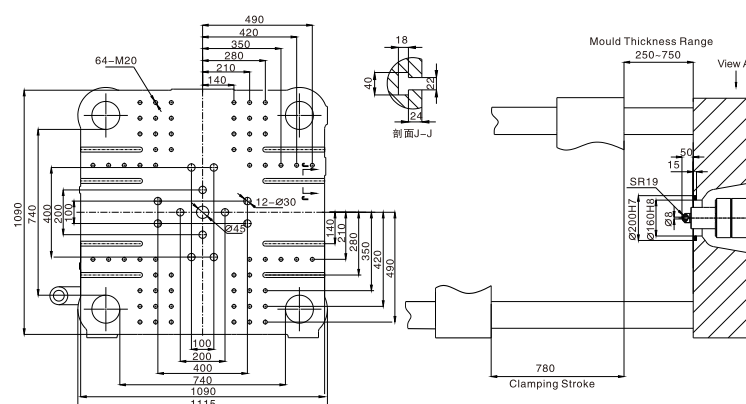


Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
420PVC-SeⅢ	2176	1923	2417	6480	7556	1499	2314	840	800	915	1157	4050	1730	(300)	865
480PVC-SeⅢ	2246	1987	2526	7061	8025	1549	2428	856	800	942	1214	4249	2012	(300)	825
530PVC-SeⅢ	2244	2005	2495	7846	8955	1809	2450	865	800	945	1225	4474	2094	(300)	915
660PVC-SeⅢ	2402	2125	2537	7729	9103	2194	2644	1234	850	960	1322	4690	2094	(300)	700

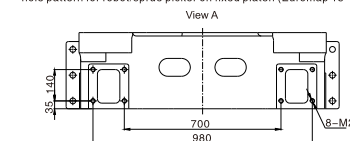
Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

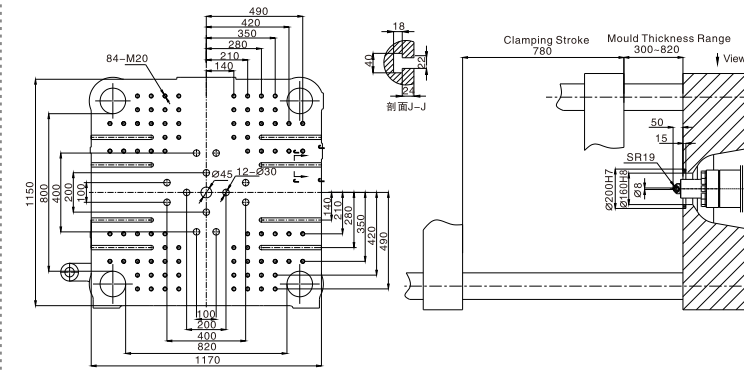
420PVC-SeⅢ



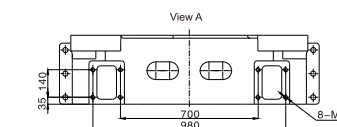
hole pattern for robot/sprue picker on fixed platen (Euomap 18-E12)



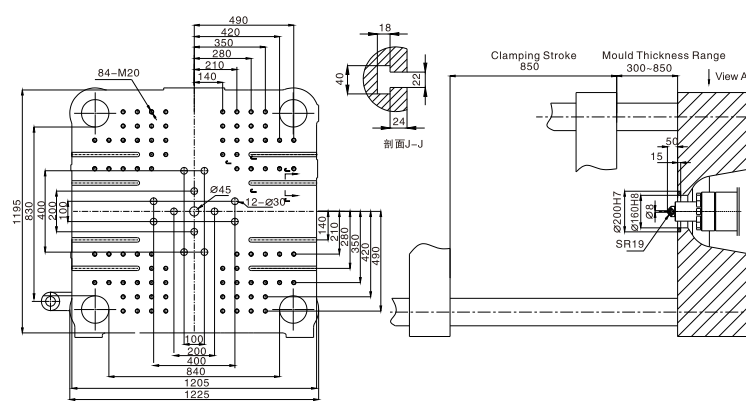
480PVC-SeⅢ



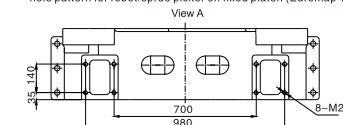
hole pattern for robot/sprue picker on fixed platen (Euomap 18-E13)



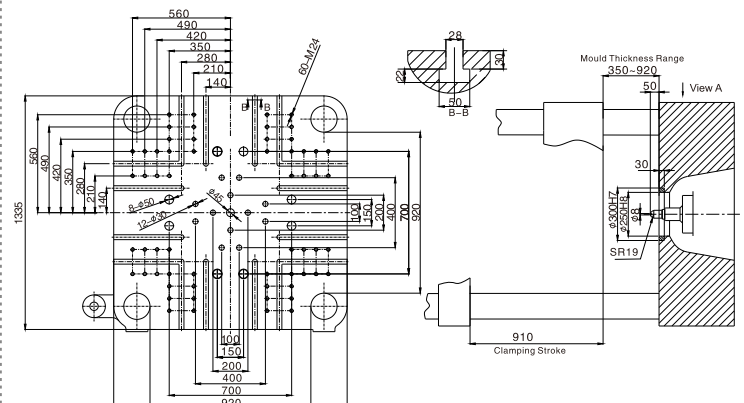
530PVC-SeⅢ



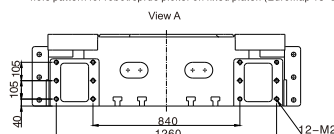
hole pattern for robot/sprue picker on fixed platen (Euomap 18-E13)



660PVC-SeⅢ



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



Remark: C-hopper height for reference only

View A

350

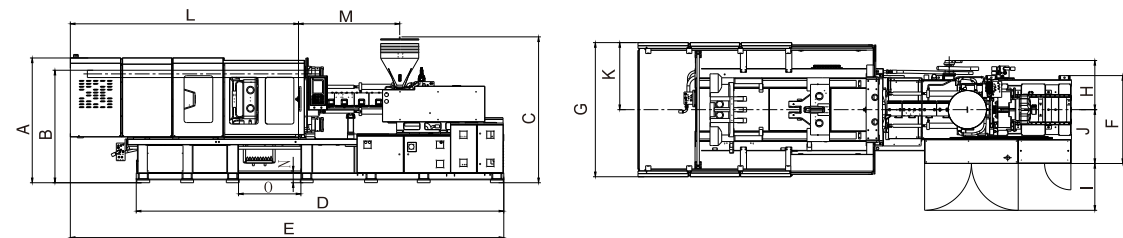
35

70

8-M10

Item	Unit	420PVC-SeKII/S		480PVC-SeKII/S		530PVC-SeKII/S		660PVC-SeKII/S	
		4200-2868		4800-3958		5300-5875		6600-5875	
Injection Unit									
Screw diameter	mm	70	75	80	85	90	95	90	95
Theoretical shot volume	cc	1443	1657	2011	2270	2799	3119	2799	3119
Shot weight (PVC)	g	1732	1988	2413	2724	3359	3743	3359	3743
Shot weight (PVC)	oz	61.2	70.2	85.3	96.2	118.7	132.2	118.7	132.2
Injection pressure	MPa	199	173	197	174	210	188	210	188
Injection rate	cm³/sec	323	371	407	460	489	545	489	545
Injection stroke	mm	375		400		440		440	
Max. screw speed	rpm	108		102		102		102	
Injection unit force	Ton	12		12		20.4		20.4	
Carriage stroke	mm	435		480		600		600	
Clamping Unit									
Clamping force	Ton	420		480		530		660	
Max. daylight	mm	1530		1600		1700		1830	
Clamping stroke	mm	780		780		850		910	
Distance btwn. tie bars	mm	740x740		820x800		840x830		920x920	
Min. mould dimension	mm	520x520		570X560		580X580		645x645	
Mould thickness range	mm	250~750		300~820		300~850		350~920	
Ejector force	Ton	16.6		16.6		16.6		16.6	
Ejector stroke	mm	210		240		240		290	
No. of ejector pins	unit	13		13		13		21	
Power Unit									
Max. motor power	kW	46.1		56.5		73.3		73.3	
System pressure	MPa	17.5		17.5		17.5		17.5	
Hydraulic pump capacity	L/min	220		275		352		352	
No. of heating zones	unit	5+1		5+1		5+1		5+1	
Heating power	kW	28.95		35.85		39.7		39.7	
Total power	kW	76.05		93.35		114.0		114.0	
Total current	A	104.0		127.7		155.9		155.9	
General									
Machine weight	Ton	14.68		17		23		26	
Oil filling capacity	L	540		720		775		1140	

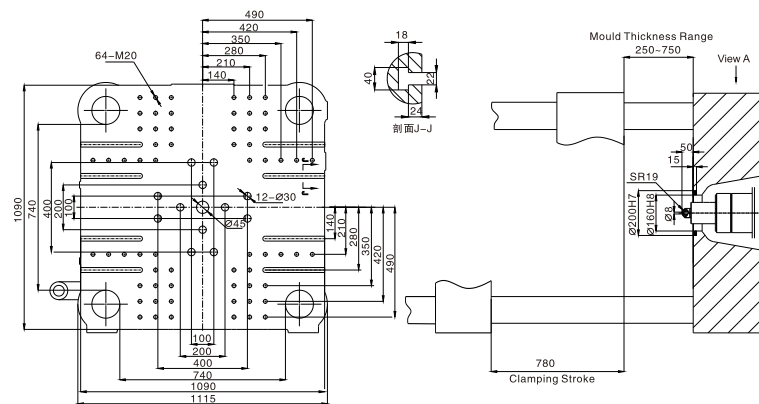
Machine Dimensions



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
420PVC-SeKII/S	2176	1923	2417	6480	7556	1499	2314	840	800	915	1157	4050	1730	(300)	865
480PVC-SeKII/S	2246	1987	2526	7061	8025	1549	2428	856	800	942	1214	4249	2012	(300)	860
530PVC-SeKII/S	2244	2005	2495	7846	8955	1809	2450	865	800	945	1225	4474	2094	(300)	915
660PVC-SeKII/S	2402	2125	2537	7729	9103	2194	2644	1234	850	960	1322	4690	2094	(300)	700

Platen/Nozzle Dimensions

480PVC-SeKII/S



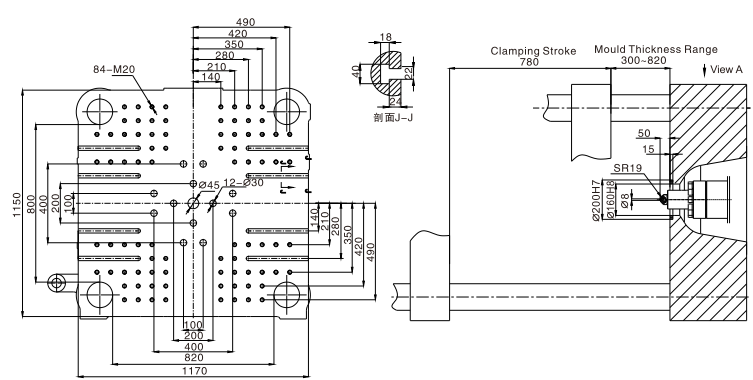
View A

35 140

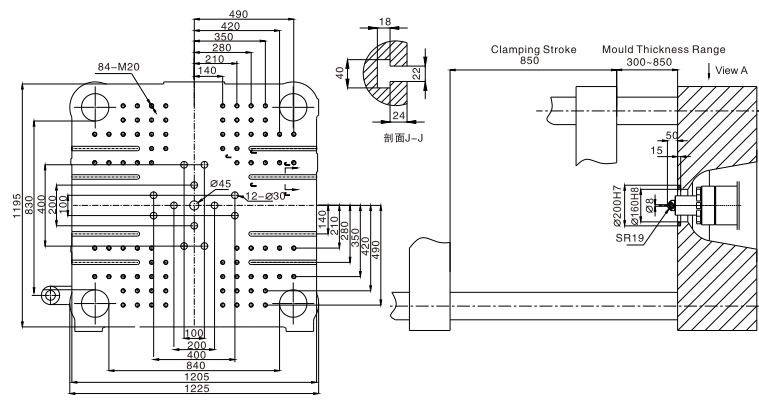
700

980

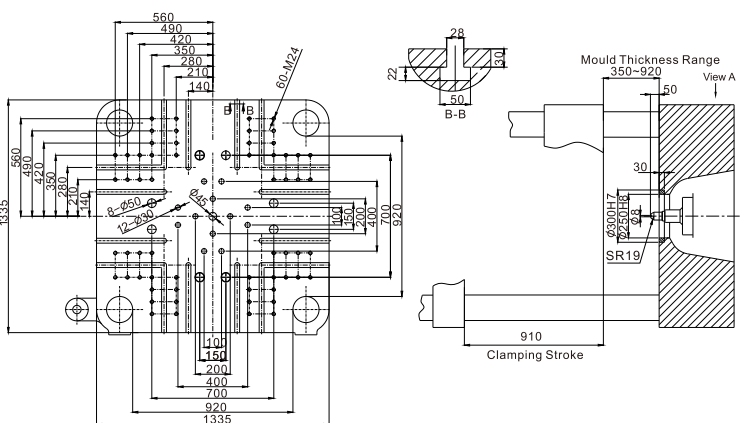
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530 PVC-SeKII/S



660 PVC-SeKII/S



Large-sized PVC servo pump parameters

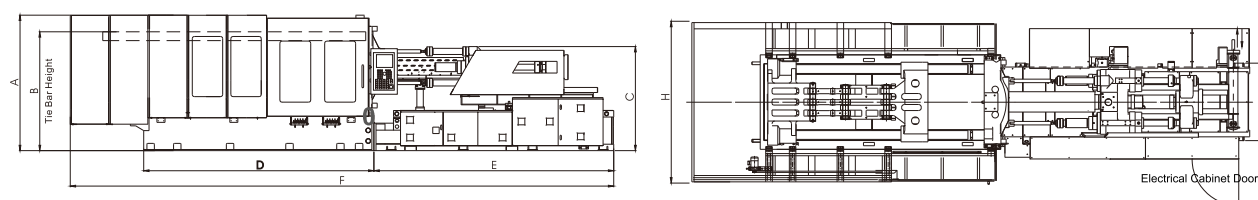
Item	Unit	750 PVC-SeIII	850 PVC-SeIII	1000 PVC-SeIII
Injection Unit				
Screw diameter	mm	100	100	110
Theoretical shot volume	cc	3691	3691	4657
Shot weight (PVC)	g	4430	4430	5588
Shot weight (PVC)	oz	157	157	197
Injection pressure	MPa	171	171	173
Injection rate	cm ³ /sec	706	706	787
Injection stroke	mm	470	470	490
Max. screw speed	rpm	0~81	0~81	0~71
Injection unit force	Ton	19.8	19.8	19.8
Carriage stroke	mm	600	600	650
Clamping Unit				
Clamping force	Ton	750	850	1000
Max. daylight	mm	2050	2200	2300
Clamping stroke	mm	1025	1100	1150
Distance btwn. tie bars	mm	1000x1000	1060x1060	1100x1100
Min. mould dimension	mm	700x700	740x740	780x780
Mould thickness range	mm	350~1025	450~1100	450~1150
Ejector force	Ton	25	25	25
Ejector stroke	mm	350	350	350
No. of ejector pins	unit	21	21	21
Power Unit				
Max. motor power	kW	67.6	67.6	77.4
System pressure	Mpa	17	17	17
Hydraulic pump capacity	L/min	440	440	495
No. of heating zones	unit	5+1	5+1	5+1
Heating power	kW	48	48	56
Total power	kW	116.6	116.6	134.4
Total current	A	141.7	141.7	163.4
General				
Machine weight	Ton	40.0	44.0	53.0
Oil filling capacity	L	1400	1400	1600

Item	Unit	750PVC-SeKII/S	850PVC-SeKII/S	1000PVC-SeKII/S
Max. motor power	kW	83.8	83.8	94.2
Total power	kW	132.8	132.8	151.2
Total current	A	161.4	161.4	183.8

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

Machine Dimensions

【 750~1000PVC-SeIII/PVC-SeKII/S 】

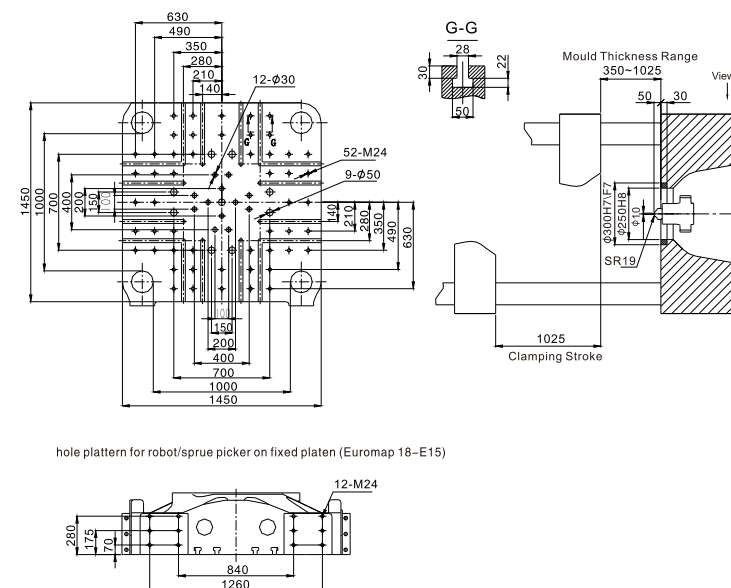


Model	A	B	C	D	E	F	G	H
750PVC-SeIII/PVC-SeKII/S	2539	2227	2635	4318	4497	10192	1410	2946
850PVC-SeIII/PVC-SeKII/S	2420	2300	2635	4668	4497	10514	1410	3100
1000PVC-SeIII/PVC-SeKII/S	2687	2370	2717	4904	4900	11090	1482	3380

Remark: C-hopper height for reference only

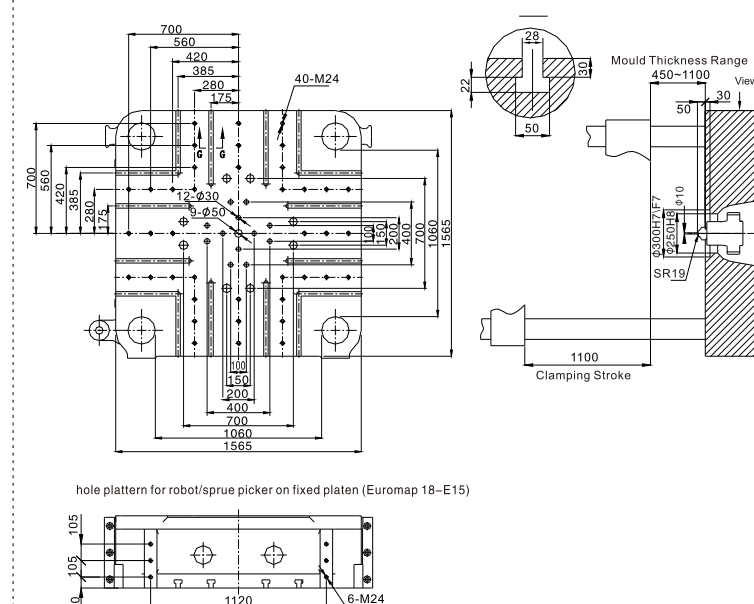
Platen/Nozzle Dimensions

750PVC-SeIII/PVC-SeKII/S



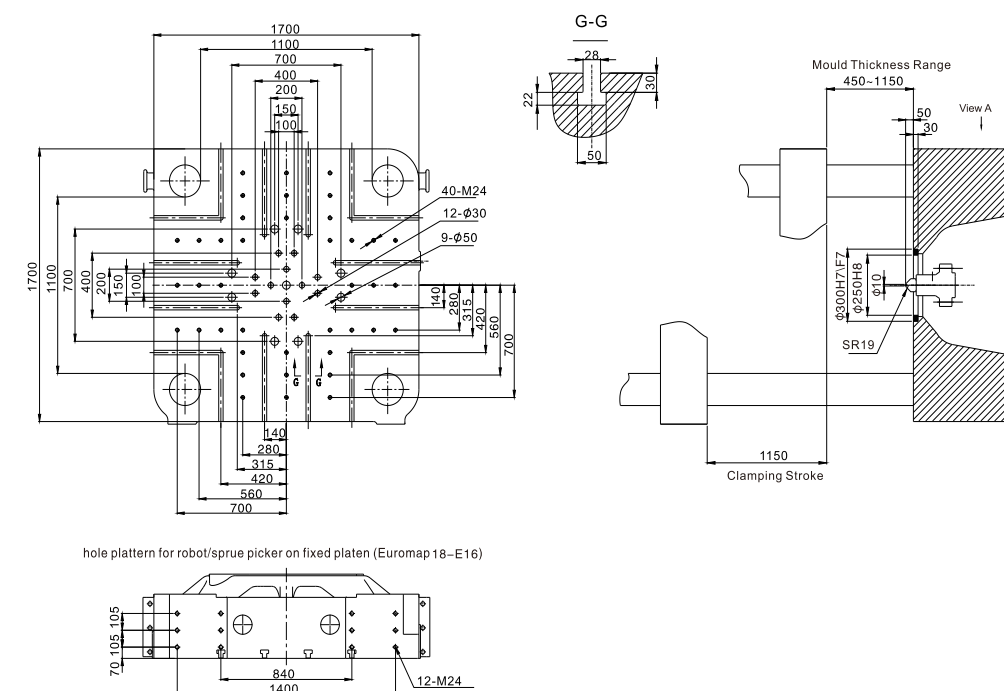
hole pattern for robot/sprue picker on fixed platen (Euromap 18-E15)

850PVC-SeIII/PVC-SeKII/S



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

1000PVC-SeIII/PVC-SeKII/S



hole pattern for robot/sprue picker on fixed platen (Euromap 18-E16)

Item	Unit	1250 PVC-SeⅢ	1500 PVC-SeⅢ	1800 PVC-SeⅢ
Injection Unit				
Screw diameter	mm	125	135	145
Theoretical shot volume	cc	6835	9232	10651
Shot weight (PVC)	g	8203	11079	12781
Shot weight (PVC)	oz	290	391	452
Injection pressure	MPa	180	187	162
Injection rate	cm³/sec	839	810	1215
Injection stroke	mm	557	645	645
Max. screw speed	rpm	0~60	0~46	0~47
Injection unit force	Ton	19.8	28.8	28.8
Carriage stroke	mm	800	800	850
Clamping Unit				
Clamping force	Ton	1250	1500	1800
Max. daylight	mm	2600	2900	3000
Clamping stroke	mm	1300	1500	1500
Distance btwn. tie bars	mm	1250x1250	1400x1400	1600x1400
Min. mould dimension	mm	875x875	980x980	1100x980
Mould thickness range	mm	500~1300	600~1400	700~1500
Ejector force	Ton	25	33	33
Ejector stroke	mm	350	350	380
No. of ejector pins	unit	21	33	33
Power Unit				
Max. motor power	kW	91.6	91.6	104.1
System pressure	Mpa	17	17	17
Hydraulic pump capacity	L/min	550	550	715
No. of heating zones	unit	5+1	5+1	5+1
Heating power	kW	72	90	90
Total power	kW	164.6	182.6	195.1
Total current	A	200.1	222.0	237.1
General				
Machine weight	Ton	71.0	103.0	130.0
Oil filling capacity	L	1600	2000	2000

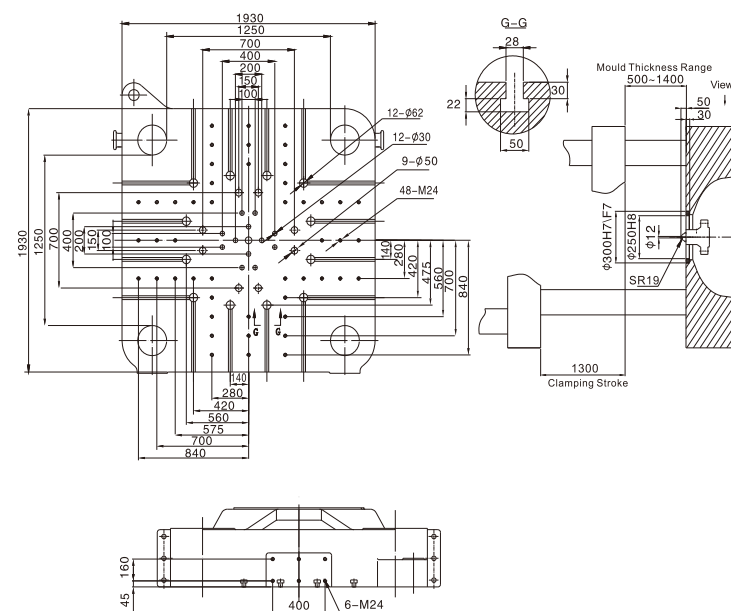
Item	Unit	1250PVC-SeKII/S	1500PVC-SeKII/S	1800PVC-SeKII/S
Max.motorpower	kW	112	112	131.9
Total power	kW	185	203	222.9
Total current	A	224.9	246.7	270.9

Machine Dimensions

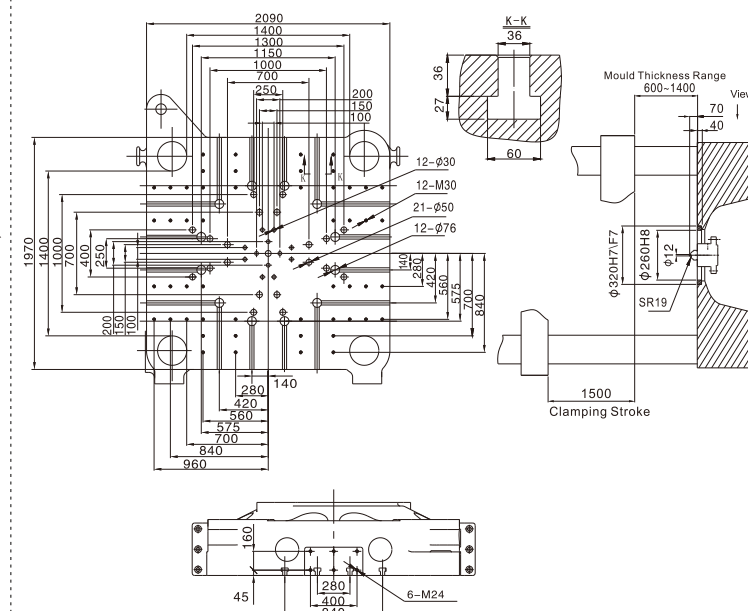
Model	A	B	C	D	E	F	G	H
1250PVC–SeIII/PVC–SeKII/S	2867	2530	2853	5485	5060	12149	1482	3620
1500PVC–SeIII/PVC–SeKII/S	2808	2700	3200	6158	5360	13290	1340	4000
1800PVC–SeIII/PVC–SeKII/S	2808	2720	3200	6340	5360	13439	1340	4240

Platen/Nozzle Dimensions

1250PVC-SeIII/PVC-SeKII/S



1500PVC-SeIII/PVC-SeKII/S



1800 PVC-SeIII/PVC-SeKII/S

