

SPET-D

160T-1000T

SPET-D SERIES
INJECTION MOLDING MACHINE FOR
DAILY STORAGE ITEMS

PET CREATING MORE VALUE TO CUSTOMERS



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[2] The picture in the catalogue is for reference only. The real object should be considered as final.
[3] The data in the catalogue is obtained from internal testing in YIZUMI laboratory.
Please refer to the actual machine for the final data. YIZUMI reserves the right of final interpretation upon disputes and ambiguities.



THINK TECH FORWARD

Core Value Propositions



Intelligent and efficient

High plasticizing capacity

PET plasticizing screw for higher plasticizing capacity.



Professional

PET plasticizing components

PET plasticizing components improve plasticizing capability while ensuring excellent color mixing.



Specialized needle valve control program

Multiple needle valve opening modes, offering simple and quick operation.



Enhanced hydraulic motor

Standard with enhanced hydraulic motor, offering longer service life and greater power.



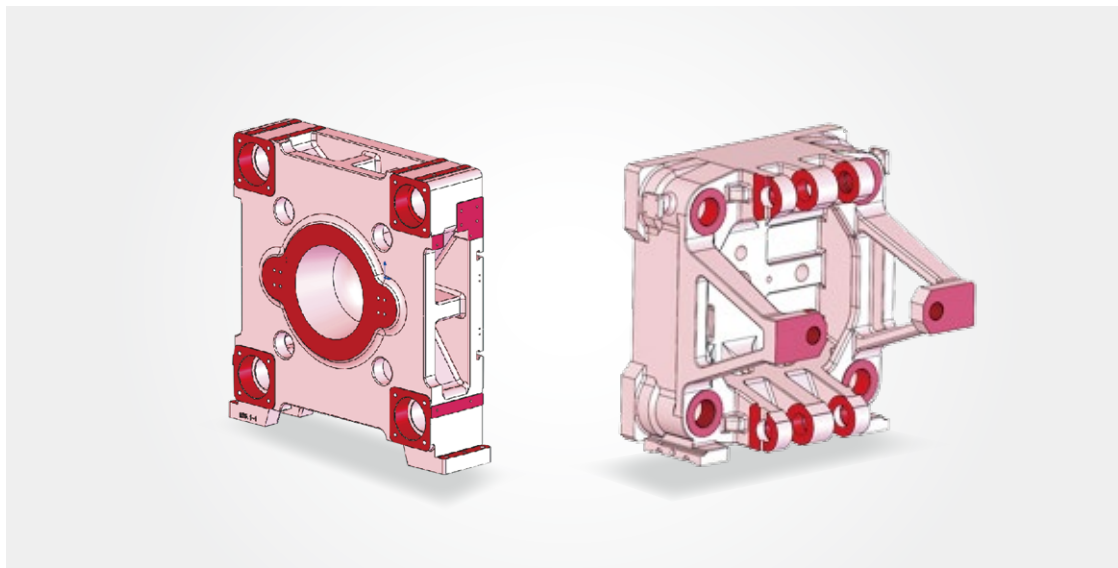
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Main Configuration

New-generation clamping unit

High-rigidity specialized platen

Optimized structure of fixed and movable platens provides excellent rigidity and reduces deformation.



New injection unit design

Dual linear guides with self-lubricating function for clean and tidy operation

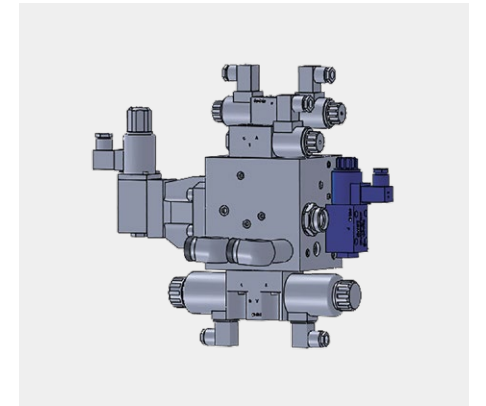
- With an oil change interval of over 5 years, it minimizes oil contamination in the workshop and the environment.
- The latest power system improves injection speed by an average of 9%, screw speed by an average of 18%, and plasticizing efficiency by an average of 20%.



New hydraulic circuit design

Optimized oil circuit design for lower pressure loss and more accurate positioning

- Optimized oil circuit design reduces pressure loss for improved energy efficiency.
- Optimized hydraulic operation principle and manifold pipeline design minimize pressure loss in the oil circuit, achieving greater energy saving.



Upgraded Control System

Standard feature of KEBA controller for all models

- Standard feature of KEBA's new control system with 12" TFT true color LCD display.
- Storage for 700 sets of mold parameters.
- MES interface.
- Supports common communication interfaces: RS-485, USB, CANOPEN, EtherCAT, OPC UA (optional) and Euromap77 (optional).
- Multi-curve display function, allowing for the direct display of curves for actions such as mold opening and closing, plasticizing, temperature, and injection monitoring.

It reflects YIZUMI's unique design philosophy and ergonomic button layout, providing infinite possibilities for digital and intelligent advancements.

15-stage linear control on speed

More precise control, with accurate response at 1% flow rate.



SPET-D Series Injection Molding Machine for Daily Storage Items

Specifications

DESCRIPTION	UNIT	S160PET-D	S200PET-D	S260PET-D	S320PET-D	S380PET-D	S450PET-D	S530PET-D	S650PET-D	S800PET-D	S1000PET-D
Injection Model		IU445	IU640	IU945	IU1340	IU1880	IU2690	IU3200	IU4500	IU5300	IU6780
International Specifications		444/1600	638/2000	947/2600	1341/3200	1887/3800	2694/4500	3216/5300	4460/5300	5305/8000	6792/10000
INJECTION UNIT											
Theoretical shot volume	cm³	246.9	370.9	518.4	749.2	1071.3	1497.0	1859.8	2438.3	2924.9	3769.8
Shot weight	g	288.8	434.0	606.6	876.6	1253.4	1751.5	2175.9	2852.8	3422.1	4410.7
	oz	10.2	15.3	21.4	31.0	44.3	61.9	76.9	100.8	120.9	155.9
Screw diameter	mm	43	48	53	60	68	76	80	84	92	100
Injection pressure	MPa	180.1	172.2	182.8	179.1	176.2	180.0	172.9	182.9	181.4	180.2
Injection rate	g/s	190.4	263.3	261.3	367.6	441.9	540.7	625.4	591.4	788.4	922.6
Screw L:D ratio		24:1	24:1	24:1	24:1	24:1	23:1	23:1	23:1	23.5:1	23.2:1
Plasticizing effect	g/s	40.0	55.0	70.0	95.0	120.0	150.0	165.0	180.0	210.0	230.0
Max. injection speed	mm/s	112.1	124.4	101.2	111.1	104.0	101.9	106.4	91.2	101.4	100.4
Screw stroke	mm	170	205	235	265	295	330	370	440	440	480
Screw speed	r/min	0-240	0-240	0-190	0-210	0-215	0-180	0-162	0-147	0-158	0-145
CLAMPING UNIT											
Clamping force	kN	1600	2000	2600	3200	3800	4500	5300	6500	8000	10000
Opening stroke	mm	410	460	530	580	660	740	825	900	980	1120
Space between tie bars (W×H)	mm×mm	460×440	510×510	570×570	670×670	710×710	780×780	830×800	900×900	980×960	1090×1090
Max. daylight	mm	870	980	1100	1240	1370	1520	1675	1800	1960	2220
Mold thickness (min.-max.)	mm	160-460	180-520	205-570	220-660	250-710	310-780	350-850	400-900	400-980	500-1100
Ejector stroke	mm	140	150	160	170	210	220	220	280	280	320
Number of ejector pin holes		5	5	13	13	13	13	17	21	21	21
Ejector force	kN	44	51	81	81	110	110	166	182	182	215
POWER UNIT											
Max. power of pump motor	kW	25.2	28.7	28.7	35.2	47.5	56.8	66	66	76.4	98.4
Heating capacity	kW	10.5	13	15.5	19.5	29.8	32	37.1	37.1	49.1	53.3
Number of temp control zones		4	4	5	6	6	6	6	7	7	7
GENERAL UNIT											
Dry cycle time	s	2.1	2.7	2.8	3.4	3.6	3.9	5.2	5	5.4	6.2
Oil tank capacity	L	167	230	230	326	410	510	570	570	720	860
Machine dimensions (L×W×H)	m×m×m	4.99×1.20×1.92	5.47×1.27×2.02	5.87×1.53×2.1	6.63×1.66×2.21	7.5×1.9×2.1	8.33×1.99×2.2	8.87×2.06×2.16	9.08×2.19×2.4	10.14×2.34×2.48	11.24×2.51×2.35
Machine weight	kg	4100	5000	6700	8800	12100	15000	17100	28000	34000	39000

Note: 1. Theoretical shot volume = barrel sectional area × injection stroke. 2. Shot weight = theoretical shot volume × 1.17 (PET).
3. Due to improvement, specifications may be changed without prior notice.

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SPET-DH Series Injection Molding Machine for Liquor and Thin-Wall Packaging

Specifications

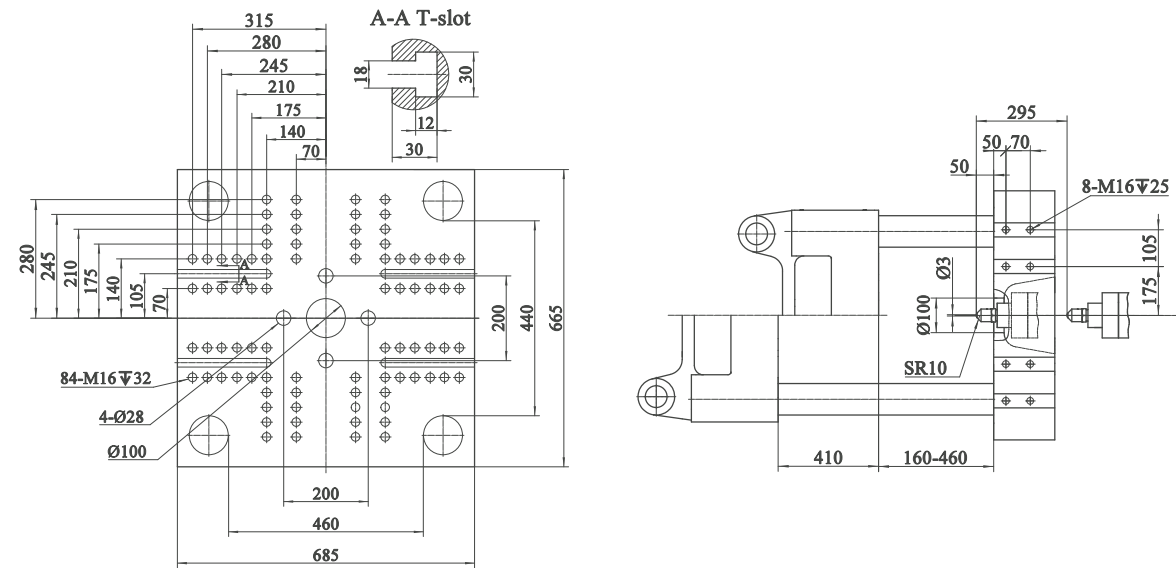
DESCRIPTION	UNIT	S320PET-DH	S380PET-DH	S450PET-DH
Injection Model		IU1800	IU2260	IU3200
International Specifications		1810/3200	2268/3800	3216/4500
INJECTION UNIT				
Theoretical shot volume	cm³	978.9	1198.4	1678.4
Shot weight	g	1145.3	1402.2	1963.8
	oz	40.5	49.5	69.4
Screw diameter	mm	65	68	76
Injection pressure	MPa	184.9	186.2	190.3
Injection rate	g/s	679.4	802.3	912.4
Screw L:D ratio		24:1	24:1	23:1
Plasticizing effect	g/s	95	105	125
Max. injection speed	mm/s	175.0	188.8	171.9
Screw stroke	mm	295	330	370
Screw speed	r/min	0-250	0-220	0-200
CLAMPING UNIT				
Clamping force	kN	3200	3800	4500
Opening stroke	mm	580	660	740
Space between tie bars (W×H)	mm×mm	670×670	710×710	780×780
Max. daylight	mm	1240	1370	1520
Mold thickness (min.-max.)	mm	220-660	250-710	310-780
Ejector stroke	mm	170	210	220
Number of ejector pin holes		13	13	13
Ejector force	kN	77	110	110
POWER UNIT				
Max. power of pump motor	kW	76.4	76.4	98.4
Heating capacity	kW	26.8	29.8	32
Number of temp control zones		6	6	6
GENERAL UNIT				
Dry cycle time	s	2.6	2.8	3.2
Oil tank capacity	L	730	820	1000
Machine dimensions (L×W×H)	m×m×m	6.63×1.66×2.21	7.5×1.9×2.1	8.33×1.99×2.2
Machine weight	kg	8800	12100	15000

Note: 1. Theoretical shot volume = barrel sectional area × injection stroke. 2. Shot weight = theoretical shot volume × 1.17 (PET).
3. Due to improvement, specifications may be changed without prior notice.

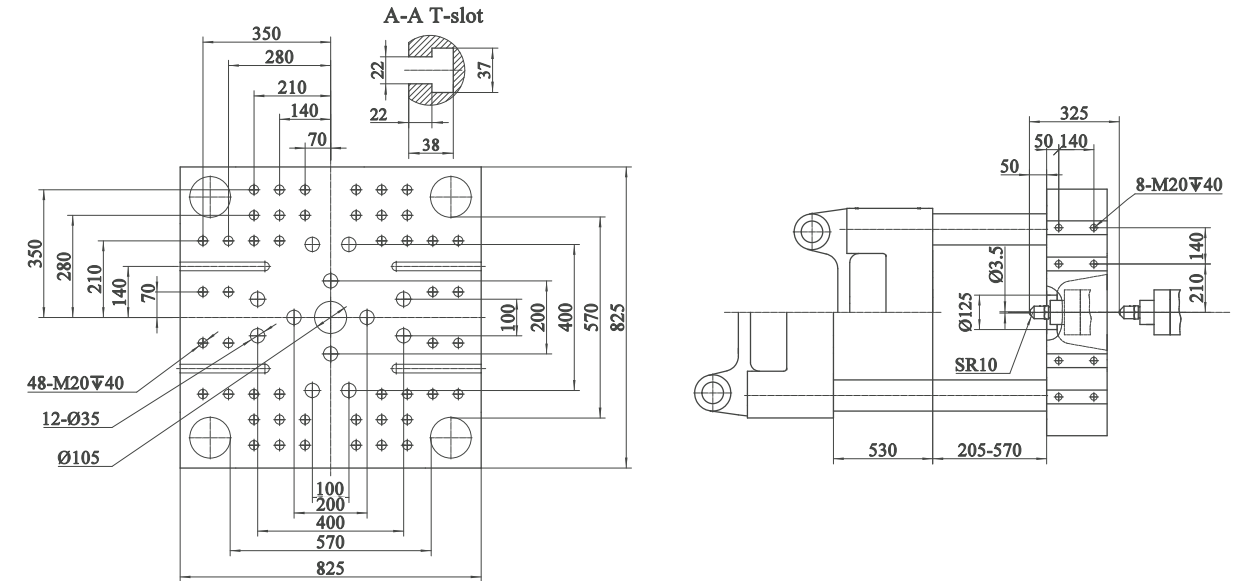
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Platen Dimensions

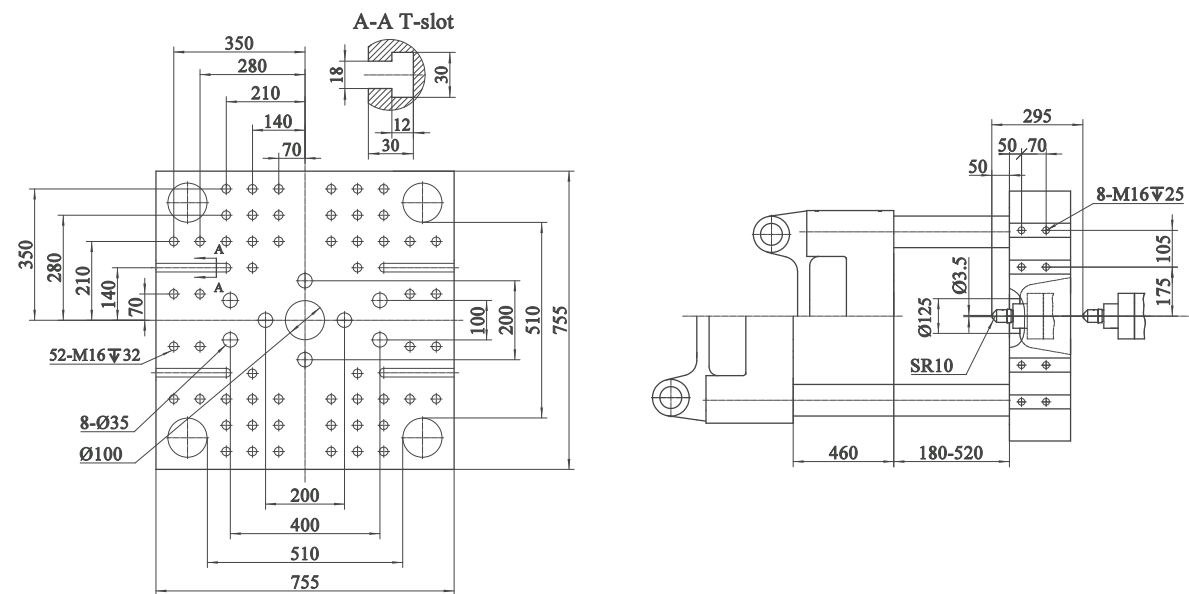
S160PET-D



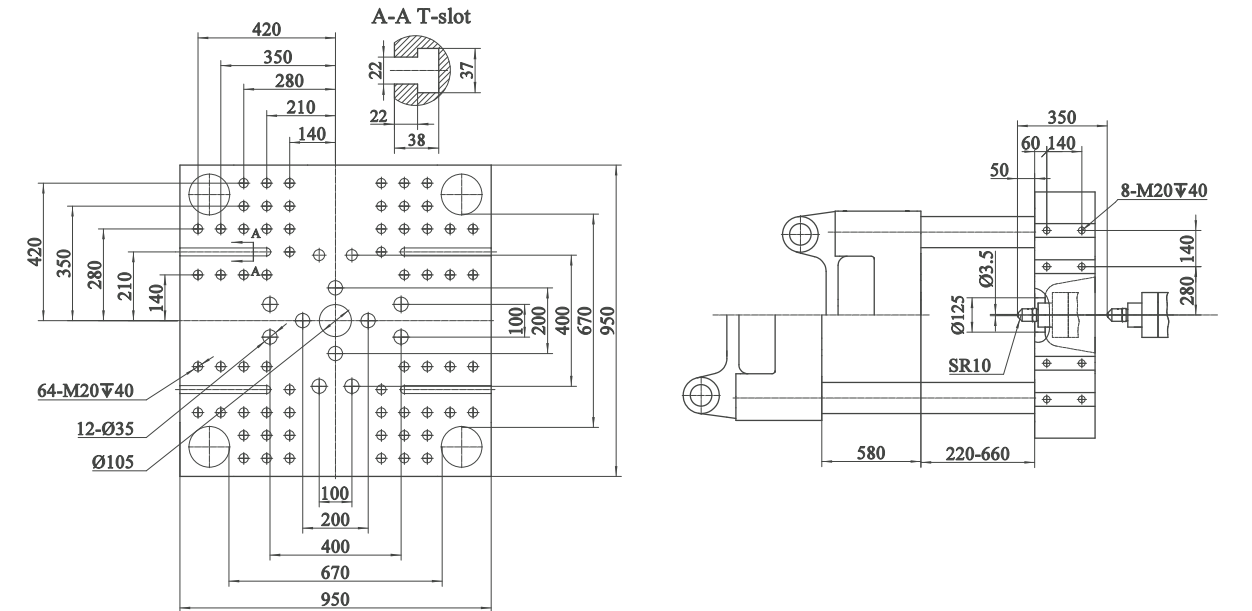
S260PET-D



S200PET-D



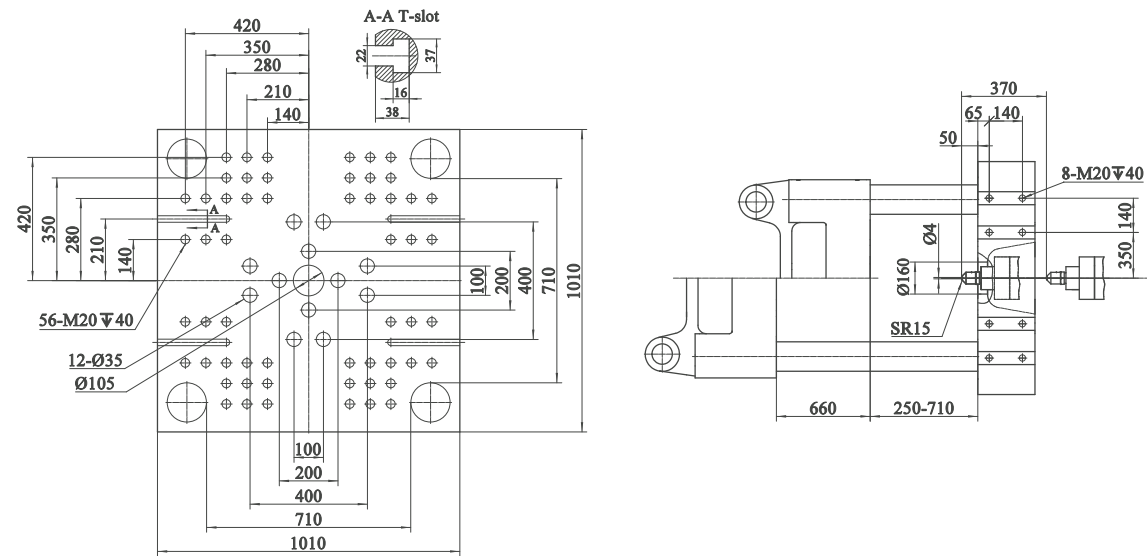
S320PET-D



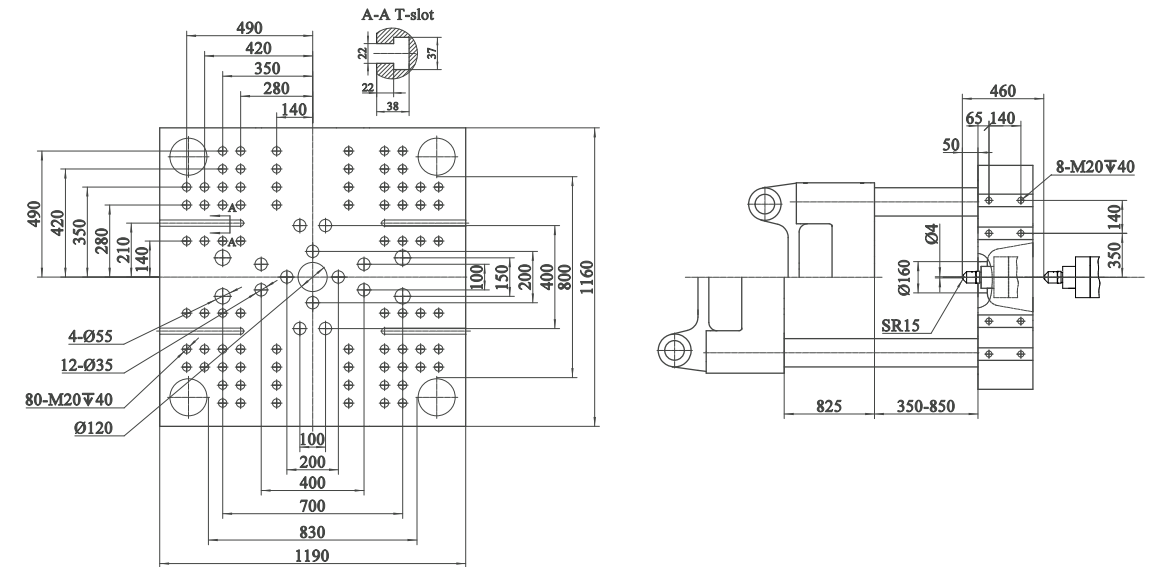
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Platen Dimensions

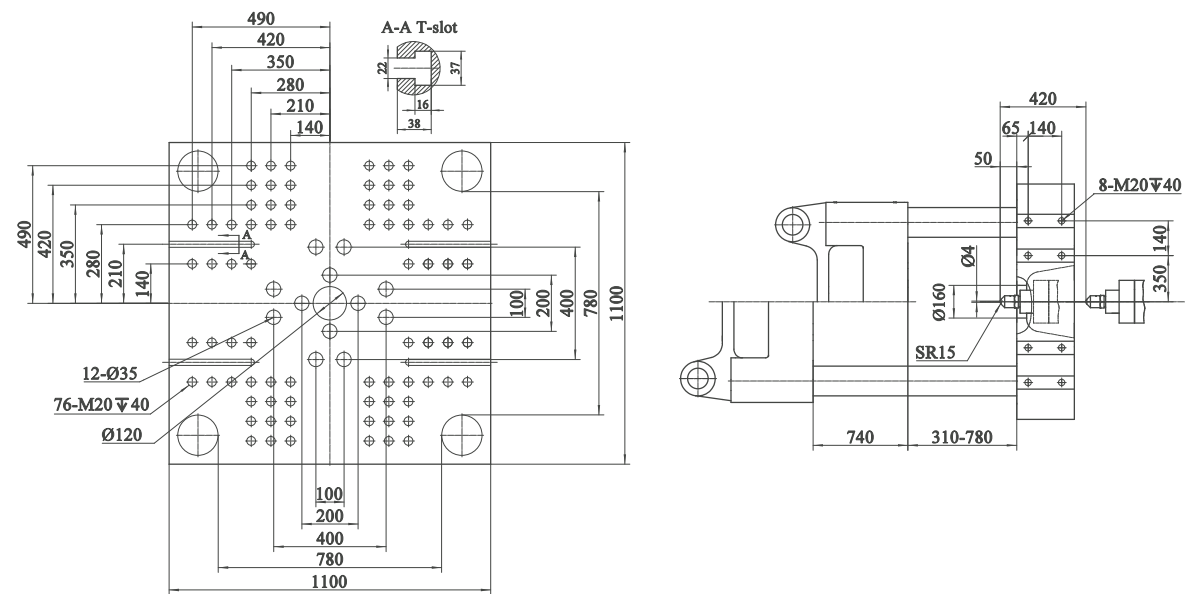
S380PET-D



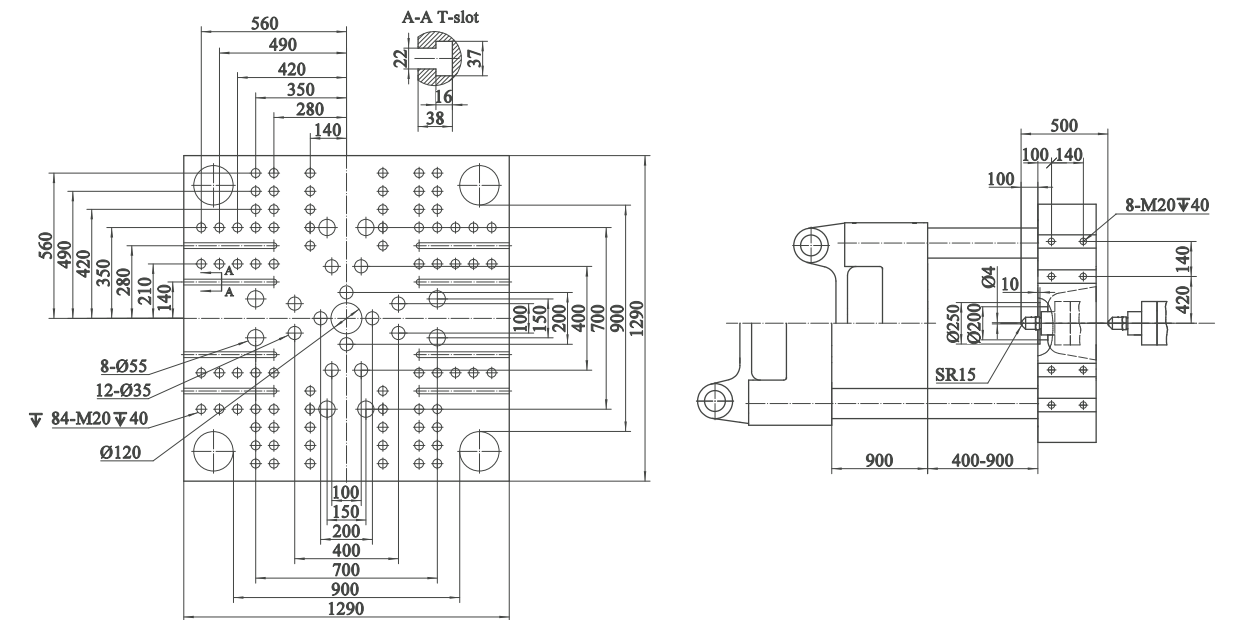
S530PET-D



S450PET-D



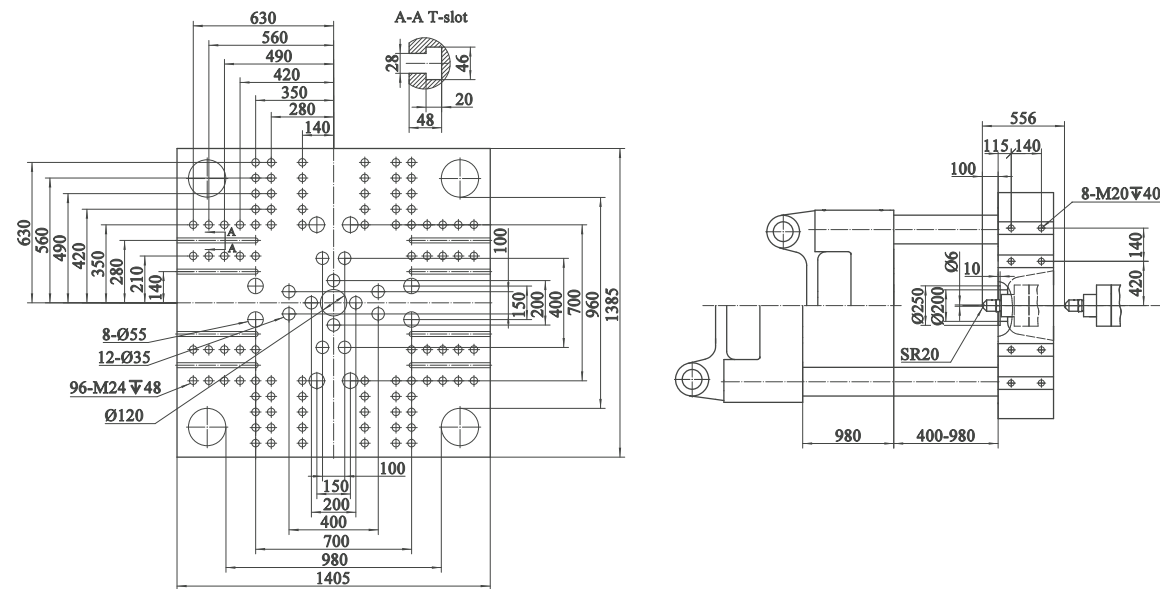
S650PET-D



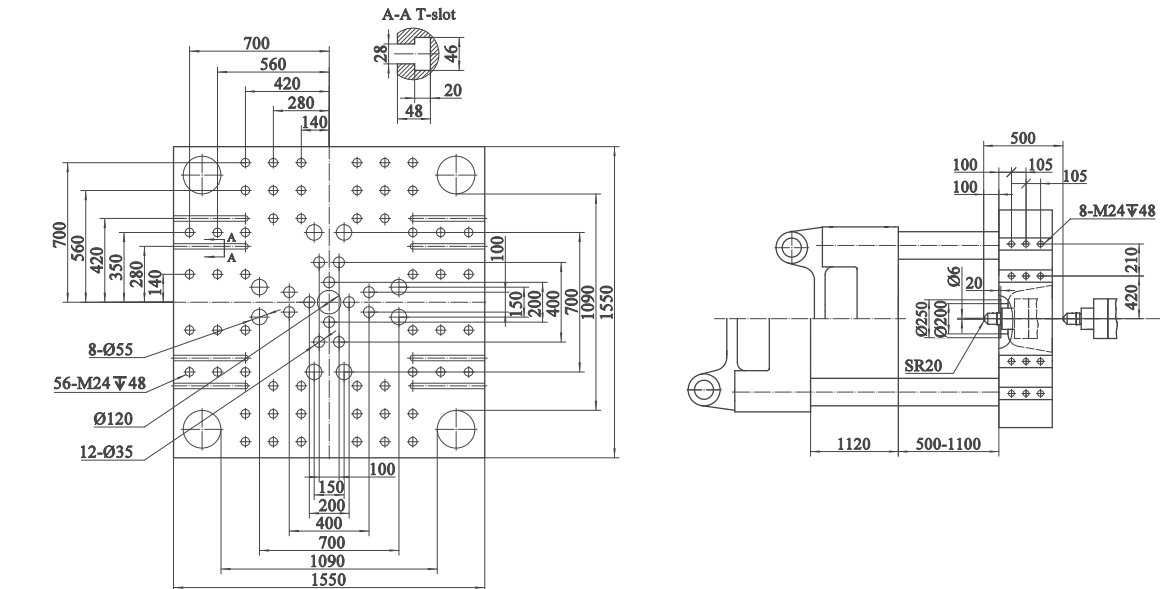
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Platen Dimensions

S800PET-D

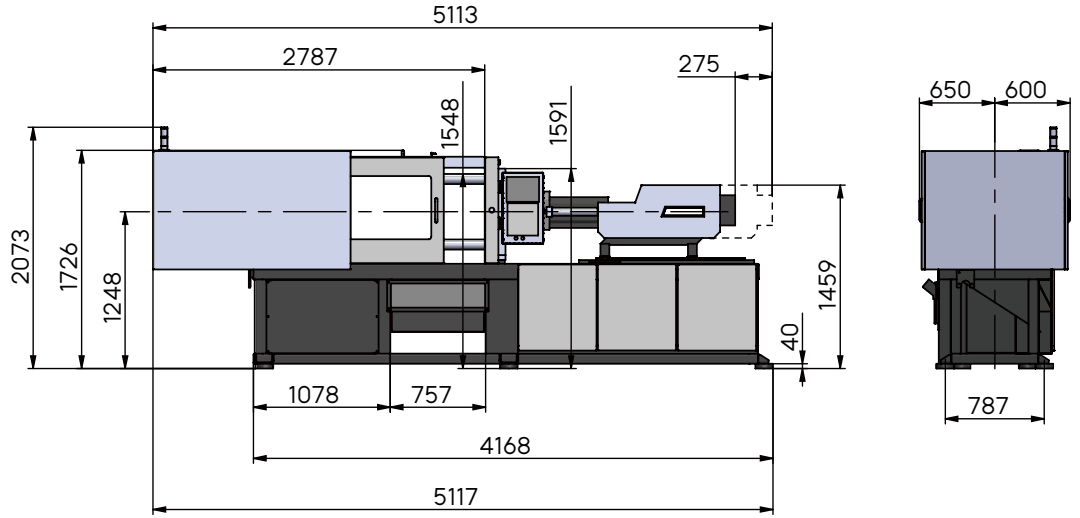


S1000PET-D

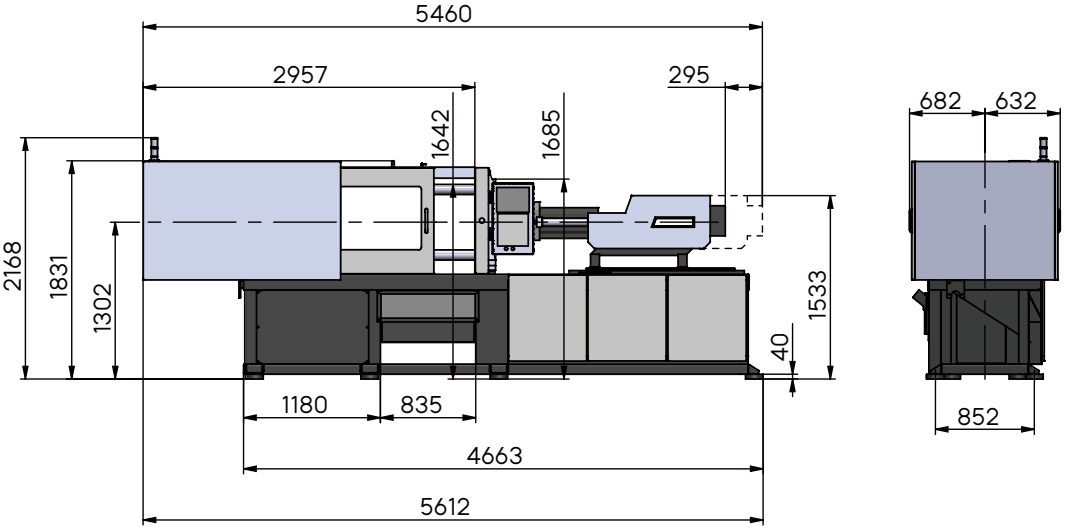


Machine Dimensions

S160PET-D



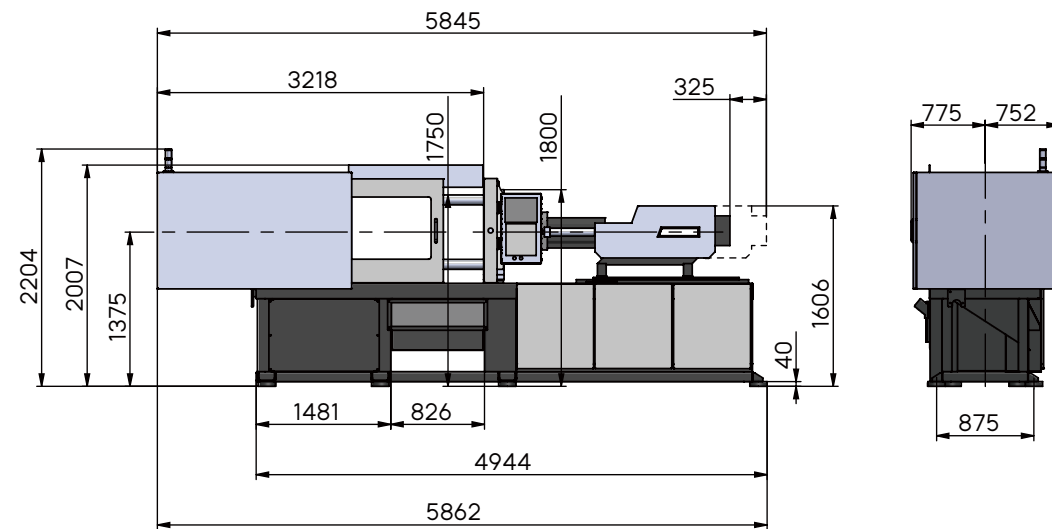
S200PET-D



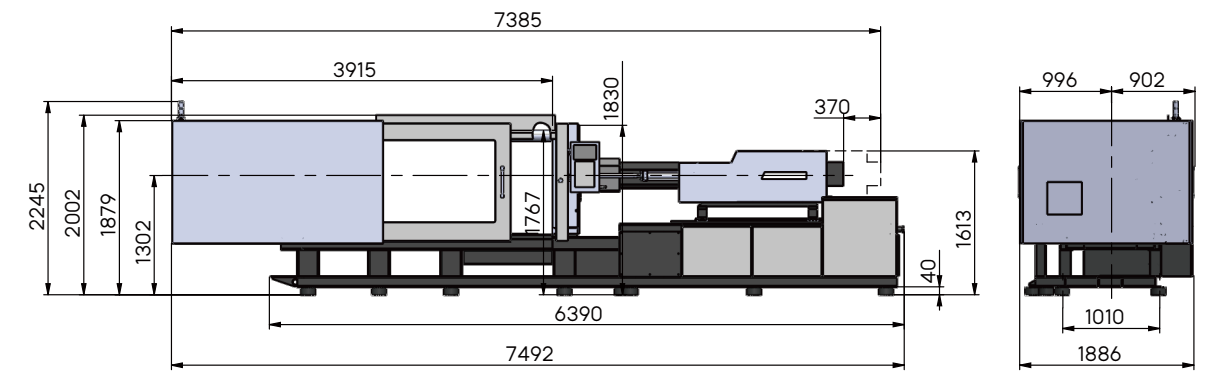
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Machine Dimensions

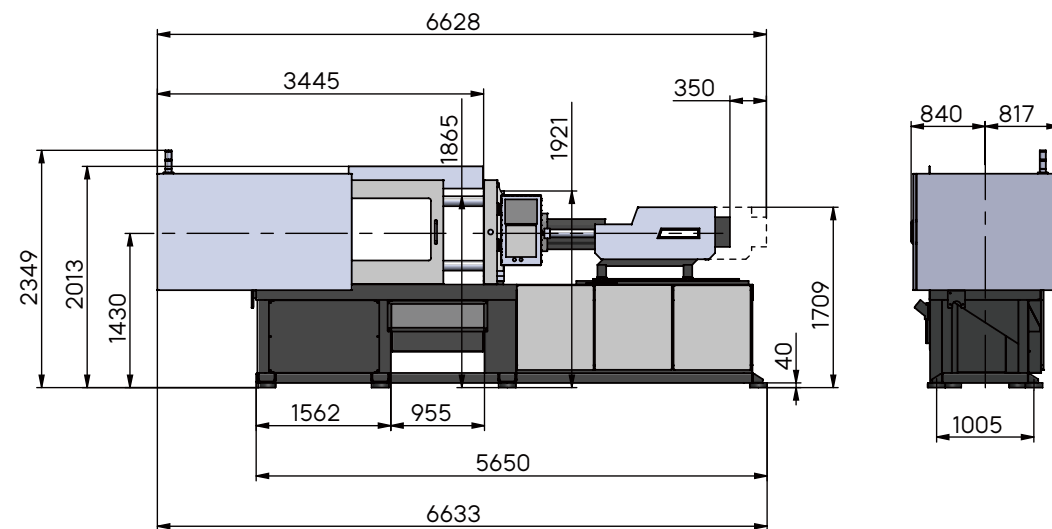
S260PET-D



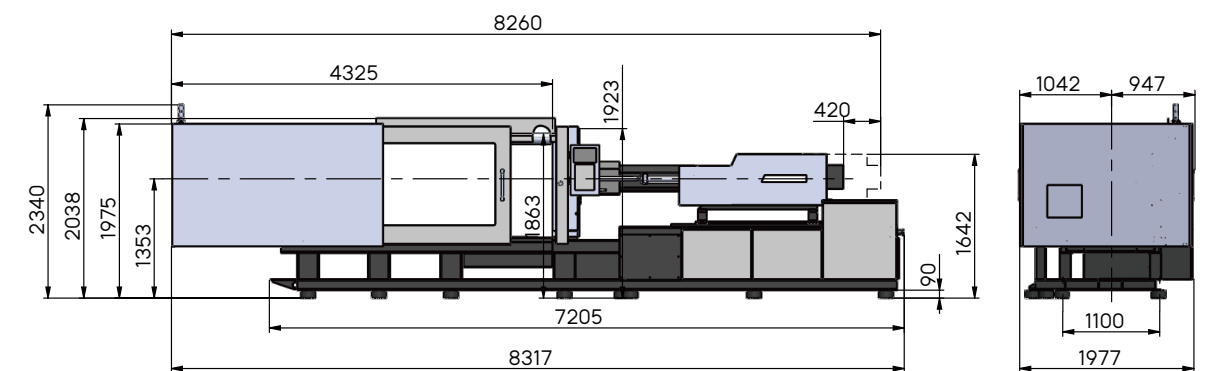
S380PET-D



S320PET-D



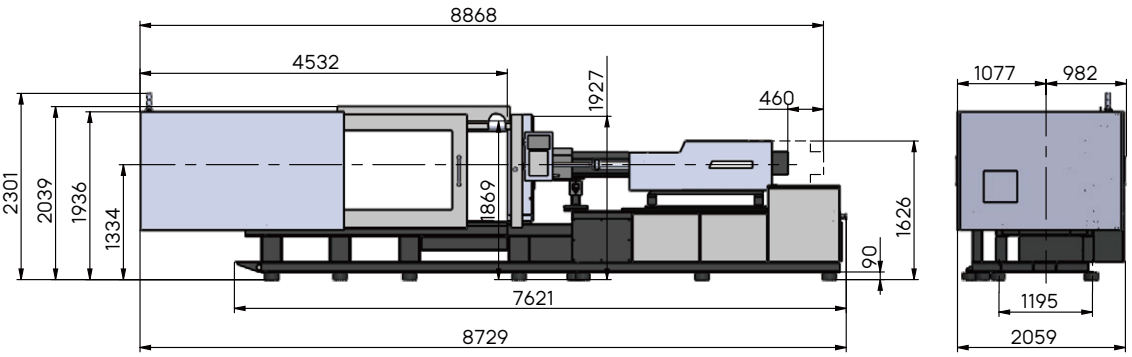
S450PET-D



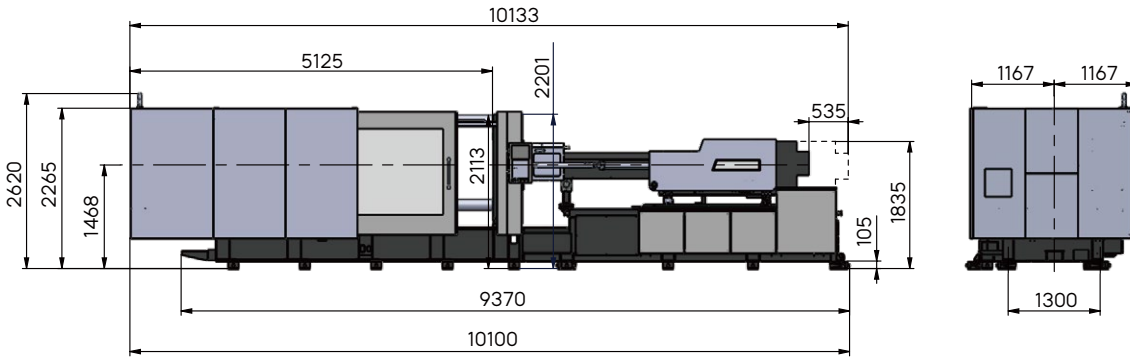
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Machine Dimensions

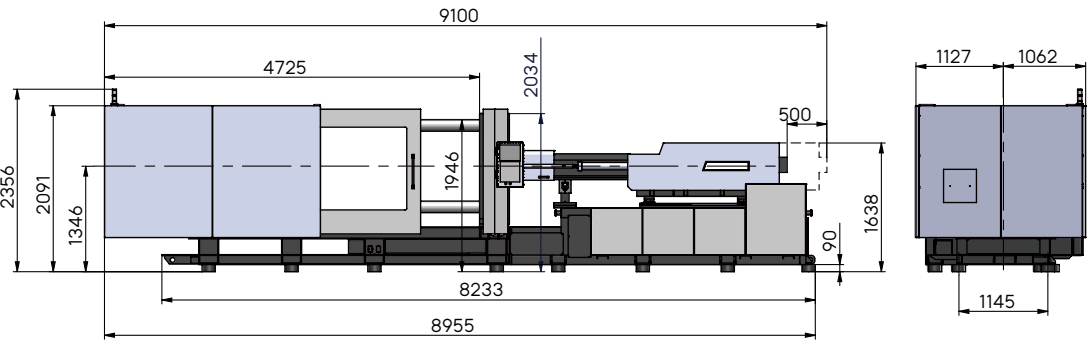
S530PET-D



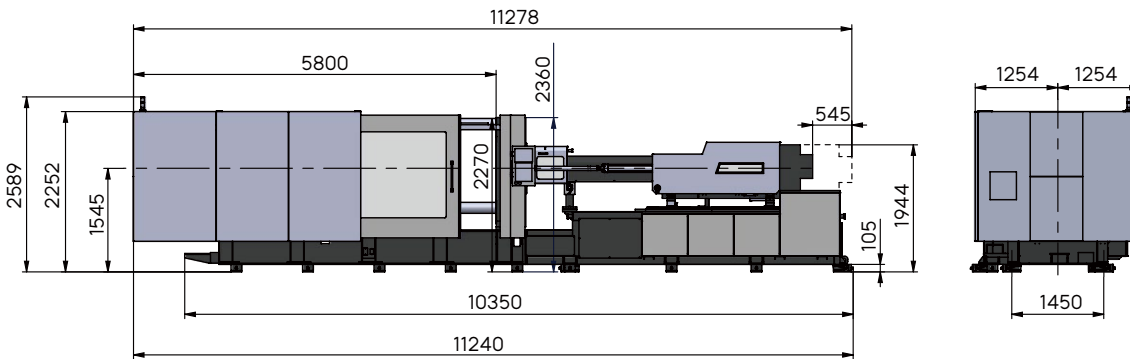
S800PET-D



S650PET-D



S1000PET-D



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Standard & Optional Features (S160-530PET-D)

	Standard	Optional
Injection Unit		
Integrated injection unit with linear guides	●	
Parallel double-cylinder injection system	●	
Low-speed high-torque hydraulic motor	●	
PET plasticizing components	●	
Energy-saving groove design of barrel (patented design)	●	
Multi-stage PID barrel temperature control (4-7 stages)	●	
Double-carriage cylinder	●	
Automatic detection of injection and plasticizing fault	●	
Precise transducer control of plasticizing / injection stroke	●	
Cold start protection	●	
Automatic purging	●	
Selectable suck-back before or after plasticizing	●	
6-stage injection control (speed, pressure, position)	●	
5-stage holding pressure control (speed, pressure, time)	●	
3-stage plasticizing control (speed, pressure, position)	●	
Movable hopper (160-320T)	●	
Extended nozzle		○
Barrel cooling fan		○
Spring shut-off nozzle/hydraulic nozzle		○
Increased injection stroke or 1 stage larger (smaller) injection unit		○
Swiveling injection unit		○
Ceramic heater band (standard for models above 650T)		○
Heat-retaining and energy-saving barrel (silicone insulation, infrared heating)		○
Stainless steel hopper		○
Clamping Unit		
Precision transducer for clamping / ejector stroke control	●	
QT500-7A high-rigidity platens/toggle	●	
Computer-controlled two-stage ejection forward/backward	●	
EUROMAP-based robot mounting holes	●	
Hydraulic mold height adjustment device	●	
Hydraulic / electrical safety devices	●	
Wear-resistant manganese steel supporting tracks for movable platen	●	
Automatic centralized lubrication system	●	
Multiple ejector function settings	●	
Low pressure mold protection	●	
Platen with T slots and mounting holes	●	
Special mold mounting hole		○
Mold thermal insulation plate		○
Increased ejector force		○
Increased mold thickness		○
Magnetic platen		○
Mold lifting device		○
Hydraulic System		
Fourth-generation servo system	●	
High-precision real-time by-pass oil filter	●	
Low-noise and energy-saving hydraulic circuit	●	
High-performance hydraulic control valve	●	
External cooler	●	

	Standard	Optional
Automatic calibration of system pressure and flow		●
Plasticizing back pressure adjustment device		●
Safety chain for exposed HP hydraulic hose		●
Multi-channel cooling water devices with fast connectors		●
Low-friction seal		●
Variable pump system		○
Enlarged oil pump and motor (1-satge)		○
Enlarged plasticizing motor (multi-satge)		○
Mold opening synchronized with ejection/ core pulling/ plasticizing		○
Servo valve for injection		○
Proportional valve control for mold opening and closing		○
Multiple core pullers		○
Hydraulic unscrewing device		○
Independent oil temperature control		○
Automatic oil temperature detection and alarm		○
Control System		
Barrel heating protection		●
Input/output inspection		●
Automatic heat retaining and automatic heating setting		●
Time / position / time + position controlled switchover from injection to holding		●
Separate adjustment of motion slope		●
Automatic clamping force adjustment		●
Process parameter locking		●
700 sets of process parameters storage memory		●
12" color LCD display		●
Multiple operating languages		●
Two sets of 3-phase power socket (16A+32A)		●
Reserved interfaces for air blowers, core pulling, and ejector backward protection		●
Emergency stop of front and rear safety guard		●
Two-color alarm light		●
Hot runner interface		○
Pneumatic sequence gate valve		○
Interface for electric unscrewing interface		○
Air blowing with valve		○
Air-assisted injection device		○
Central (networked) monitoring system		○
Safety light curtain inside safety guard		○
Display of overall energy consumption		○
Change of power supply voltage		○
General		
Operation manual		●
Leveling pad		●
Mold clamp		●
A tool kit and a precision filter		●
Auto loader		○
Glass-tube water flowmeter		○
Dryer		○
Dehumidifier		○
Mold temperature controller		○

● Standard ○ Optional

Standard & Optional Features (S650-1000PET-D)

	Standard	Optional
Injection Unit		
Integrated injection unit with linear guides	●	
Parallel double-cylinder injection system	●	
Low-speed high-torque hydraulic motor	●	
PET plasticizing components	●	
Energy-saving groove design of barrel (patented design)	●	
Multi-stage PID barrel temperature control (6-9 stages)	●	
Double-carriage cylinder	●	
Automatic detection of injection and plasticizing fault	●	
Precise transducer control of plasticizing / injection stroke	●	
Cold start protection	●	
Automatic purging	●	
Selectable suck-back before or after plasticizing	●	
6-stage injection control (speed, pressure, position)	●	
5-stage holding pressure control (speed, pressure, time)	●	
3-stage plasticizing control (speed, pressure, position)	●	
Proportional back pressure control	●	
Extended nozzle		○
Barrel air-cooling device		○
Spring shut-off nozzle/hydraulic nozzle		○
Increased injection stroke or 1 stage larger (smaller) injection unit		○
Swiveling injection unit		○
Movable or rolling hopper		○
Heat-retaining and energy-saving barrel (silicone insulation, infrared heating)		○
Stainless steel hopper		○
Auto loader		○
Clamping Unit		
Precision transducer for clamping / ejector stroke control	●	
Clamping platens / toggles made of highly-rigid ductile iron QT500-7A	●	
Computer-controlled two-stage ejection forward/backward	●	
EUROMAP-based robot mounting holes	●	
Hydraulic mold height adjustment device	●	
Hydraulic / electrical safety devices	●	
Wear-resistant manganese steel supporting tracks for movable platen	●	
Automatic centralized lubrication system	●	
Multiple ejector function settings	●	
Low-pressure mold protection	●	
Platen with T slots and mounting holes	●	
Special mold mounting hole		○
Mold thermal insulation plate		○
Increased ejector stroke		○
Increased mold thickness		○
Magnetic platen		○
Hydraulic System		
Fourth-generation servo system	●	
High-precision real-time by-pass oil filter	●	
Low-noise and energy-saving hydraulic circuit	●	
High-performance hydraulic control valve	●	
External cooler	●	

	Standard	Optional
Automatic calibration of system pressure and flow		●
Plasticizing back pressure adjustment device		●
Safety chain for exposed HP hydraulic hose		●
Multi-channel cooling water devices with fast connectors		●
Low-friction seal		●
Variable pump system		○
Enlarged oil pump and motor (1-satge)		○
Enlarged plasticizing motor (multi-satge)		○
Mold opening synchronized with ejection/ core pulling/plasticizing		○
Servo valve controlled injection		○
Proportional valve control for mold opening and closing		○
Multiple core pullers		○
Hydraulic unscrewing device		○
Independent oil temperature control		○
Automatic oil temperature detection and alarm		○
Control System		
Barrel heating protection		●
Input/output inspection		●
Automatic heat retaining and automatic heating setting		●
Time / position / time + position controlled switchover from injection to holding		●
Separate adjustment of motion slope		●
Automatic clamping force adjustment		●
Process parameter locking		●
700 sets of process parameters storage memory		●
12" color LCD display		●
Multiple operating languages		●
Three sets of 3-phase power socket (2×32A+16A)		●
Reserved interfaces for air blowers, cores, and ejector backward protection		●
Emergency stop buttons for front and rear safety gates		●
Two-color alarm light		●
Hot runner interface		○
Pneumatic sequence gate valve		○
Interface for electric unscrewing interface		○
Air blowing with valve		○
Air-assisted injection device		○
Central (networked) monitoring system		○
Safety light curtain inside safety guard		○
Display of overall energy consumption		○
Change of power supply voltage		○
General		
Operation manual		●
Adjustable leveling pad		●
Mold clamp		●
A tool kit and a precision filter		●
Auto loader		○
Glass-tube water flowmeter		○
Dryer		○
Dehumidifier		○
Mold temperature controller		○

● Standard ○ Optional