Designed by YIZUMI, August 202.





150T-550T

P SERIES THIN-WALL
INJECTION MOLDING MACHINE

Yizumi Precision Molding Technology Co., Ltd.

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[DISCLAIMER]

- $\begin{tabular}{l} \textbf{[1]} YIZUMI reserves the right to modify the product description in the catalogue. Specification might be changed without prior notice. \\ \end{tabular}$
- [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.
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THINK TECH FORWARD

One-stop service Address customer's pain points and solve the issues





Communication of Product Concept

Customers provide the concept of product requirements. The professionals from YIZUMI will assist customers in the design and development of the product to improve customers' production efficiency and product competitiveness.

Overall Planning

The professionals from YIZUMI will provide customers with capacity assessment, equipment and production line integration, manufacturing facility planning and other total solutions.

Connected Production

YIZUMI offers full-process control over in-plant wiring, equipment, mold, and automation from manufacturing to integration testing to eliminate integration risks. The system can be put into production as soon as it arrives.

YFO Exclusive Services

With the service concept throughout the entire process, YIZUMI is committed to reduce downtime by focusing on details. Improving the productivity of customers is our ultimate goal.



Overview Design of P Series Machine

Robust Toggles

The overall optimized design of toggle strength and rigidity greatly improves the stability of the clamping and effectively extends the service life of the machine.

Unique Large Beveled Cosshead Toggles Design

Large beveled structure can better transfer force from the tail toggle hole to the center of the platen to minimize the platen deformation, ensure the uniformity of force applied on the platens and mold, extend the service life, and make certain the quality of products.

Optimized Control Program

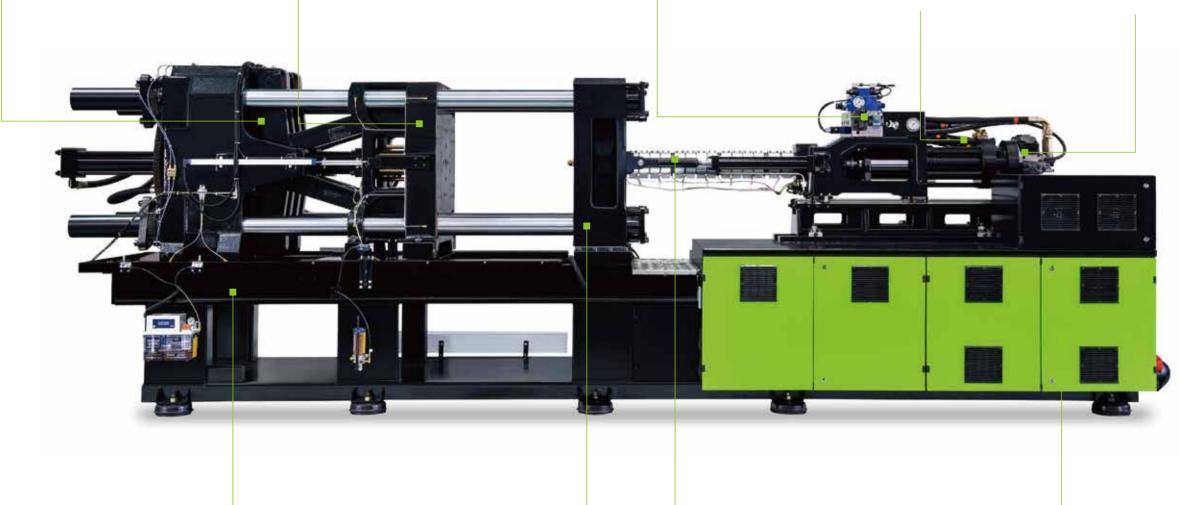
Selecting the high-quality hydraulic components to reduce response time, oil circuit impact, and overall machine noise. Machine will go through a number of tests and optimizing adjustments to meet the high quality requirements.

Single Cylinder Injection Unit

The compact single cylinder injection structure renders features such as small movement inertia, short acceleration time, and high repetitive accuracy of injection. It can be adapted to a variety of injection units according to different product processing requirements.

Optimized Cylinder Sealing Structure

Based on many years of manufacturing experience and the characteristics of oil circuit in high-speed single cylinder devices, the cylinder sealing structure is further optimized to ensure the durability of the injection unit and avoid oil leakage.



High-rigid Machine Frame

The Steel I-Beam type machine frame provides sufficient rigidity to ensure a smooth and vibration-free operation at high speed.

High-rigid and Low Deformation Platens

The adoption of reinforced platen design according to the characteristics of thin-walled packaging products. With perfect combination of strength and rigidity, while minimize the platen deformation, it maintains a flexible and smooth movement.

Horizontal Dual-carriage Design

The adoption of horizontal dual-carriage cylinder design effectively eliminates the turning torque of the injection mechanism and ensures a stable and reliable injection.

Efficient Power Output

Power output is optimized to realize the step distribution of 150-800mm/s injection speed.

Optional Features



Ejector-on-Fly

Ejetor while mold opening to shorten the production cycle time



Use of Appropriate Screw and Barrels

Select from a variety of professional screw and barrels according to the characteristics of different raw materials and production processes to ensure the plasticizing quality.



High-speed Mold Opening /Closing Proportional Valve

Further reduce the reaction time. Double the repetitive accuracy of mold opening ends and increase the operating speed of mold opening/closing by 15%-20%, suitable for the production of various precision thin-walled products.



Infrared Heater Band

The infrared heater band reduces the heat loss by 30%-68%.



Linear Guide Rails

Reduce the friction from movable platen to further lower energy consumption, improve operating speed and shorten the production cycle time.



Servo Injection with Accumulator

Increase the injection speed up to 800mm/s and double the repetitive accuracy of injection. It is capable to produce thinner and more sophisticated products while shortening the injection time and improving the production efficiency.



Electric Dozing Motor

Reduce production cycle time through parallel operation.
Driven by servo motor, the dozing motor has higher energy conversion efficiency and saves more energy.



Shut-off Nozzle

Choose the long-lasting precision shut-off nozzle. Effectively avoid nozzle drooling.

Customized Control System



KEBA industrial controller

Electrical System

- Faster processing speed, optimized control rate, and outstanding repetitive accuracy help to achieve more stable product quality.
- Bright, full color 12-inch touch screen input and easy-to-use operation page.
- Multi-stage injection and plasticizing function pages are easy to use and improve processes accordingly.
- The production management and production monitoring functions can communicate with the peripheral equipment barrier-free.
- Online quality monitoring function and injection molding industry 4.0.

Thin-wall mold

We can offer customized mold for thin wall injection molding according to customer specific requirements, to better meet diversified demand.









Applications

















Food Packaging

Cover a wide range of packaging for various food, beverages, cheese, disposable take-out food containers, plastic cutlery, IML packaging. Provide a variety of equipment and mold options. Offer production line turn-key delivery in collaboration with high-quality solution providers.

Various Types of Bottle Caps

Can make all kinds of bottle caps including beverage bottle seal caps, pull-off caps, folding caps, dustproof caps, etc. With the special kit for bottle cap machine to meet the requirements of precision bottle cap production

Disposable Medical Supplies

Injector, pipet tips, petri dish, and other products.
Provide clean, efficient, and stable system solutions.

aps

Such as 5L-20L industrial sealed barrels, all types of logistics cable ties, and multi-cavity silicon sealant barrels. For plastic products with high flow length ratio and light gram weight, it can effectively improve the productivity and product quality.

Various Types of Thin-Walled Plastic Products

P Series serves at

















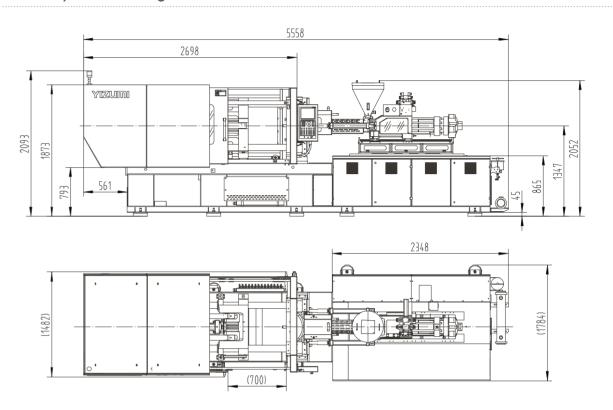


P150 High-speed Injection Molding Machine

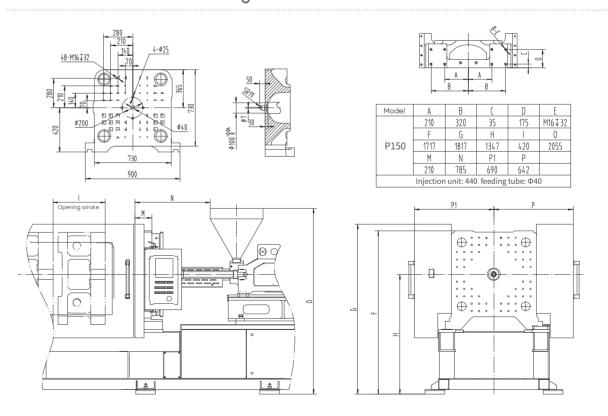
DESCRIPTION	UNIT	P150						
International specification		440/	1500	640)/1500			
INJECTION UNIT								
Shot volume	cm ³	221	280	334	412			
Shot weight (PS)	g	203	258	307	379			
_	OZ	7.2	9.1	10.8	13.4			
Screw diameter	mm	40	45	45	50			
Injection pressure	MPa	199	158	194	158			
Screw L:D ratio			22	2:1				
Max.injection speed ①	mm/s	150/23	0/290	120/	190/235			
Max.injection speed with accumulator	mm/s	50	0		500			
Nozzle stroke	mm		40	00				
Screw stroke	mm	17	176 210					
Screw speed (stepless)	r/min		0-3	300				
CLAMPING UNIT								
Clamping force	kN	1500						
Opening stroke	mm	420						
Space between bars (WxH)	mmxmm	455x455						
Max. daylight	mm		870					
Mold thickness (MinMax.)	mm		150-	-450				
Hydraulic ejection stroke	mm		14	40				
Ejector number			Į.	5				
Hydraulic ejection force	kN		7	7				
POWER UNIT								
Hydraulic system pressure	Мра		17	7.5				
Pump motor	kW		23/45	5.2/55				
Pump motor with accumulator	kW	45.2	+11	45	5.2+22			
electric screw drive	kW		16	5.4				
Heating capacity	kW	11		11	16.5			
Number of temp control zones			Į	5				
GENERAL UNIT								
Dry cycle time	S		1.	.8				
Oil tank capacity	I		3.	70				
Machine dimensions(LxWxH)	mxmxm		5.6x1	.8x2.1				
Machine weight	Ton	5.6x1.8x2.1 7.8						

① : Servo/Standard Servo/Amplified Servo

P150 Layout Drawings



P150 Platen Dimension Drawings

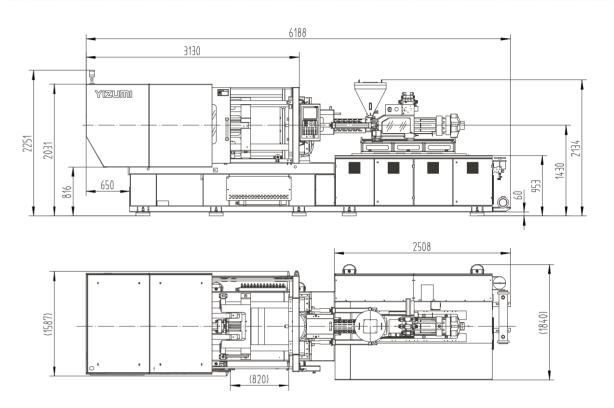


P200 High-speed Injection Molding Machine

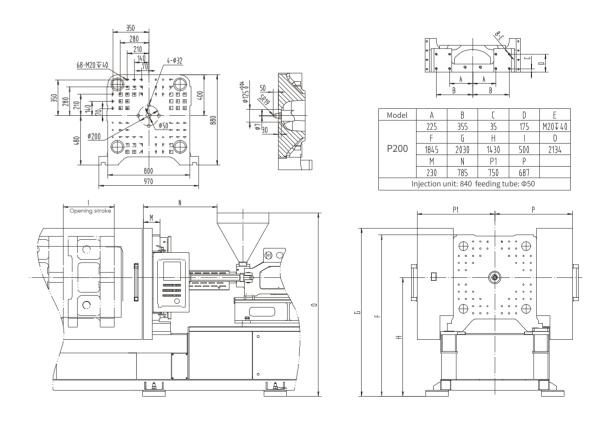
DESCRIPTION	UNIT	P200							
International specification		440/	/2000	640/	′2000				
INJECTION UNIT									
Shot volume	cm³	221	280	334	412				
Shot weight (PS)	g	203	258	307	379				
Shot Weight (F3)	OZ	7.2	9.1	10.8	13.4				
Screw diameter	mm	40	45	45	50				
Injection pressure	MPa	199	158	194	158				
Screw L:D ratio			22	2:1					
Max.injection speed ①	mm/s	185/23	80/290	150/1	90/235				
Max.injection speed with accumulator	mm/s	50	00	5	500				
Nozzle stroke	mm		40	00					
Screw stroke	mm	17	76	2	210				
Screw speed (stepless)	r/min		0-300						
CLAMPING UNIT									
Clamping force	kN	2000							
Opening stroke	mm		500						
Space between bars (WxH)	mmxmm		520x520						
Max. daylight	mm		10	50					
Mold thickness (MinMax.)	mm		200-	-550					
Hydraulic ejection stroke	mm		15	50					
Ejector number			Í	5					
Hydraulic ejection force	kN		7	7					
POWER UNIT									
Hydraulic system pressure	Мра		17	7.5					
Pump motor	kW		33.9/4	5.2/55					
Pump motor with accumulator	kW	45.2	2+11	45.	2+22				
electric screw drive	kW		16	5.4					
Heating capacity	kW	11		11	16.5				
Number of temp control zones			Í	5					
GENERAL UNIT									
Dry cycle time	S			2					
Oil tank capacity	T		40	60					
Machine dimensions(LxWxH)	mxmxm		6.2x1.8	5x2.25					
Machine weight	Ton			.3					

① : Servo/Standard Servo/Amplified Servo

P200 Layout Drawings



P200 Platen Dimension Drawings

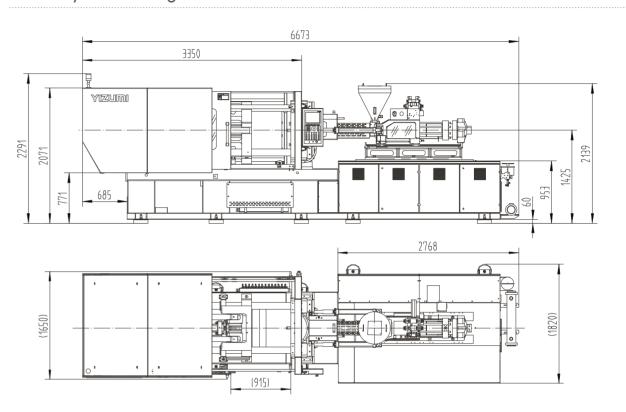


P250 High-speed Injection Molding Machine

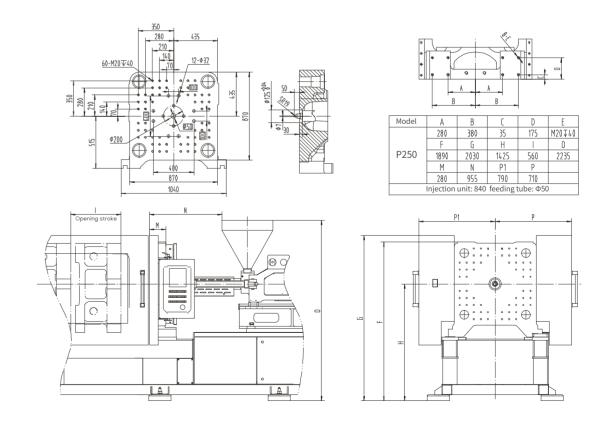
DESCRIPTION	UNIT	P250										
International specification		440/	440/2500 640/2500				840/2500					
INJECTION UNIT												
Shot volume	cm ³	221	280	334	412	442	535	636				
Shot weight (PS)	9	203	258	307	379	406	492	58				
	OZ	7.2	9.1	10.8	13.4	14.3	17.3	20.				
Screw diameter	mm	40	45	45	50	50	55	60				
Injection pressure	MPa	199	158	194	158	191	158	132				
Screw L:D ratio				22	2:1							
Max.injection speed ①	mm/s	185/	290	150,	/235	125/195						
Max.injection speed with accumulator	mm/s	50	00	5	00	500						
Nozzle stroke	mm		40	00		450						
Screw stroke	mm	17	176 210					225				
Screw speed (stepless)	r/min		0-300									
CLAMPING UNIT												
Clamping force	kN	2500										
Opening stroke	mm	560										
Space between bars (WxH)	mmxmm			580:	x580							
Max. daylight	mm			11	60							
Mold thickness (MinMax.)	mm			220	-600							
Hydraulic ejection stroke	mm			18	30							
Ejector number				1	3							
Hydraulic ejection force	kN			13	37							
POWER UNIT												
Hydraulic system pressure	Мра			17	7.5							
Pump motor	kW			33.9	9/55							
Pump motor with accumulator	kW	45.2	2+11	45.2	2+22		45.2+2	2				
electric screw drive	kW		16.4				20					
Heating capacity	kW	1		11	16.5	16.5	22	24				
Number of temp control zones				į	5							
GENERAL UNIT												
Dry cycle time	S			2	.2							
Oil tank capacity	I			48	80							
Machine dimensions(LxWxH)	mxmxm			6.7x1.8	32x2.3							
		6.7x1.82x2.3 10.5										

① : Servo/Standard Servo

P250 Layout Drawings



P250 Platen Dimension Drawings

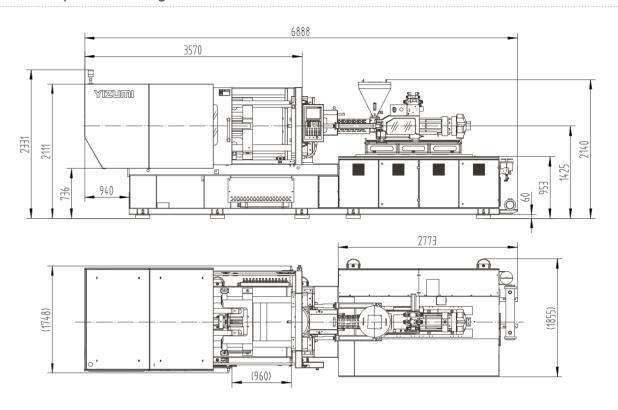


P300 High-speed Injection Molding Machine

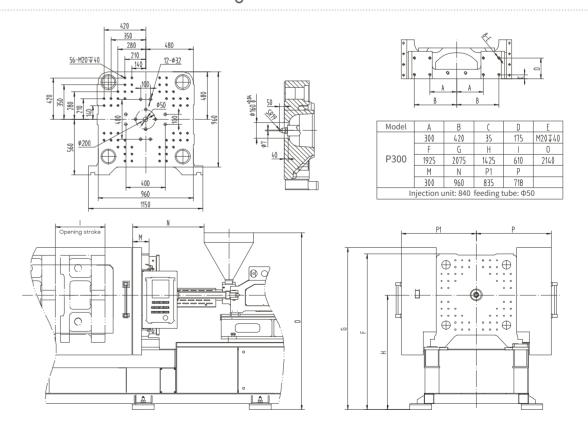
DESCRIPTION	UNIT	P300										
International specification		840/3000 1080/3000					1480/3000					
INJECTION UNIT												
Shot volume	cm ³	442	535	636	491	594	707	763	896	1039		
Shot weight (PS)	9	406	492	585	452	546	650	702	824	950		
Shot Weight (1 3)	OZ	14.3	17.3	20.6	15.9	19.3	22.9	24.8	29.1	33.		
Screw diameter	mm	50	55	60	50	55	60	60	65	70		
Injection pressure	MPa	191	158	132	227	187	158	194	166	143		
Screw L:D ratio						22:1						
Max.injection speed ①	mm/s	19	5/280/	350	16	5/235/2	295	130/190/240				
Max.injection speed with accumulator	mm/s		500			500			500			
Nozzle stroke	mm					450						
Screw stroke	mm		225			250			270			
Screw speed (stepless)	r/min					0-300						
CLAMPING UNIT												
Clamping force	kN	3000										
Opening stroke	mm					610						
Space between bars (WxH)	mmxmm					635x63	5					
Max. daylight	mm					1260						
Mold thickness (MinMax.)	mm				:	250-65	0					
Hydraulic ejection stroke	mm					180						
Ejector number						13						
Hydraulic ejection force	kN					137						
POWER UNIT												
Hydraulic system pressure	Мра					17.5						
Pump motor	kW				55/45.2	2+33.9/	55+45.2	2				
Pump motor with accumulator	kW		55+22				55-	+22				
electric screw drive	kW		20			29			29			
Heating capacity	kW	16.5	22	24.8	16.5	22	24.8	22.6	24	27		
Number of temp control zones						5						
GENERAL UNIT												
Dry cycle time	S					2.3						
Oil tank capacity						600						
1 /												
Machine dimensions(LxWxH)	mxmxm	6.9x1.86x2.35 12.5										

① : Servo/Standard Servo/Amplified Servo

P300 Layout Drawings



P300 Platen Dimension Drawings

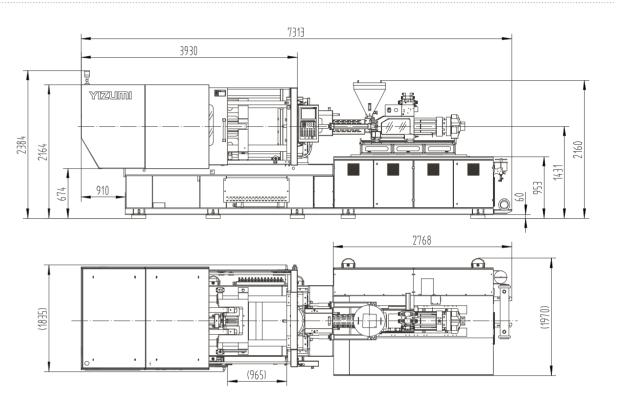


P350 High-speed Injection Molding Machine

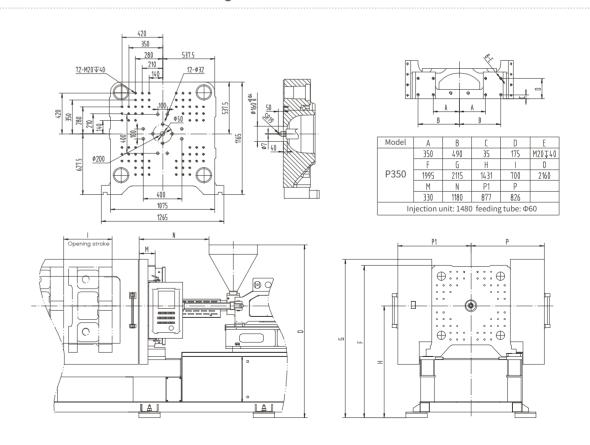
DESCRIPTION	UNIT	P350										
International specification		1080/3500 1480/3500					2180/3500					
INJECTION UNIT												
Shot volume	cm ³	491	594	707	763	896	1039	891	1212	158		
Shot weight (PS)	g	452	546	650	702	824	956	819	1115	145		
_	OZ	15.9	19.3	22.9	24.8	29.1	33.7	28.9	39.3	51.		
Screw diameter	mm	50	55	60	60	65	70	60	70	80		
Injection pressure	MPa	227	187	158	194	166	143	246	181	138		
Screw L:D ratio						22:1						
Max.injection speed ①	mm/s	16	0/270/	325	130	0/220/2	265	10	5/170/2	210		
Max.injection speed with accumulator	mm/s		500			500			500			
Nozzle stroke	mm					450						
Screw stroke	mm		250			270		315				
Screw speed (stepless)	r/min			0-3	300				0-250			
CLAMPING UNIT												
Clamping force	kN					3500						
Opening stroke	mm					700						
Space between bars (WxH)	mmxmm				-	730×73	0					
Max. daylight	mm					1450						
Mold thickness (MinMax.)	mm				(300-75	0					
Hydraulic ejection stroke	mm					200						
Ejector number						13						
Hydraulic ejection force	kN					137						
POWER UNIT												
Hydraulic system pressure	Мра					17.5						
Pump motor	kW				55/55	5+33.9/	55+55					
Pump motor with accumulator	kW			55-	+22				55+30)		
electric screw drive	kW		29			29			42			
Heating capacity	kW	16.5	22	24.8	22.6	24	27	30	32	35		
Number of temp control zones						5						
GENERAL UNIT												
Dry cycle time	S					2.6						
Oil tank capacity	I					700						
Machine dimensions(LxWxH)	mxmxm				7.3	5x1.97x	2.4					
		7.35x1.97x2.4 15										

① : Servo/Standard Servo/Amplified Servo

P350 Layout Drawings



P350 Platen Dimension Drawings

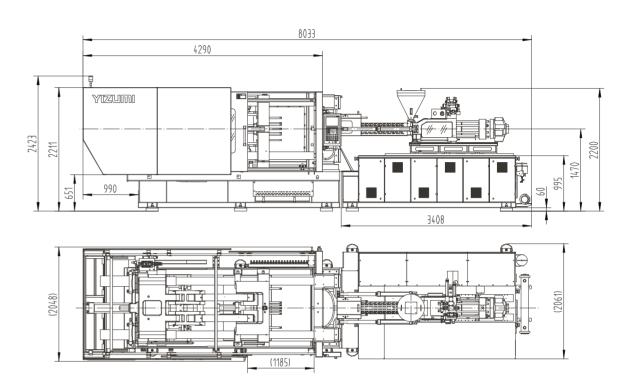


P450 High-speed Injection Molding Machine

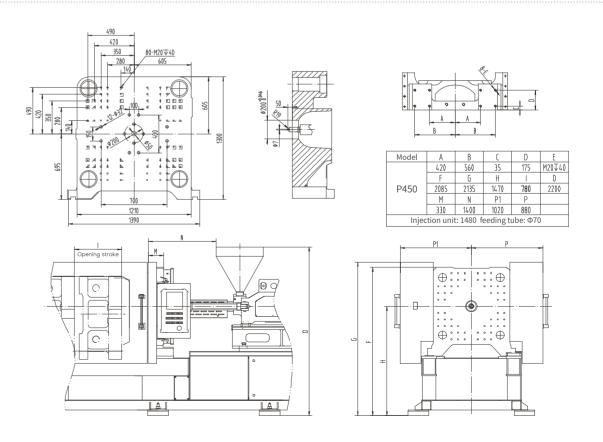
DESCRIPTION	UNIT	P450										
International specification		1080/4500 1480/4500				2180/4500						
INJECTION UNIT												
Shot volume	cm ³	491	594	707	763	896	1039	891	1212	158		
Shot weight (PS)	g	452	546	650	702	824	956	819	1115	145		
	OZ	15.9	19.3	22.9	24.8	29.1	33.7	28.9	39.3	51.4		
Screw diameter	mm	50	55	60	60	65	70	60	70	80		
Injection pressure	MPa	227	187	158	194	166	143	246	181	138		
Screw L:D ratio						22:1						
Max.injection speed ①	mm/s	16	0/330/	370	130	0/265/3	300	105/210/240				
Max.injection speed with accumulator	mm/s		500			500		500				
Nozzle stroke	mm					450						
Screw stroke	mm	250 270						315				
Screw speed (stepless)	r/min			0-3	800			0-250				
CLAMPING UNIT												
Clamping force	kN					4500						
Opening stroke	mm	780										
Space between bars (WxH)	mmxmm				8	320x82	0					
Max. daylight	mm					1580						
Mold thickness (MinMax.)	mm				(300-80	0					
Hydraulic ejection stroke	mm					220						
Ejector number						13						
Hydraulic ejection force	kN					137						
POWER UNIT												
Hydraulic system pressure	Мра					17.5						
Pump motor	kW				55/5	5+55/5	5+63					
Pump motor with accumulator	kW			55	+22				55+30			
electric screw drive	kW		29			29			42			
Heating capacity	kW	16.5	22	24.8	22.6	24	27	30	32	35		
Number of temp control zones						5						
GENERAL UNIT												
Dry cycle time	S					3.5						
Oil tank capacity	I					750						
Machine dimensions(LxWxH)	mxmxm				8.		45					
		8.1x2.1x2.45										

 $[\]textcircled{1}: {\sf Servo/Standard Servo/Amplified Servo}$

P450 Layout Drawings



P450 Platen Dimension Drawings

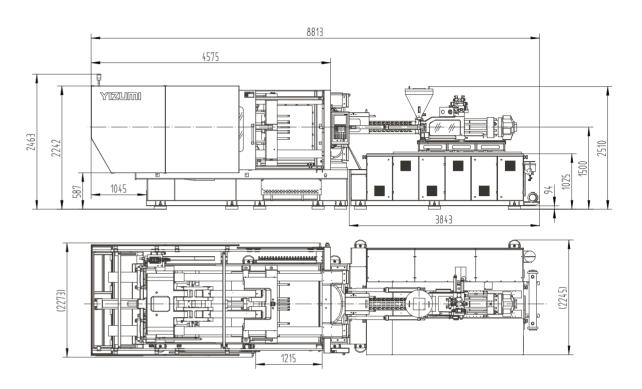


P550 High-speed Injection Molding Machine

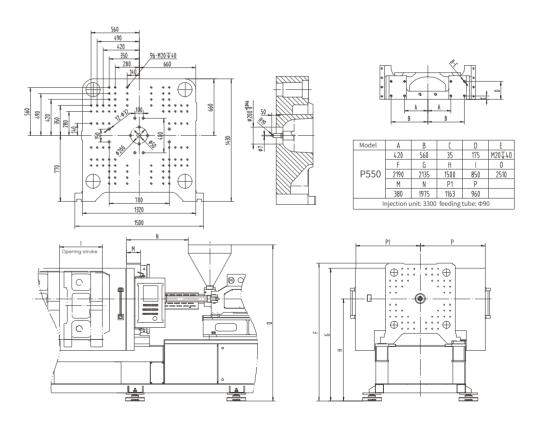
DESCRIPTION	UNIT	P550										
International specification		1480/5500 2180/5500				3300/5500						
INJECTION UNIT												
Shot volume	cm ³	763	896	1039	891	1212	1583	1366	1784	225		
Shot weight (PS)	9	702	824	956	819	1115	1457	1257	1642	207		
Shot Weight (F3)	OZ	24.8	29.1	33.7	28.9	39.3	51.4	44.3	57.9	73		
Screw diameter	mm	60	65	70	60	70	80	70	80	90		
Injection pressure	MPa	194	166	143	246	181	138	241	185	14		
Screw L:D ratio						22:1						
Max.injection speed ①	mm/s		170/34	O		130/270)	100/200				
Max.injection speed with accumulator	mm/s		500			500		500				
Nozzle stroke	mm					450						
Screw stroke	mm		270			315		355				
Screw speed (stepless)	r/min	0-300 0-250					0-220					
CLAMPING UNIT												
Clamping force	kN					5500						
Opening stroke	mm					850						
Space between bars (WxH)	mmxmm				(920x92	0					
Max. daylight	mm					1700						
Mold thickness (MinMax.)	mm				4	350-850	O					
Hydraulic ejection stroke	mm					220						
Ejector number						13						
Hydraulic ejection force	kN					137						
POWER UNIT												
Hydraulic system pressure	Мра					17.5						
Pump motor	kW				6	3/63+6	3					
Pump motor with accumulator	kW		63+22			63+30			63+30			
electric screw drive	kW		29			42			60			
Heating capacity	kW	22.6	24	27	30	32	35	30	32	35		
Number of temp control zones						5						
GENERAL UNIT												
Dry cycle time	S					4						
Oil tank capacity	I					900						
Machine dimensions(LxWxH)	mxmxm				8.9		2.46					
		8.9x2.25x2.46 25.5										

① : Servo/Standard Servo

P550 Layout Drawings



P550 Platen Dimension Drawings



Standard and Optional Features

Injection Unit	Standard	Optional
Nitrided alloy-steel screw and barrel	•	
Nozzle PID temperature control	•	
Double-cylinder	•	
Automatic material cleaning function	•	
Selectable suck-back before or after plasticizing	•	
Multi-stage barrel PID temperature control	•	
Purge guard (with safety switch)	•	
Precise transducer for injection / plasticizing stroke control	•	
Multi-stage injection speed / pressure /position control	•	
Multi-stage holding pressure speed / pressure / time control	•	
Multi-stage storage speed / pressure / position control	•	
Extended nozzle		0
Hard chrome plated screw component		0
Bi-metallic screw & barrel		0
Special screw set		0
Proportional back pressure control		0
Blowing device of barrel		0
Pneumatic/Hydraulic shut-off nozzle		0
Increased injection stroke		0
Hydraulic System	Standard	Optional
High-performance servo pump system	•	
Back pressure adjustment device of plasticizing		
High-precision by-pass oil filter		
Automatic system pressure and flow adjustment		
Imported hydraulic valve		
Imported hydraulic seal		
System pressure sensor		
Oil temperature detection and alarm		
·	•	
Low-noise hydraulic system	•	
Low-noise hydraulic system Hydraulic cooling device	•	0
Low-noise hydraulic system Hydraulic cooling device Hydraulic core pulling/ unscrewing device	•	0
Low-noise hydraulic system Hydraulic cooling device Hydraulic core pulling/ unscrewing device Independent oil temperature control system	•	0
Low-noise hydraulic system Hydraulic cooling device Hydraulic core pulling/ unscrewing device Independent oil temperature control system High-response servo injection system	•	_
Low-noise hydraulic system Hydraulic cooling device Hydraulic core pulling/ unscrewing device Independent oil temperature control system High-response servo injection system High-response servo mold opening and closing system	•	0
Low-noise hydraulic system Hydraulic cooling device Hydraulic core pulling/ unscrewing device Independent oil temperature control system High-response servo injection system High-response servo mold opening and closing system Ejection during mold opening	•	0 0
Low-noise hydraulic system Hydraulic cooling device Hydraulic core pulling/ unscrewing device Independent oil temperature control system High-response servo injection system High-response servo mold opening and closing system Ejection during mold opening Larger oil cooler		0
Low-noise hydraulic system Hydraulic cooling device Hydraulic core pulling/ unscrewing device Independent oil temperature control system High-response servo injection system High-response servo mold opening and closing system Ejection during mold opening Larger oil cooler Larger oil pump and motor		0 0
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Clamping Unit	Standard	Optional
Precise transducer for clamping / ejector stroke control	•	
Clamping platens / toggles made of highly-rigid ductile iron	•	
Two-stage ejector forward or back control	•	
Low-pressure mold protection	•	
Multiple ejector function settings	•	
Hydraulic gear-type mold height adjustment device	•	
Hydraulic/electrical safety devices	•	
Wear-resistant supporting tracks for movable platen	•	
Automatic centralized lubrication system	•	
Boost mold closing function		
Increased mold thickness		
Increased ejector stroke		\circ
Mechanical position limit device of mold-open		0
Heat insulating plate for mold		0
Special mold mounting hole		0
Movable platen with linear guide rail		0
Electrical Control System	Standard	Optional
Input/output inspection	•	
Automatic heat retaining and automatic heating setting	•	
Time / position / pressure controlled switchover from injection to holding		
Independent adjustment of slope		
Robot interface		
Molding data locking function	•	
Automatic clamping force adjustment	•	
LCD display screen	•	
Large memory for process parameters storage	•	
Multiple operating languages	•	
5 sets (8 sets) of independent air blowing with valve	•	
Working light/ single or multi color alarm light		0
Single-phase / three-phase power socket		0
Air blow device		0
Interface for electric unscrewing device		0
Special power supply voltage		0
Electrial unscrewing unit		0
Hot runner interface		0
Machine overall energy consumption display		O
Electrial dozing motor		0
Infrared / ceramic heater band		Ö
Plasticizing during mold opening		Ö
	0: 1 1	
Other	Standard	Optional
Operation manual	•	
Adjustable leveling pad	•	
A tool kit	•	
Filter element		
Standard hopper	•	
Mold temperature controller		\circ
Auto loader		\bigcirc
Dehumidifier		\circ
Glass-tube water flowmeter		\circ

4