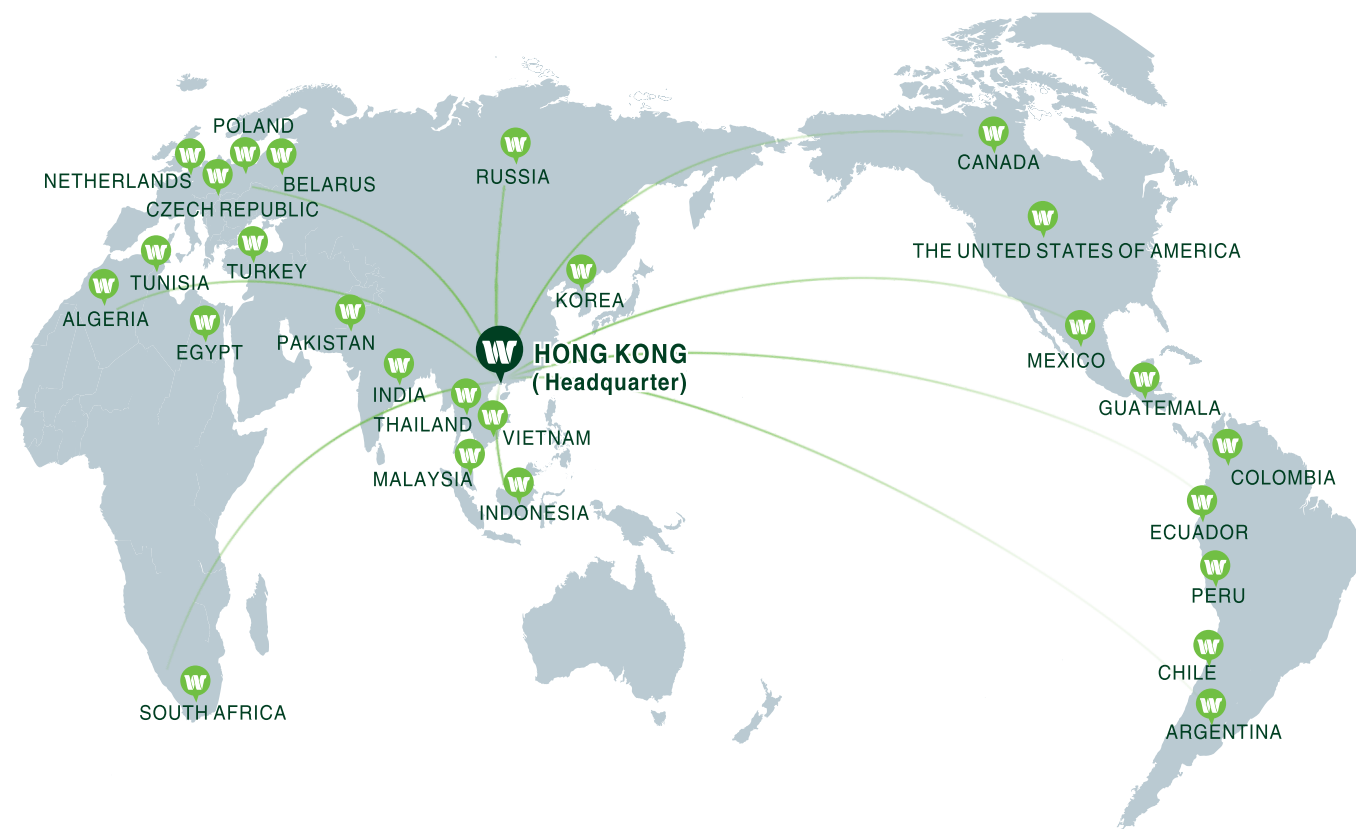


Our offices and agents



WELLTEC

*Special Injection for **PET***



WELLTEC

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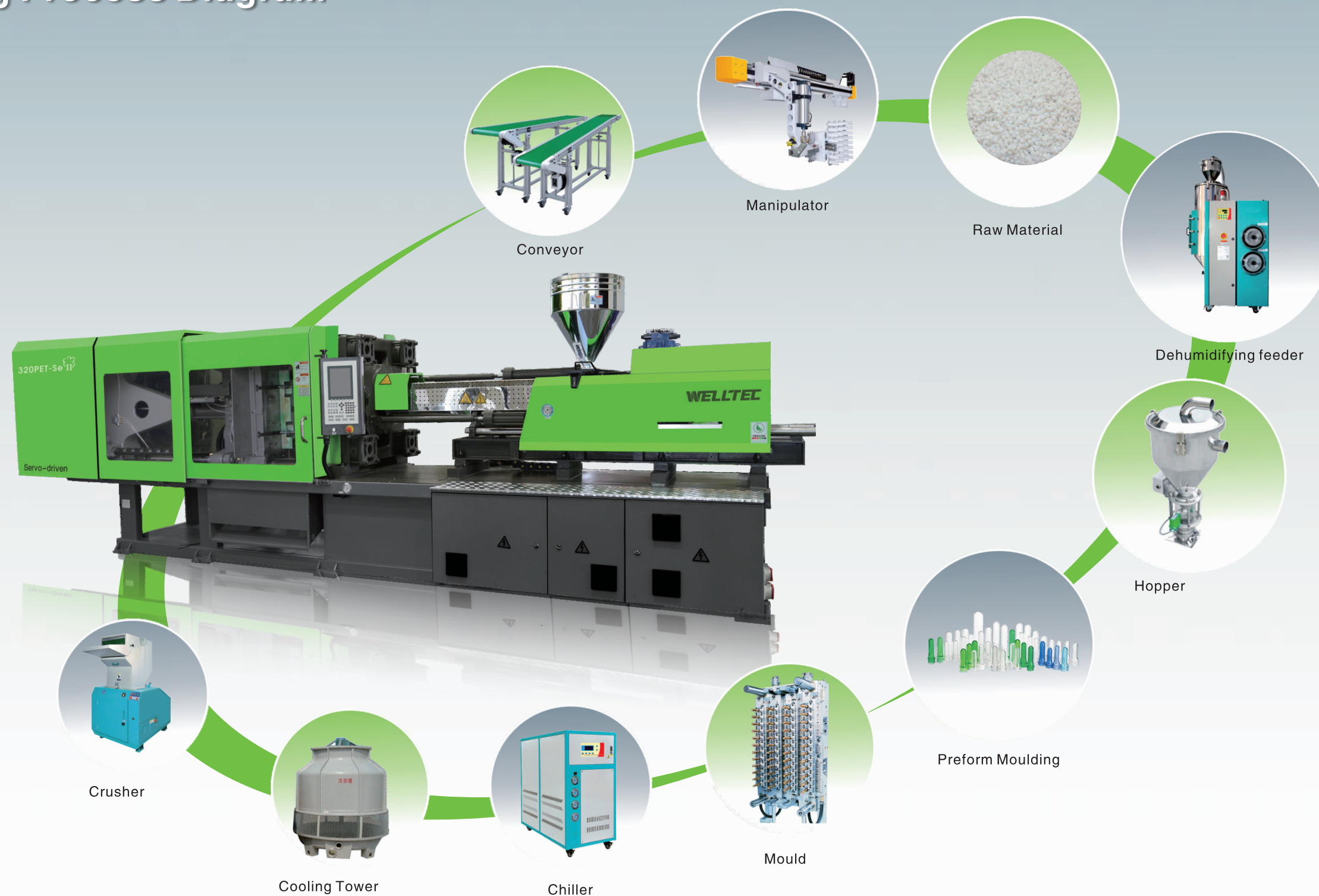
Version NO. PET-1908W



www.welltec.com.hk

PET Preform Injection Moulding System

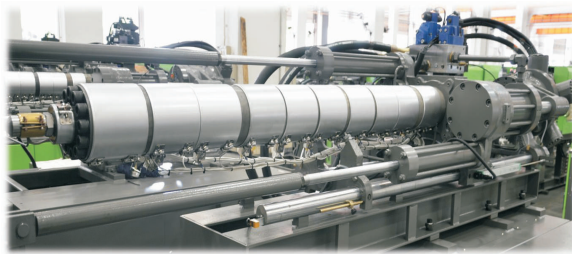
Forming Process Diagram



Main Features

Ultra-large shot weight

Large diameter screw increases the injection stroke and the injection volume is about 50% larger than the standard machine.



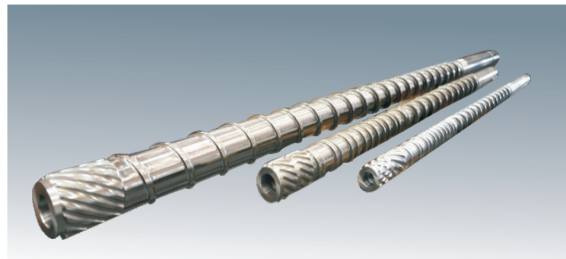
Large torque hydraulic motor

Stable and continuous output of high torque to meet the requirement of high speed plasticising for PET.



Efficient and high-performance screw

The design of low shear and large length-diameter ratio increases the plasticising efficiency by more than 30%, and effectively reduces acetaldehyde level.



Excellent plasticising effect

It ensures the high transparency of the ordinary preform. Raw materials of even colour is attainable when mixing with masterbatch, toner and colour oil. Materials of a larger proportion of recycled plastics can be also evenly plasticised.

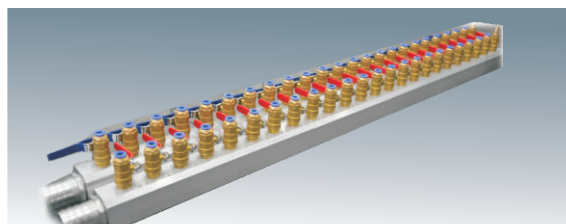
Stable and precise injection

Wear-resistant tip set and quality position transducers are provided.



Strong ejector design

The ejector force is about 40% larger than the ordinary machine, and the ejector stroke is 10–40mm longer.



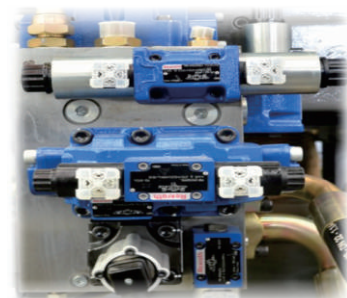
Multi water channels of large pipe

Equipped with 15–23 groups of mould cooling water channels to shorten the cooling time and improve the transparency of the preform.

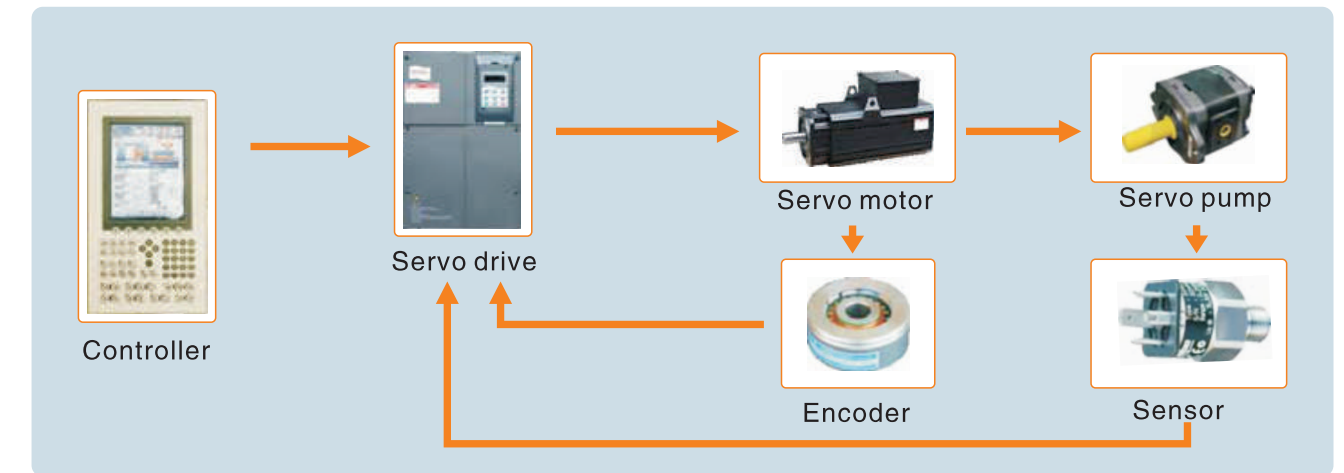
Excellent energy saving effect

Compared to the use of traditional machines, an electricity reduction up to 60% is possible with the use of precise and high efficient servo gear pump together with the low resistance hydraulic channel.

Heating of hydraulic system is also better controlled.



Sell series servo hydraulic control principle



S09 smart control system

Software & Functions

B&R professional control system of injection moulding machine

- 10.4 "TFT colour LCD display
- Parameter change record: Users can identify the source of parameter change and the details of the changed parameter
- Assist machine stability through a management of parameter statistics
- Automatic control of temperature parameter by PID
- Mould parameters can be stored with a USB device and used in other machines
- Remote monitoring of parameter and operation sequence by Modem or Ethernet
- Multi-languages display



The remote monitoring software enables users to monitor the screen display of the machines in any place and at any time. Users are able to remotely access the status and quality report of the machines as if they are operating inside the workshop. (Optional item)

PET servo pump parameters

Item		160PET-Se II	190PET-Se II	260PET-Se II	260PET-Se II	320PET-Se II	320PET-Se II	380PET-Se II	380PET-Se II	450PET-Se II	500PET-Se II	660PET-Se II	260PET-Se II	380PET-Se II
International specification	UNIT	1600-720	1900-980	2600-1280	2600-1660	3200-1660	3200-2780	3800-2780	3800-3700	4500-3700	5000-4620	6600-4620	2600-1080	3800-2280
INJECTION UNIT				Standard	Large	Standard	Large	Standard	Large				For Thin-wall PET Products	
Screw diameter	mm	55	60	65	75	75	85	85	94	94	105	110	55	70
Theoretical shot volume	cc	594	783	995	1458	1458	2270	2270	3019	3019	3810	4181	603	1262
Shot weight (PET)	g	683	901	1145	1677	1677	2610	2610	3472	3472	4381	4809	694	1452
Shot weight (PET)	oz	24.1	31.8	40.4	59.1	59.1	92.1	92.1	122.5	122.5	154.5	169.6	24.5	51.2
Length/Diameter ratio	L/D	24	24	24	24	24	24	24	24	24	24	24	24	24
Injection pressure	MPa	121	126	129	114	114	122	122	123	123	121	111	180	180
Injection rate(PET)	g/s	295	360	405	502	627	732	732	892	892	1210	1328	498	497
Injection stroke	mm	250	277	300	330	330	400	400	435	435	440	440	254	328
Max. screw speed	rpm	185	177	163	127	133	122	122	125	125	127	124	260	167
Plasticising capacity (PET)	g/s	54.7	65.9	72.6	108.6	114.1	140.0	140.0	170.3	170.3	207.6	247.9	69.8	83.6
CLAMPING UNIT														
Clamping force	Ton	160	190	260	260	320	320	380	380	450	500	660	260	380
Max. daylight	mm	1006	1100	1130	1130	1275	1275	1450	1450	1560	1640	1830	1130	1450
Clamping stroke	mm	446	490	550	550	615	615	710	710	740	820	910	550	710
Distance between tie bars	mm	460X460	510X510	580X580	580X580	660X660	660X660	740X740	740X740	780X780	825X825	920X920	580X580	740X740
Min. mould dimension	mm	320x320	350x350	400X400	400X400	460X460	460X460	510X510	510X510	540X540	570X570	645X645	400X400	510X510
Mould thickness range	mm	150-560	175-610	200-580	200-580	250-660	250-660	250-740	250-740	300-820	300-820	350-920	200-580	250-740
Ejector force	Ton	6.5	8.5	10.8	10.8	13.4	13.4	16.2	16.2	19.2	19.2	22.6	10.8	16.2
Ejector stroke	mm	140	150	185	185	200	200	230	230	260	260	300	185	230
No. of ejector pins	unit	5	5	9	9	13	13	13	13	13	13	21	9	13
POWER UNIT														
Major motor	kW	23	31.4	32	32	45	56.5	56.5	81.4	81.4	94.2	94.2	56.5	56.5
System pressure	MPa	17	17	17	17	17	17	17	17	17	17	17	17	17
No. of heater zones	unit	4+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1
Heater input power	kW	18.94	22.54	24.54	34.93	34.93	45.93	45.93	45.85	45.85	57.93	61.73	19.52	31.53
Ultimate capacity	kW	42.94	54.94	57.54	67.93	80.93	103.43	103.43	128.25	128.25	153.13	156.93	77.02	89.03
Current	A	58.7	75.1	78.7	92.9	110.7	141.4	141.4	175.4	175.4	209.4	214.6	105.3	121.7
GENERAL DATA														
Machine dimensions(LxWxH)	m	5.3x1.4x1.8	5.6x1.5x1.8	6.0x1.6x2.0	6.6x1.6x2.0	6.9x1.7x2.0	7.6x1.7x2.0	8.2x1.8x2.1	8.6x1.9x2.1	8.9x1.9x2.1	9.6x2.1x2.2	10.0x2.1x2.3	5.9x1.6x2.0	7.7x1.8x2.1
Net weight	Ton	5.5	6.8	8.6	8.8	11	11.5	15	15.4	18	20.5	27	8.5	15
Oil filling capacity	L	300	330	450	450	550	550	600	600	620	900	1100	500	570

- Note 1: the above PET machine is not only suitable for moulding PET preform products, but also suitable for producing thick wall products of PP, PE and PPR materials.
- Note 2: 260-ton thin-wall PET machine is mainly used for the production of blood collection tube and similar items; 380-ton thin-wall PET machine is mainly used for the production of thin-wall packaging box of wine.
- Note 3: thin-wall PET machine is also suitable for producing general thin-wall products of PP, PE, PS and other raw materials.

PET variable pump parameters

Item		160PET	190PET	260PET	320PET	380PET	450PET
International specification	UNIT	1600-720	1900-980	2600-1280	3200-1660	3800-2780	4500-3700
INJECTION UNIT							
Screw diameter	mm	55	60	65	75	85	94
Theoretical shot volume	cc	594	783	995	1458	2270	3019
Shot weight (PET)	g	683	901	1145	1677	2610	3472
Shot weight (PET)	oz	24.1	31.8	40.4	59.1	92.1	122.5
Length/Diameter ratio	L/D	24	24	24	24	24	24
Injection pressure	MPa	121	126	129	114	122	123
Injection rate(PET)	g/s	272	339	367	538	718	808
Injection stroke	mm	250	277	300	330	400	435
Max. screw speed	rpm	171	166	148	114	120	113
Plasticising capacity (PET)	g/s	50.5	62.0	65.8	97.7	137.3	141.5
CLAMPING UNIT							
Clamping force	Ton	160	190	260	320	380	450
Max. daylight	mm	1006	1100	1130	1275	1450	1560
Clamping stroke	mm	446	490	550	615	710	740
Distance between tie bars	mm	460X460	510X510	580X580	660X660	740X740	780X780
Min. mould dimension	mm	320x320	350x350	400X400	460X460	510X510	540X540
Mould thickness range	mm	150-560	175-610	200-580	250-660	250-740	300-820
Ejector force	Ton	6.5	8.5	10.8	13.4	16.2	19.2
Ejector stroke	mm	140	150	185	200	230	260
No. of ejector pins	unit	5	5	9	13	13	13
POWER UNIT							
Major motor	kW	18.5	22	25.3	34.5	45	55
System pressure	MPa	17	17	17	17	17	17
No. of heater zones	unit	4+1+1	5+1+1	5+1+1	5+1+1	5+1+1	5+1+1
Heater input power	kW	18.94	22.54	24.54	34.93	45.93	45.85
Ultimate capacity	kW	38.4	45.5	50.84	70.43	91.93	101.85
Current	A	58.4	69.2	77.2	107.0	139.7	154.7
GENERAL DATA							
Machine dimensions(LxWxH)	m	5.3x1.4x1.8	5.6x1.5x1.8	6.0x1.6x2.0	6.9x1.7x2.0	8.2x1.8x2.1	8.9x1.9x2.1
Net weight	Ton	5.5	6.8	8.6	11	15	18
Oil filling capacity	L	300	330	450	550	600	650

• Note 1: the above PET machine is also suitable for producing thick wall products of PP, PE and PPR materials.

Application

Case sharing

Preform of mineral water bottle

- One mould with 48 cavities, 17g per product, 816g in total
- The production cycle is about 17.5 seconds
- Machine Model 320 PET-Se II (large volume injection), screw diameter of 85 mm



Preform of edible oil bottle

- One mould with 12 cavities, 275g per product, 3300g in total
- The production cycle is about 50 seconds
- Machine Model 500 PET-Se II , screw diameter of 105 mm
- Take out by manipulator



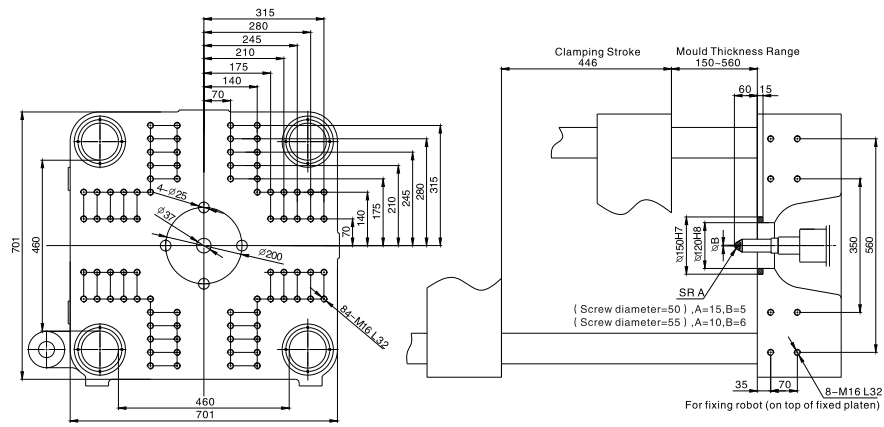
Medical blood collection tube

- Length 75mm, diameter 12.4mm, wall thickness about 1mm
- One mould with 42 cavities, 3.6g per product, 173g in total
- The production cycle is about 11 seconds
- Machine Model 260PET-Se II (thin-walled PET special) , screw diameter of 55 mm

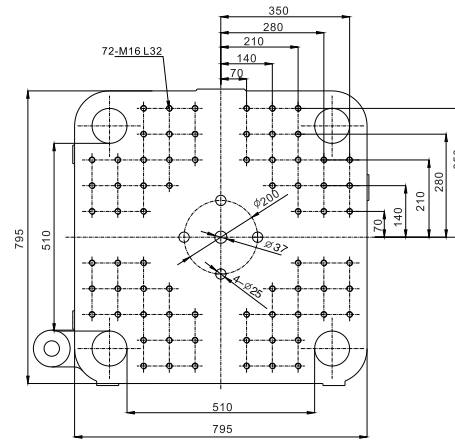


Platen/Nozzle Dimensions (160~660T)

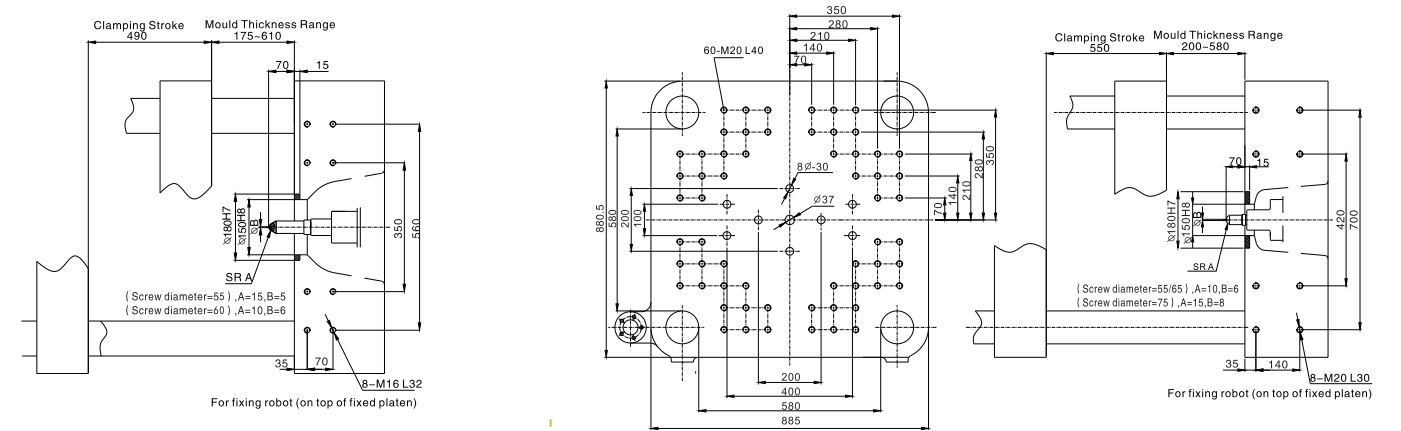
160PET-SeII



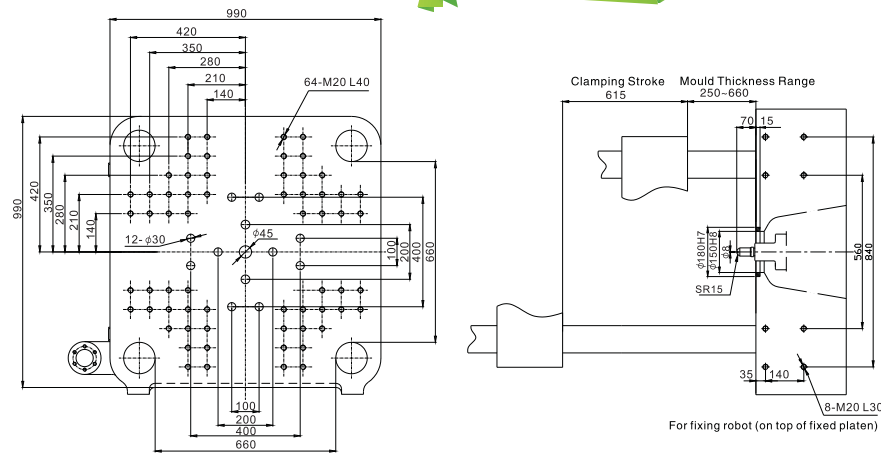
190PET-SeII



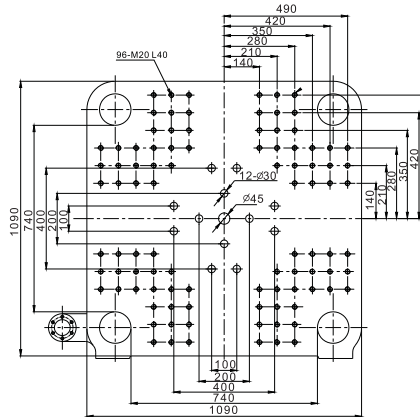
260PET-SeII



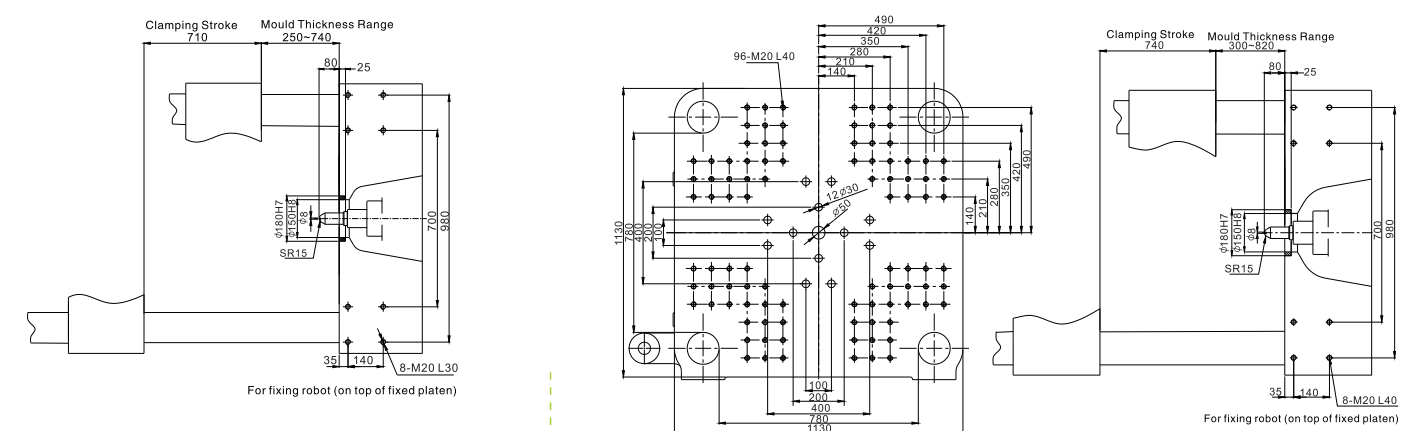
320PET-SeII



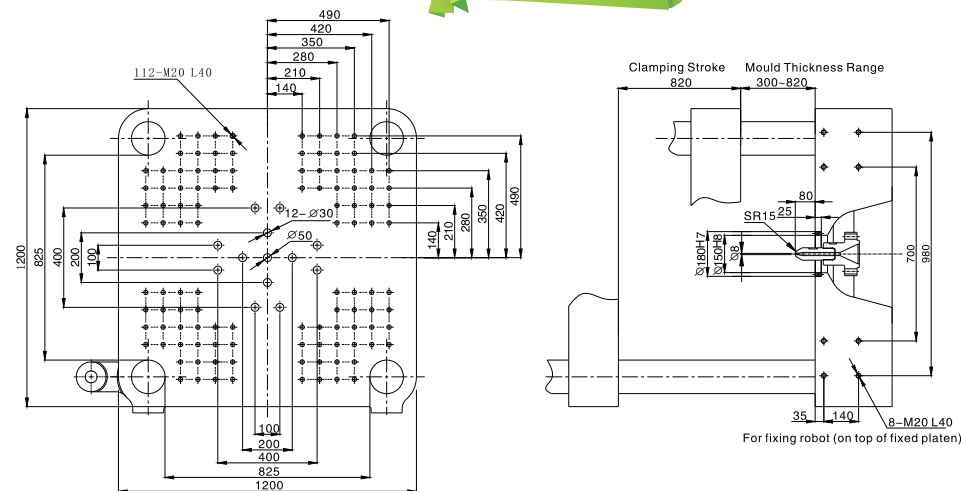
380PET-SeII



450PET-SeII



500PET-SeII



660PET-SeII

