

Our offices and agents



Special Injection for PET



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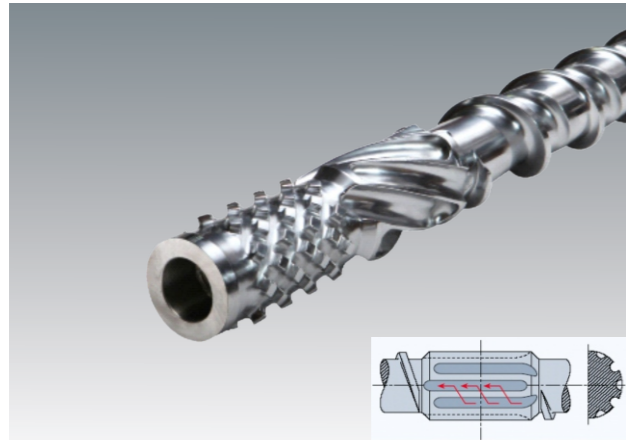


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PET Preform Injection Moulding System / Process Diagram



Machine Features



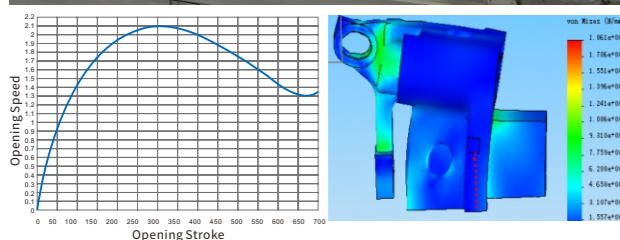
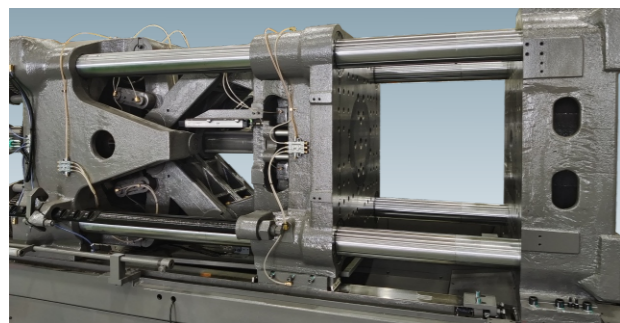
Efficient and high-performance screw

The design of low shear and high L/D ratio increases the plasticising efficiency by more than 30%, and effectively reduces acetaldehyde level.



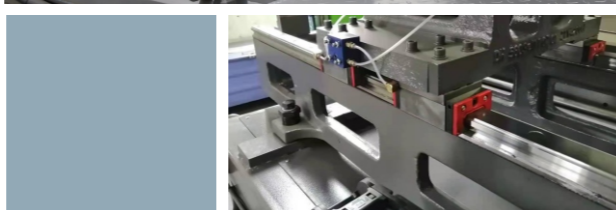
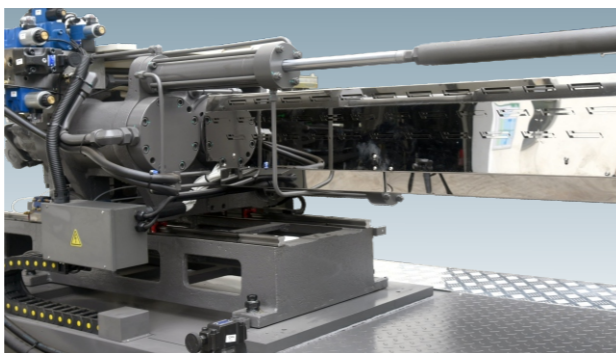
Excellent plasticising effect

It ensures the high transparency of the preform. Even colouring by mixing master batch, pigment or liquid colourant is attainable. Resins with higher proportion of recycled plastics can be also evenly plasticised.



Advanced design of clamping structure

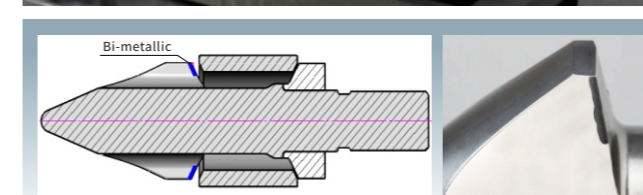
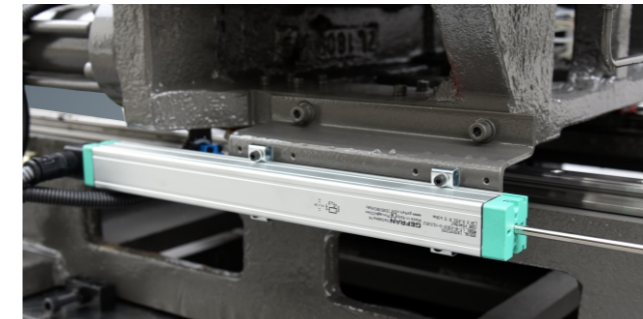
Extra durability achieved through even mould platen stress dispersion and high-strength clamping structure. Extra large opening stroke satisfy the production of long depth preform.



Linear guide rail injection unit

Linear guide rail greatly reduces mechanical back pressure and energy consumption.

Machine Features



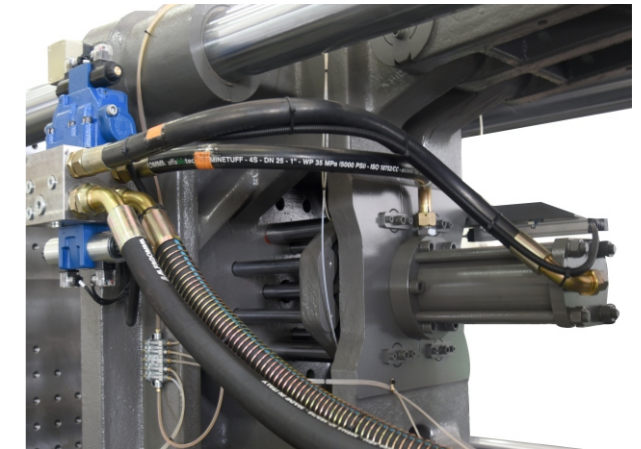
Stable and precise injection

Wear-resistant bi-metallic tip set is provided.



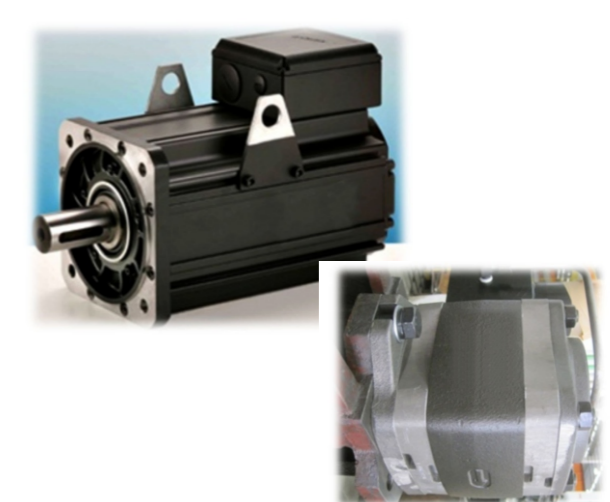
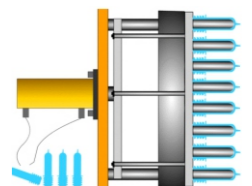
Large torque hydraulic motor

Stable and continuous output of high torque to meet the requirement of high speed plasticising for PET. Some of the standard equipment are with high torque motor of 210 bar.



Strong ejector design

Enlarged ejector hydraulics to enhance ejector speed, force and stroke.



Excellent energy saving

Precise, energy saving servo motor and high performance gear pump. Large diameter hydraulic pipeline.

⚙️ PET servo pump parameters

ITEM	UNIT	330PETIII/e		420PETIII/e			480PETIII/e		500PP-SeIII
		3300-1930	3300-2860	4200-2860	4200-3500	4200-4760	4800-3500	4800-4760	5000-4760
INJECTION UNIT									
									PP-144cav
Screw diameter	mm	75	85	85	94	105	94	105	110
Theoretical shot volume	cc	1436	2128	2128	2776	3810	2776	3810	4181
Shot weight (PET)	g	1680	2490	2490	3248	4458	3248	4458	4892
Shot weight (PP/PE)	g	1048	1553	1553	2026	2781	2026	2781	3052
Length/Diameter ratio	L/D	24	24	24	24	24	24	24	24
Injection pressure	MPa	134	135	135	126	125	126	125	114
Injection rate(PET)	g/s	559	557	696	743	751	967	978	1073
Injection stroke	mm	325	375	375	400	440	400	440	440
Max. screw speed	rpm	125	125	125	112	112	112	112	125
Plasticising capacity (PET)	g/s	128.4	172.1	172.1	175.3	254.7	175.3	254.7	240.2
CLAMPING UNIT									
Clamping force	Ton	330	330	420	420	420	480	480	500
Max. daylight	mm	1400	1400	1530	1530	1530	1600	1600	1700
Clamping stroke	mm	700	700	780	780	780	780	780	730
Distance btwn. tie bars	mm	680X680	680X680	740X740	740X740	740X740	820X800	820X800	920X1120
Min.mould dimension	mm	470X470	470X470	520X520	520X520	520X520	570X560	570X560	640X780
Mould thickness range	mm	250-700	250-700	250-750	250-750	250-750	300-820	300-820	450-970
Ejector force	Ton	19.8	19.8	19.8	19.8	19.8	23.2	23.2	49.4
Ejector stroke	mm	215	215	230	230	230	270	270	180
No. of ejector pins	unit	13	13	13	13	13	13	13	16
POWER UNIT									
Pump motor power	kW	46.1	46.1	56.5	56.5	56.5	73.3	73.3	73.3
Plasticising motor power	kW	46.1	62.8	62.8	71.2	80.1	71.2	80.1	94.2
No. of heating zones	unit	5+1	5+1	5+1	5+1	5+1	5+1	5+1	5+1
Heating power	kW	44.54	57.93	57.93	61.25	77.21	61.25	77.21	68.98
Total power	kW	137.74	167.83	178.23	189.95	214.81	206.75	231.61	237.48
Total current	A	188.4	229.5	243.7	259.7	293.7	282.7	316.7	324.7
GENERAL DATA									
Machine dimensions (LxWxH)	m	7.5x2.0x2.1	8.0x2.0x2.1	8.5x2.0x2.2	8.8x2.0x2.2	9.0x2.0x2.2	9.0x2.1x2.2	9.5x2.1x2.2	10.2x2.3x2.6
Net weight	Ton	12.0	12.3	15.2	15.6	16.5	17.3	18.3	35.0
Oil filling capacity	L	600	600	600	600	600	600	600	600

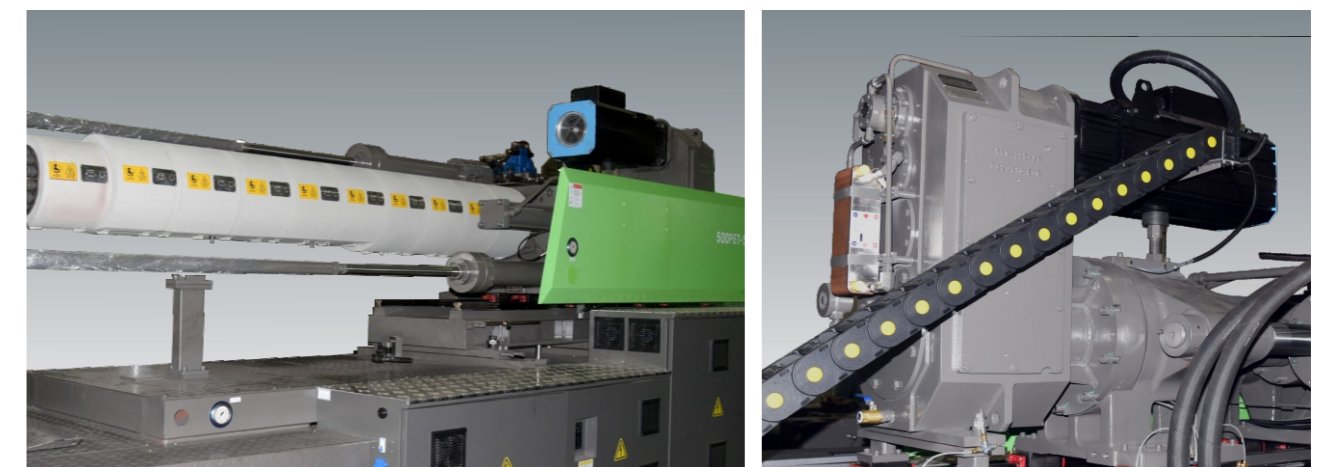
■ We are always working on improvement and reserve the rights to change design and specifications without prior notice

⚙️ Simultaneous electric plasticising



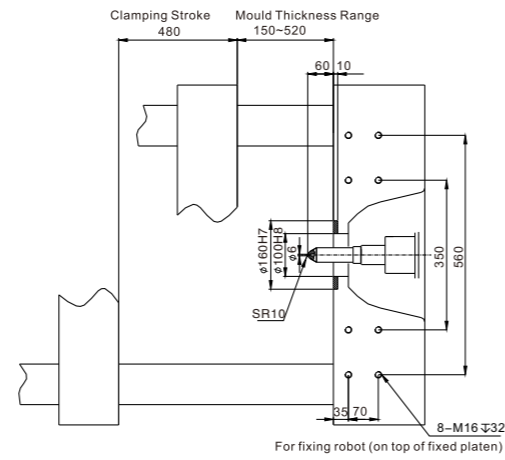
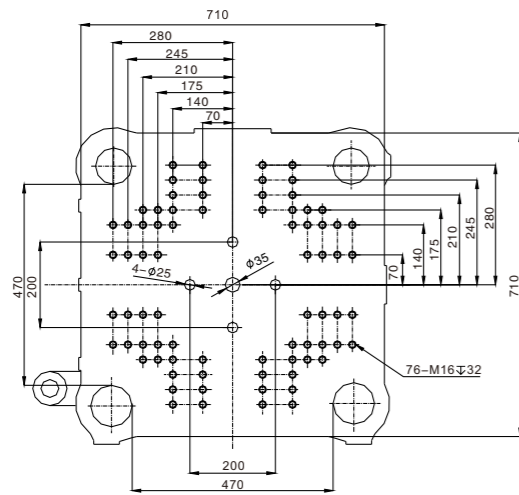
■ The features of simultaneous electric plasticising

- The synchronisation of plasticising, mould opening and product take-out shortens the cycle time.
- 20-40% energy saving is attained. Reduction in hydraulic oil and cooling water consumption.
- High-power motor and driver ensure stable plasticising.
- Low-noise.

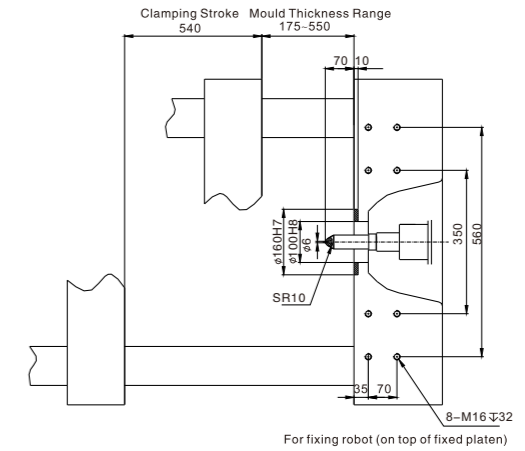
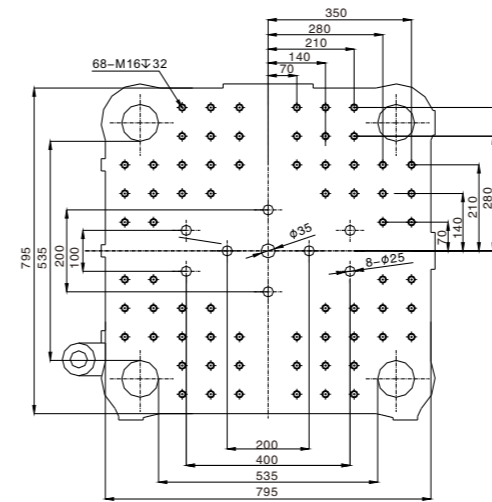


Platen/Nozzle Dimensions

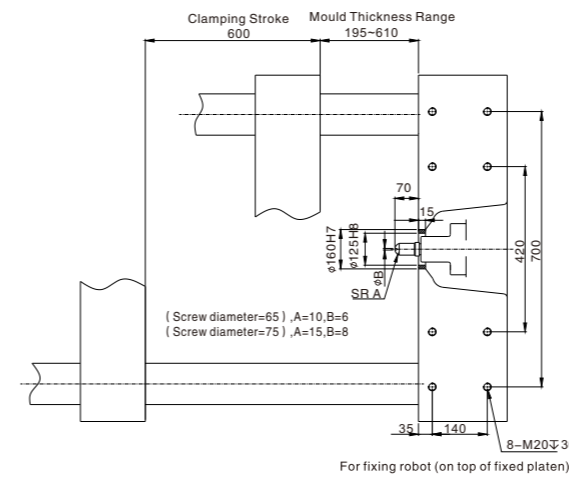
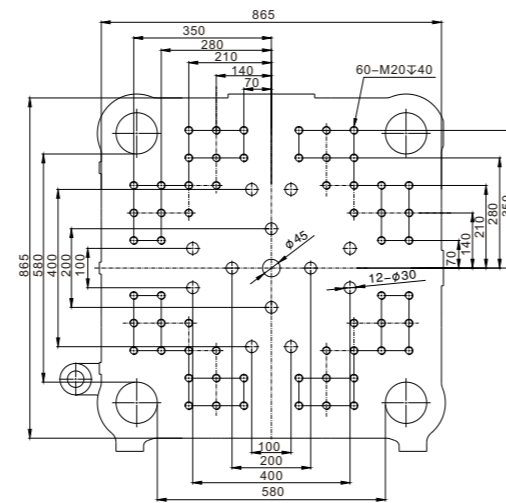
170PET III



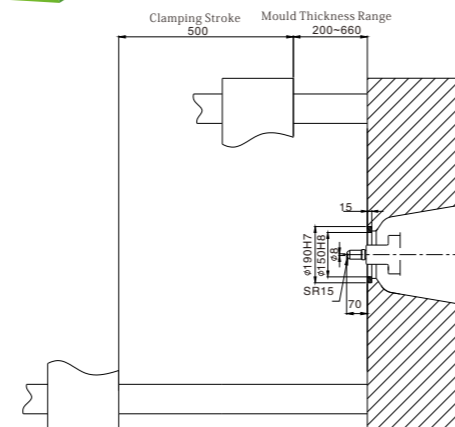
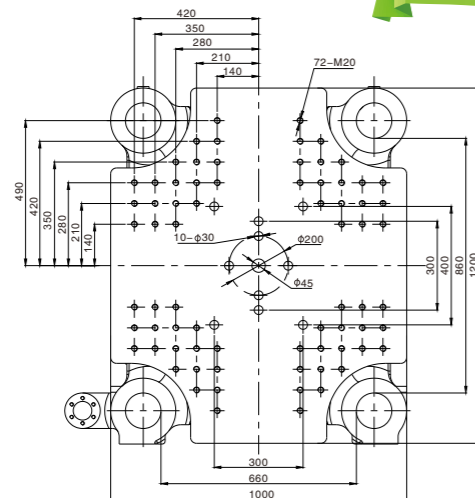
210PET III



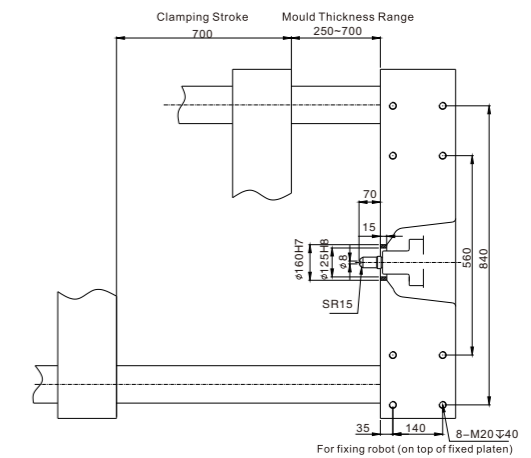
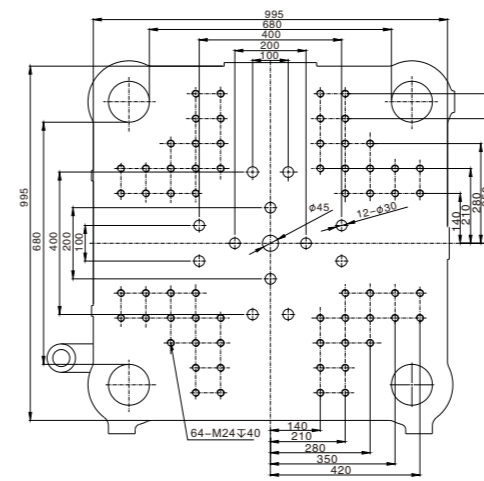
270PET III



300PET III

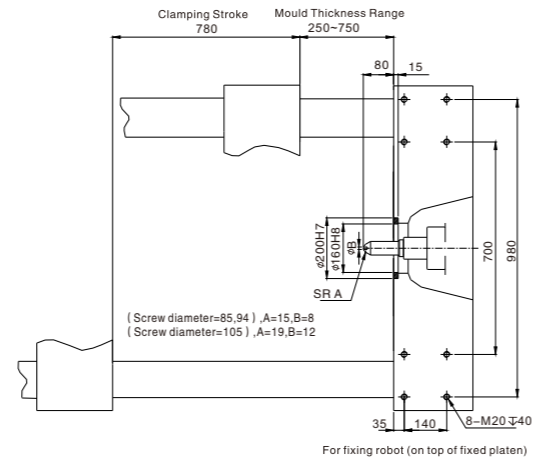
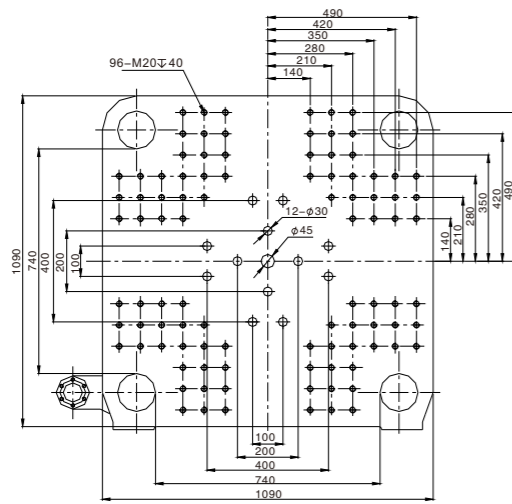


330PET III

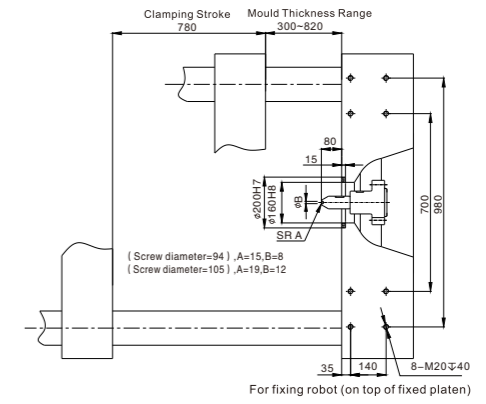
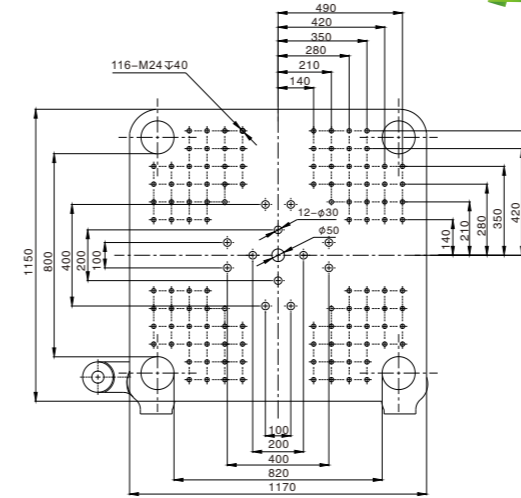


Platen/Nozzle Dimensions

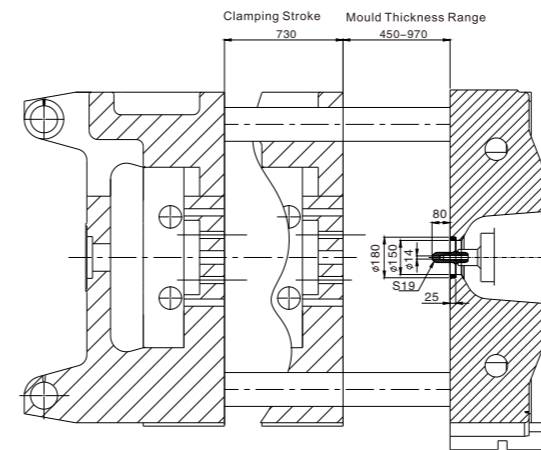
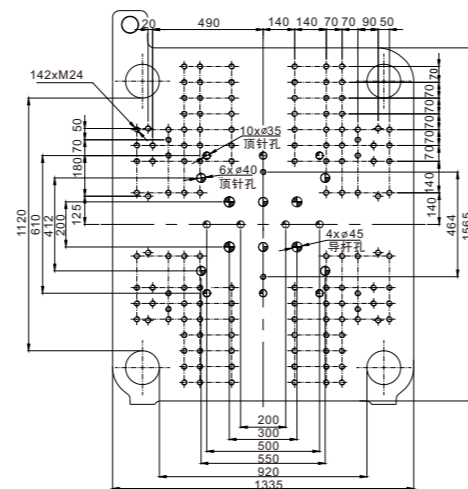
420PET III



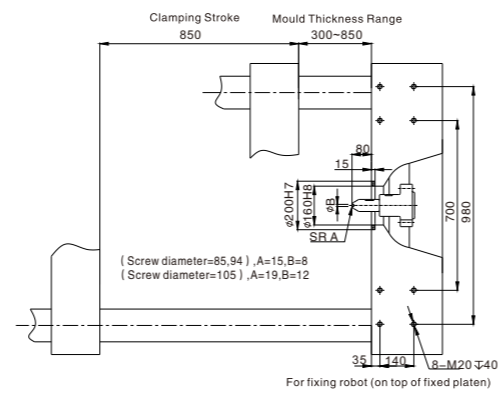
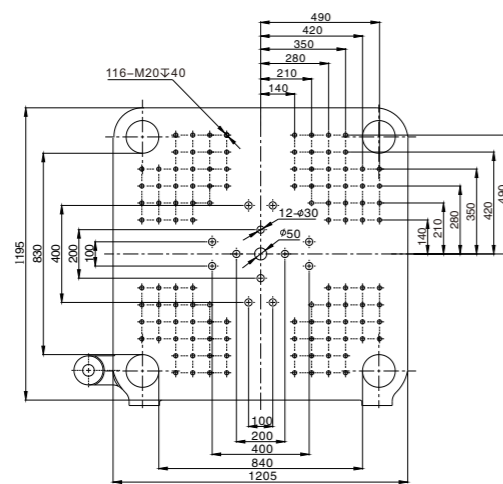
480PET III



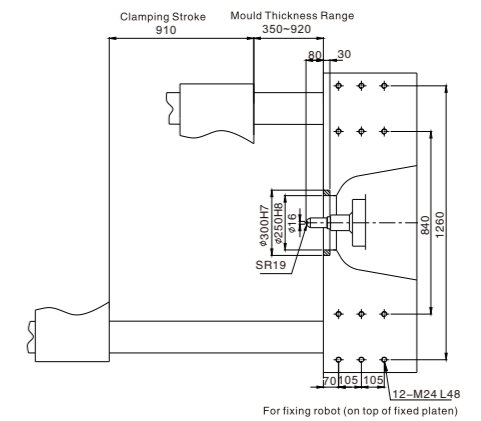
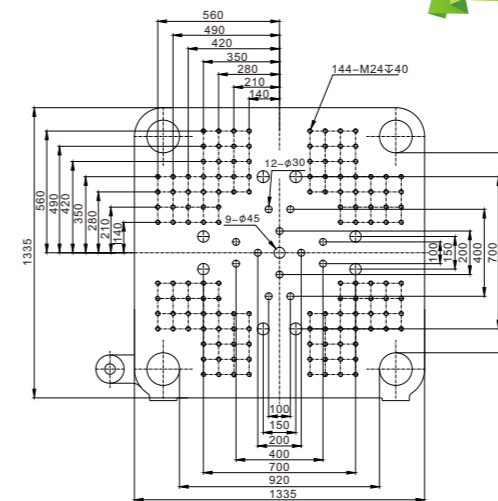
500PP-SE III



530PET III



660PET III



Application

Preform of mineral water bottle

- One mould with 64 cavities. 14g each
- Cycle time: 15 seconds
- Machine model 420PET III/s
Screw diameter of 94 mm



Preform of cooking oil bottle

- One mould with 32 cavities. 105g each
- Cycle time: 40 seconds include robot take-out time
- Machine model 480 PET III/e
Screw diameter of 105 mm



Preform of wide mouth bottle

- One mould with 32 cavities
Bottle diameter of 76mm, 37g each
- Cycle time: 27 seconds
- Machine model 480PET III
Screw diameter of 94 mm

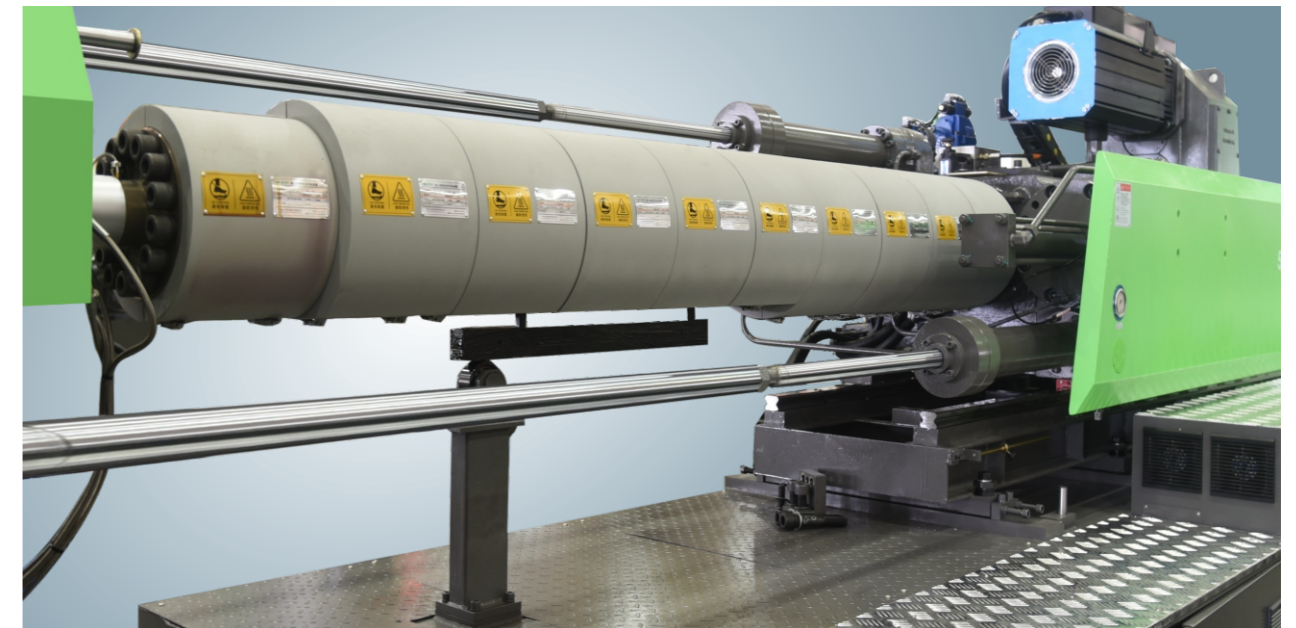


Preform of PP beverage bottle

- One mould with 48 cavities. 35g each
- Cycle time: 35.8 seconds
- Machine model 320PET III/h
Screw diameter of 100 mm



Optional Items



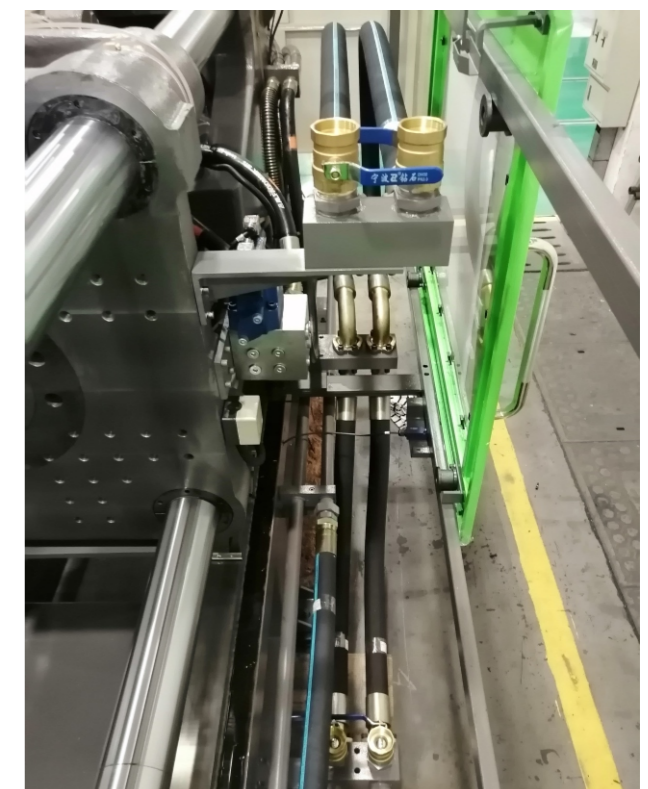
▲ Nano infrared heater bands



▲ Side entry robot



▲ Proportional valves for mould open/close



▲ Integrated cooling water circuits