THINK TECH FORWARD

Designed by YIZUMI, April 2023

YIZUMI

A5

60T-2600T

A5 SERIES STANDARD HIGH-END SERVO INJECTION MOLDING MACHINE

New A5, Excellent As Always

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PRODUCT DETAILS

THINK TECH FORWARD

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A5 Series Standard High-end Servo Injection Molding Machine

Machine model：60T-560T

Five Value Propositions

- Wide range of application
- Precise and stable
- High-efficiency and energy-saving
- Reliable and durable
- User-friendly

After successfully bringing servo machines to the market for years, mastering advanced European and American technology from HPM Company and completely understanding customer needs through over-two-year market research, YIZUMI develops a brand-new standard high-end servo injection molding machine, A5 Series, based on IPD mode.

Wide range of application

- Larger machine specifications
- Stronger power and faster response
- Wider processing range and lower repeated investment costs

Precise and stable

- Fully optimize injection unit to ensure precision and stability

Reliable and durable

- Higher overall rigidity of machine
- Uniform-stress molding technology
- More stable and reliable operation of machine

High-efficiency and energy-saving

- The third-generation servo system
- Low noise, strong power and quick response in operation

User-friendly

- User-friendly HMI
- Integrate a great deal of common functional software
- Improve operability and maintainability to give customers more flexibility and ease during use

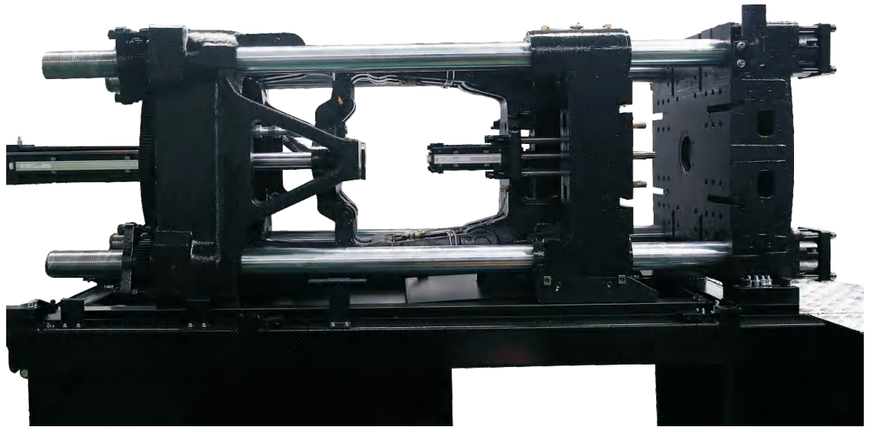
Clamping Unit

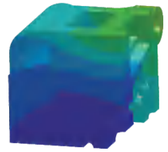
Customer need:

reliable and durable clamping unit, effective mold protection and high repeatability of mold open position.

Solutions:

Based on mature structure of clamping unit, 12 key functions were optimized and innovated, including:





Uniform-stress molding technology

The clamping force is evenly distributed with little deformation of platen. No injection molding defect will be caused when the same part is produced under lower clamping force, which protects the platen and mold.

Closed-loop control of mold open position

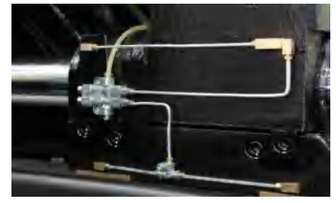
The enhanced accuracy and repeatability of mold open position result in accurate part removal by robot and benefit automated continuous production. The mold open position accuracy is smaller than 2mm and repeatability is below 0.3mm.

High-rigidity T-slot platen

High-rigidity T-slot platen is standard on the product line, which increases the overall rigidity of clamping unit by 30%, brings convenience for installation and removal of mold, reduces the wear of thread due to long-term use of screw hole and extends the life of platen.

Anti-tilt platen support design

Special anti-tilt platen support design increases the smoothness of motion, lowers friction, improves the efficiency of motion, reduces energy consumption and prevents the platen from tilting so as to protect the mold.



Compulsory ejector return

This function meets the requirement of special mold reset and the molds are more applicable.

Low pressure mold protection

Low-pressure mold protection control unit ensures the mold gets effectively protected.

Injection Unit

Customer need: high injection precision stability and improved quality of plasticizing and color mixing.

Solutions: Based on mature structure of injection unit, 15 key functions were optimized and innovated, including:

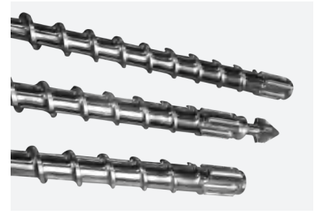
Horizontal dual-carriage design

Adopt a horizontal dual-carriage design for two-cylinder parallel injection, effectively eliminating rotary torque to ensure a reliable and stable injection.

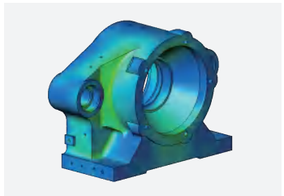
Horizontal double-carriage design

New universal screw and barrel unit

The upgraded screw and barrel unit further optimizes color mixing and plasticizing efficiency. It has the advantages of easy color change and cleaning, low shear without tempera ture rise and wider applicability, etc.



New screw & barrel unit



High-rigidity injection component

Optimized injection unit

The injection unit is optimized to increase rigidity, ensure coaxiality of the forces on motion and injection, reduce resistance, and enhance the stability and accuracy of injection.

Injection unit support with linear guide rails

Integrated linear guide rail structure

The injection unit is equipped with the one-piece supporting base which is integrated with linear guide rails, which minimizes the friction to motion, increases injection accuracy and enhances plasticizing efficiency.

User-friendly designs

Heating device guard, hopper slide rail, purge guard and centralized lubrication, etc. are user-friendly designs that ensure the operation safety, reduce labor intensity and offer more ease of operation and maintenance.

User-friendly design: movable hopper rails (60T-320T) Centralized lubrication module

Hydraulic System

YIZUMI's third-generation energy-saving servo technology

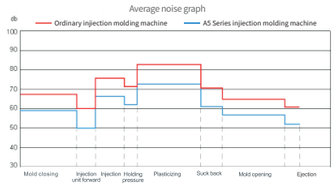
The third-generation servo system has been improved and optimized in the internal structure of motor, the standard of magnetic steel, the selection of oil pump and the development of drive software to achieve superior performance in stability, reliability, durability, energy conservation, efficiency and low noise; the servo system uses 30%-80% less energy than conventional hydraulic machines. The accuracy of closed-loop hydraulic oil temperature control, which is the new function, is ±0.5℃ with further increased stability.

Professional brand-name motor

Imported high-pressure gear pump

INOVANCE servo drive

Proven by years of practical application and higher configured, the third-generation servo system is stable, reliable and durable and characterized by high efficiency, energy saving, low noise, strong power and fast response.

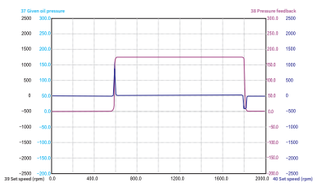


Low noise

Under the same working conditions, the 3rd-generation servo system emits 20% lower noise than the previous generation when producing the same product.

Strong power

The servo system has sufficient power and strong overload capacity, for example, a 120T machine in A5 Series can raise no overload alarm at maximum speed and under maximum pressure for 5 minutes in a test.



Fast response

The speed of response is further upgraded. Take a 120T machine for example, the response time of servo system is about 40ms.

Electrical System

Customer need——fast speed, accurate control, easy operation, program for multiple processes, powerful.

Solution——upgraded controller, 10.4'' TFT true color display, 0.25ms of scan time, fully improved operational convenience, multiple processes for your need

Mirle MS control system delivers better performance in machine control and adds to the stability of product and machine.

MS Control System

- The control unit adopts Cortex-A55 processor with scan time of 0.25ms, speedy response and accurate control.
- 1000 sets of mold data memory, USB port for extension of storage
- 7+1 sections of PID temperature control supports switchover between type J and type K thermocouples. Automatic PID tuning improves the temperature control accuracy.
- Expansion of hot runner interface is available, supporting 48 sets of hot runner and switchover between type J and type K thermocouples (optional)
- Production quality control, with display of process parameter graphs and statistics tables.
- The I/O module has 64 outputs and 64 inputs at maximum (optional).
- Integration of common software (like IMC, robot, needle valve) meets different injection molding process requirements.
- Common communication interface, including RS-232\485, CANOPEN, OPC UA

Standard CNC back pressure

Use CNC back pressure for easier adjustments of plasticizing back pressure.

User-friendly design

The ergonomic rotary controller cabinet has a special and nice exterior design while offering comfort during use. The design of electrical cabinet and other components ensures safety of wiring and also makes operation and maintenance easier.

Electrical cabinet that is neat, safe and maintenance-friendly

Universal standardized interfaces and connectors

High Standard A5 Series Medium To Large Tonnage Servo Injection Molding Machine

Machine model：650T-2600T

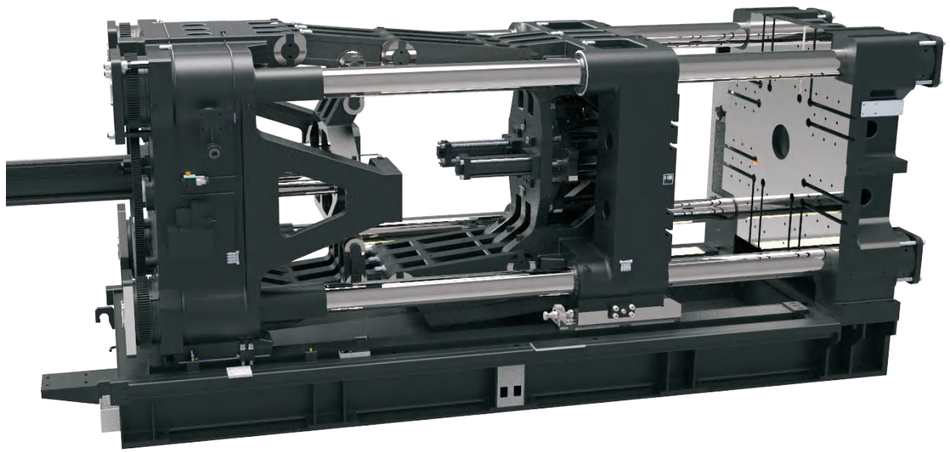
R&D background of A5 series medium to large tonnage machine

A5 series of small-medium machine (60T-480T) was introduced to market since Sept. in 2015. Its unique advantage of "wide range of application, high efficiency and precision stability" has been identified and verified by customers, and customers also request to extend existing A5 series. After interviewing, researching customers' needs, YIZUMI finally determined the core customer value of the A5 series medium-large machines (over 650T), which is reliability & stability. Under this background, YIZUMI IPD-program team follows the trend and focuses on research and test of medium-large injection molding machine in its reliability, stability and plasticizing performance, which completely meets customers needs.

To fulfill the core value of "reliability & stability" in A5 series medium-large machines, we redefine and strictly implement key inspection and performance criteria below:

- Backflow detection variation <1mm
- Plasticizing weight deviation<0.5%
- Platen parallelism (after load) <0.18mm（UN800A5）
- Platen parallelism (mold opening to 100mm)<0.54mm（UN800A5）
- Force deviation of tie bar <±3%
- Repeatability of clamping force <1%
- Accuracy of mold-open end position <2mm
- Static temperature control accuracy<±1℃

Clamping Unit



Mechanical structure of clamping unit——stable, high-rigidity

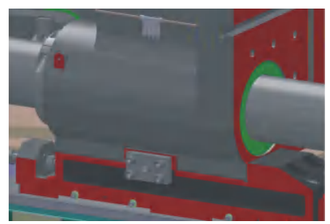
The platen structure is designed with European style and fully optimized parameters and force distribution. High-rigidity materials and manufacturing processes for base frame ensure the machine is strong, stable and reliable.

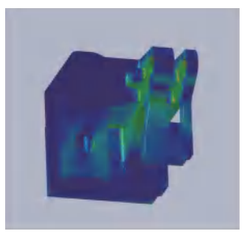
High-rigidity T-slot platen

Full range of high-rigid plates greatly improve the overall rigidity of the clamping unit. The series is equipped with T-slotted plates to facilitate mold loading/ unloading, reduce the rate of wear on screw hole threads after pro-longed use and extend the useful life of platens.

Extended moving platen support

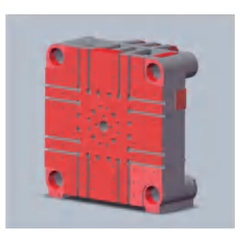
The movable platen is equipped with front heavy-load sliding supports. The center of gravity of support moves forwards to the mold mounting surface, preventing the platen from tilting. Machine still operates steadily when it is loaded with heavy molds.





Uniform-stress clamping technology

Uniform distribution of clamping force, less platen deformation . Lower clamping force is applicable to produce the same part without flash, protecting platen and mould.

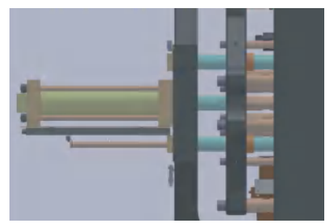


Compulsory ejector return

Standard ejector forced reset feature to fulfill the forced reset requirement for certain special molds and expand mold appli-cations.

Extended ejector guiding platen design

Ejector guiding extended, effectively avoiding ejector plate tilting and improving stability of ejection.Uniform distribution of ejector force , precise ejection position with better ejection performance.



Injection Unit

Mechanical structure of injection unit——stable, less friction

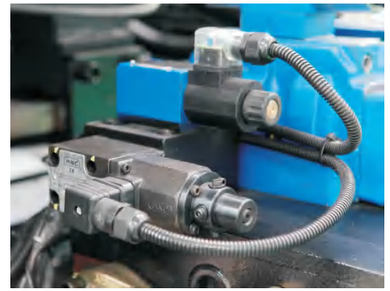
Optimized injection structure design improves rigidity of injection unit.
Reduce all frictional resistance during injection molding process enhance the stability & precision of injection.

Optimized plasticizing screw

- The plasticizing efficiency is up by 10%-30% and the quality of plasticizing and color mixing is improved as well.
- Four sets of standard barrel assembly are available so that the machine has wider applicability.

Proportional plasticizing back pressure control

- Proportional back pressure facilitates accurate control by industrial computer and enhances the stability of injection.

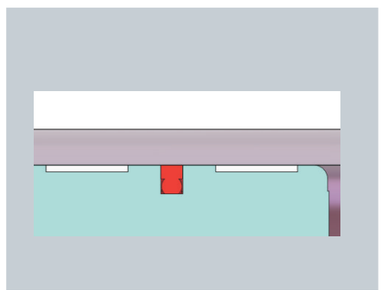


Integrated linear guide rail support

- Medium size machine adopts integrated linear guide rail, horizontal double-carriage design and double-cylinder injection to ensure injection is reliable & stable.
- Integrated linear guide rail support reduces the friction between injection unit and linear guide rail or tie bar and enhances production repeatability.

Low friction oil seal inside injection cylinder

- Injection cylinder adopts low friction oil seal design, fully reducing injection friction and ensuring longer service life.



Hydraulic System

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Professional brand-name motor

Imported high-pressure gear pump

INOVANCE servo drive

Proven by years of practical application and higher configured, the third-generation servo system is stable, reliable and durable and characterized by high efficiency, energy saving, low noise, strong power and fast response.

Low noise

Under the same working conditions, the 3rd-generation servo system emits 20% lower noise than the previous generation when producing the same product.

Strong power

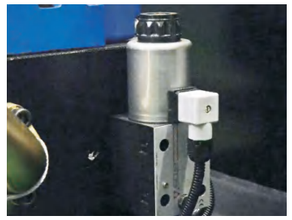
High efficiency gear pump realizes fast response injection molding which can be used in high-precision molding.

Electrical System

High precision control system——more accurate control of system pressure, flow, position & temperature, higher part repeatability, as well as more stable overall machine performance.

Upgraded KEBA system

- Expandable with multiple modules including AO, AI, DO, DI, and TM to meet more requirements;
- Real-time monitoring of signals from machine equipped sensors to coordinate corresponding movements for higher operating safety;
- Support common RS232/485 communication interface, CANOPEN, Ethernet port, temperature compensation sensor connector, and USB port.



Proportional valve-controlled mold opening deceleration

- Reduce excessive distance in mold opening and improve repeatability of mold-open position
- Facilitate accurate part removal by robot and improve the efficiency of automated production

Low oil level alarm

- Automatic low oil level alarm function prevents gas from being sucked in due to low oil level, avoiding consequent instability of hydraulic circuit

Weldless flared hydraulic hose design

- Ensure no oil leaks due to cracked weld during long-term use

Specifications of UN60A5 to UN2600A5

Note: Due to improvement, specifications may be changed without prior notice.

DESCRIPTION		UNIT	UN60A5		UN90A5			UN120A5			UN160A5			UN200A5		
International size			190/600		295/900			420/1200			604/1600			895/2000		
INJECTION UNIT																
			A	B	A	B	C	A	B	C	A	B	C	A	B	C
Shot volume		cm^3	51.3	71.7	116.6	158.7	207.3	163.6	246.9	307.6	297.7	371	452.3	425.2	518.5	664.4
Shot weight (PS)		g	47.2	65.9	107.3	146	190.8	150.5	227.1	283	273.9	341.3	416.1	391.2	477	611.3
		oz	1.7	2.3	3.8	5.2	6.7	5.3	8	10	9.7	12	14.7	13.8	16.8	21.6
Screw diameter		mm	22	26	30	35	40	35	43	48	43	48	53	48	53	60
Injection pressure		MPa	373	267	252.8	185.6	142.2	256.9	170	136.7	203	162.9	133.6	210.7	172.8	134.8
Injection rate	Standard servo pump	g/s	43.0	60.1	69.6	94.7	123.7	83.2	125.6	156.5	132.2	164.8	200.9	148	182.6	231.5
	Imported servo pump (optional)		43.0	60.1	69.6	94.7	123.7	87	132	164	133	166	202	144	175	224
	Variable-displacement pump (optional)		38.7	54.1	68.7	93.5	122	67.2	101.5	126.5	121.6	151.5	184.7	132	161	206.3
Screw L:D ratio			20:1	20:1	24:1	20:1	20:1	24:1	20:1	20:1	22.3:1	20:1	20:1	22.:1	20:1	20:1
Max. injection speed	Standard servo pump	mm/s	124		107			94			99			89		
	Imported servo pump (optional)		123		107			100			101			87		
	Variable-displacement pump (optional)		110.8		106			76			91			79.3		
Screw stroke		mm	135		165			170			205			235		
Screw speed (stepless)	Standard servo pump	r/min	0-217		0-198			0-208			0-235			0-194		
	Imported servo pump (optional)		0-230		0-219			0-242			0-255			0-190		
	Variable-displacement pump (optional)		0-194		0-198			0-171			0-216			0-173		
CLAMPING UNIT																
Clamping force		kN	600		900			1200			1600			2000		
Opening stroke		mm	260		330			360			420			490		
Space between tie bars (WxH)		mmxmm	310x310		360x360			410x410			460x460			530x530		
Max. daylight		mm	590		710			810			940			1040		
Mold thickness (min.-max.)		mm	120-330		130-380			145-450			160-520			180-550		
Ejector stroke		mm	60		100			120			140			150		
Number of ejector pin holes			1		5			5			5			5		
Ejector force		kN	22		28			42			42			49		
POWER UNIT																
Max. system pressure		MPa	17.5		17.5			17.5			17.5			17.5		
Oil pump motor	Standard servo pump	kW	11		11			15			25			25		
	Imported servo pump (optional)		8		9			13			15			17		
	Variable-displacement pump (optional)		7.5		11			11			15			18.5		
Heating power		kW	4.8/5.5		6.9/7.8			9/10.1			10.9/12.1			14.4/16.8		
Number of temperature control zones			4		4			4			4			5		
GENERAL																
Dry cycle time		s	1.6		1.8			2.0			2.4			2.7		
Oil tank capacity		L	130		150			155			220			255		
Machine dimensions (LxWxH)		mxmxm	4.24×1.14×1.90		4.49×1.22×1.98			4.82×1.30×2.05			5.35×1.37×2.13			5.76×1.45×2.21		
Machine weight		kg	2500		3100			3700			4600			5600		

Specifications of UN60A5 to UN2600A5

Note: Due to improvement, specifications may be changed without prior notice.

DESCRIPTION		UNIT	UN260A5			UN320A5			UN400A5			UN480A5		
International size			1269/2600			1885/3200			2693/4000			3330/4800		
INJECTION UNIT									INJECTION UNIT					
			A	B	C	A	B	C	A	B	C	A	B	C
Shot volume		cm^3	584.6	749.3	962.4	834.1	1071.3	1338.3	1198.5	1497	1828.8	1678.5	2050.5	2459.6
Shot weight (PS)		g	537.9	689.3	885.4	767.4	985.6	1231.2	1102.6	1377.3	1682.5	1544.2	1886.4	2262.8
		oz	19	24.3	31.2	27.1	34.8	43.4	38.9	48.6	59.3	54.5	66.5	79.8
Screw diameter		mm	53	60	68	60	68	76	68	76	84	76	84	92
Injection pressure		MPa	217.1	169.4	131.8	226.2	176.1	141	224.8	180	147.3	198.6	162.5	135.5
Injection rate	Standard servo pump	g/s	160.3	205.5	264	238.8	306.7	383.1	297	371	453.8	379.8	464.0	556.5
	Imported servo pump (optional)		203	260	334	214	275	343	291	363	444	392	473	568
	Variable-displacement pump (optional)		162.3	208.0	267.2	251	322.4	402.7	252.6	315.5	385.4	396.5	484.4	581
Screw L:D ratio			22.6:1	20:1	20:1	22.6:1	20:1	20:1	22.3:1	20:1	20:1	22.1:1	20:1	20:1
Max. injection speed	Standard servo pump	mm/s	79			91			89			91		
	Imported servo pump (optional)		101			83			87			94		
	Variable-displacement pump (optional)		80			96.5			75.6			95		
Screw stroke		mm	265			295			330			370		
Screw speed (stepless)	Domestic servo pump (standard)	r/min	0-161			0-200			0-156			0-140		
	Imported servo pump (optional)		0-207			0-182			0-156			0-145		
	Variable-displacement pump (optional)		0-164			0-212			0-132			0-147		
CLAMPING UNIT									CLAMPING UNIT					
Clamping force		kN	2600			3200			4000			4800		
Opening stroke		mm	530			640			700			780		
Space between tie bars (WxH)		mmxmm	610x570			710x670			760x710			830x810		
Max. daylight		mm	1140			1300			1430			1590		
Mold thickness (min.-max.)		mm	195-610			220-660			240-730			260-810		
Ejector stroke		mm	160			170			210			220		
Number of ejector pin holes			13			13			13			17		
Ejector force		kN	77			77			110			110		
POWER UNIT									POWER UNIT					
Max. system pressure		MPa	17.5			17.5			17.5			17.5		
Oil pump motor	Standard servo pump	kW	30			51			60			70		
	Imported servo pump (optional)		28			31			31+9			31+17		
	Variable-displacement pump (optional)		22			37			37			45		
Heating power		kW	16.6/19			22.2/24.6			26.4/30.9			33.1/36.2		
Number of temperature control zones			5			5			6			6		
GENERAL									GENERAL					
Dry cycle time		s	2.8			3.2			4			4.5		
Oil tank capacity		L	335			445			570			760		
Machine dimensions (LxWxH)		mxmxm	6.24x1.64x2.39			6.96x1.85x2.50			7.73x2.16x2.45			8.47x2.16x2.49		
Machine weight		kg	7600			10300			14700			17300		

Specifications of UN60A5 to UN2600A5

Note: Due to improvement, specifications may be changed without prior notice.

DESCRIPTION		UNIT	UN560A5				UN650A5				UN800A5				UN1000A5			
International size			3330/5600				4820/6500				6780/8000				9015/10000			
INJECTION UNIT											INJECTION UNIT							
			A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Shot volume		cm^3	1678.5	2050.5	2459.6	2906.0	2216.7	2659	3141.6	3664.4	3190	3769.9	4397.2	5072.8	4319.7	5038.5	5812.6	6749.5
Shot weight (PS)		g	1544.2	1886.4	2262.8	2673.5	2039.4	2446.3	2890.3	3371.2	2935.6	3468.3	4045.4	4667.0	3974.1	4635.4	5347.6	6209.5
		oz	54.5	66.5	79.8	94.3	71.9	86.3	101.9	118.9	103.5	122.3	142.7	164.6	140.2	163.5	188.6	219.0
Screw diameter		mm	76	84	92	100	84	92	100	108	92	100	108	116	100	108	116	125
Injection pressure		MPa	198.6	162.5	135.5	114.6	217.6	181.4	153.5	131	212.8	180.2	154.5	133.9	208.8	179.1	155.2	133.6
Injection rate	Standard servo pump	g/s	379.8	464	556.5	658	443	531	629	699	563	666	777	896	642	749	864	1004
	Imported servo pump (optional)		387	473	567	671	423	507	699	699	533	630	735	848	642	749	864	1004
	Variable-displacement pump (optional)		396.7	484.6	581.3	686.8	423	507.4	599.5	699.3	533.2	630	734.8	847.7	642.4	749.2	864.4	1003.7
Screw L:D ratio			22.1:1	20:1	22:1	20:1	21.9:1	22:1	21.6:1	20:1	21.7:1	22:1	21.5:1	20:1	21.6:1	22:1	21.6:1	20:1
Max. injection speed	Standard servo pump	mm/s	91				87				92				89			
	Imported servo pump (optional)		94				83				87				89			
	Variable-displacement pump (optional)		95				83				87				89			
Screw stroke		mm	370				400				480				550			
Screw speed (stepless)	Domestic servo pump (standard)	r/min	0-140				0-143				0-143				0-116			
	Imported servo pump (optional)		0-145				0-143				0-136				0-116			
	Variable-displacement pump (optional)		0-130				0-127				0-110				0-103			
CLAMPING UNIT											CLAMPING UNIT							
Clamping force		kN	5600				6500				8000				10000			
Opening stroke		mm	850				900				1040				1220			
Space between tie bars (WxH)		mmxmm	850x810				930x930				1000x1000				1160x1160			
Max. daylight		mm	1700				1800				2040				2380			
Mold thickness (min.-max.)		mm	330-850				350-900				400-1000				450-1160			
Ejector stroke		mm	220				280				280				320			
Number of ejector pin holes			17				21				21				21			
Ejector force		kN	166				182				182				274			
POWER UNIT											POWER UNIT							
Max. system pressure		MPa	17.5				17.5				17.5				17.5			
Oil pump motor	Standard servo pump	kW	70				34+51				51+60				60×2			
	Imported servo pump (optional)		31+17				31×2				31x2+17				31×3			
	Variable-displacement pump (optional)		45				37+22				37×2				37+45			
Heating power		kW	33.1/43				38/47				42/51				46.5/63.6			
Number of temperature control zones			6				6				6				7			
GENERAL											GENERAL							
Dry cycle time		s	5.5				6.5				7				8			
Oil tank capacity		L	760				1000				1150				1300			
Machine dimensions (LxWxH)		mxmxm	8.73x2.16x2.49				9.57x2.25x2.66				10.51x2.38x2.73				11.37x2.60x2.66			
Machine weight		kg	17800				24600				33700				42200			

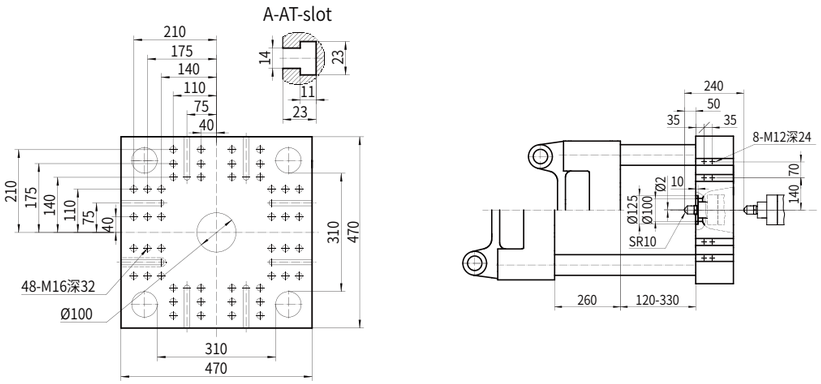
Specifications of UN60A5 to UN2600A5

Note: Due to improvement, specifications may be changed without prior notice.

DESCRIPTION		UNIT	UN1400A5				UN1800A5				UN2200A5				UN2600A5		
International size			12053/14000				18471/18000				21215/22000				29880/26000		
INJECTION UNIT											INJECTION UNIT						
			A	B	C	D	A	B	C	D	A	B	C	D	A	B	C
Shot volume		cm^3	6341.0	7363.1	8588.3	9907.8	10019.7	11559	13208.4	15888.6	12384.7	14151.9	16036.8	19085.2	17925.7	20313.3	24174.5
Shot weight (PS)		g	5833.7	6774.1	7901.3	9115.2	9218.1	10634.4	12151.7	14617.5	11394.0	13019.7	14753.9	17558.3	16491.7	18688.3	22240.6
		oz	205.8	238.9	278.7	321.5	325.2	375.1	428.6	515.6	401.9	459.2	520.4	619.3	581.7	659.2	784.5
Screw diameter		mm	116	125	135	145	135	145	155	170	145	155	165	180	155	165	180
Injection pressure		MPa	190.1	163.7	140.4	121.8	184.3	159.8	139.8	116.2	171.3	149.9	132.3	111.2	166.7	147.1	123.6
Injection rate	Standard servo pump	g/s	791	919	1071	1236	1092	1259	1439	1731	1316	1504	1704	2028	1803	2044	2432
	Imported servo pump (optional)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Variable-displacement pump (optional)		830.6	964.5	1125	1298	1157	1335	1525.6	1835	1361	1555.5	1762.7	2097.8	1803.3	2043.5	2431.9
Screw L:D ratio			22:1	20:1	20:1	22:1	23.6:1	22:1	20:1	22:1	23.5:1	22:1	20.6:1	22:1	23.4:1	22:1	20:1
Max. injection speed	Standard servo pump	mm/s	81				83				87				104		
	Imported servo pump (optional)		-				-				-				-		
	Variable-displacement pump (optional)		85				88				90				104		
Screw stroke		mm	600				700				750				950		
Screw speed (stepless)	Domestic servo pump (standard)	r/min	0-106				0-110				0-100				0-116		
	Imported servo pump (optional)		-				-				-				-		
	Variable-displacement pump (optional)		0-95				0-93				0-100				0-116		
CLAMPING UNIT											CLAMPING UNIT						
Clamping force		kN	14000				18000				22000				26000		
Opening stroke		mm	1350				1560				1750				1950		
Space between tie bars (WxH)		mmxmm	1310X1310				1560X1560				1850X1650				1950X1800		
Max. daylight		mm	2700				3210				3570				3830		
Mold thickness (min.-max.)		mm	600-1350				800-1650				850-1820				900-1880		
Ejector stroke		mm	380				400				430				430		
Number of ejector pin holes			29				33				33				33		
Ejector force		kN	303				303				460				460		
POWER UNIT											POWER UNIT						
Max. system pressure		MPa	17.5				17.5				17.5				17.5		
Oil pump motor	Standard servo pump	kW	70x2				60x3				70x3				70x4		
	Imported servo pump (optional)		-				-				-				-		
	Variable-displacement pump (optional)		55x2				55x2+37				55x3				55x4		
Heating power		kW	65.6/69.9				95				106.6				126.1		
Number of temperature control zones			8				8				10				10		
GENERAL											GENERAL						
Dry cycle time		s	9.5				13				16.5				17		
Oil tank capacity		L	1600				1900				2000				2300		
Machine dimensions (LxWxH)		mxmxm	12.64x3.00x3.16				14.42x3.30x3.34				16.38x3.93x3.76				17.84x4.12x4.00		
Machine weight		kg	75000				108000				145000				190000		

Platen Dimensions

UN60A5



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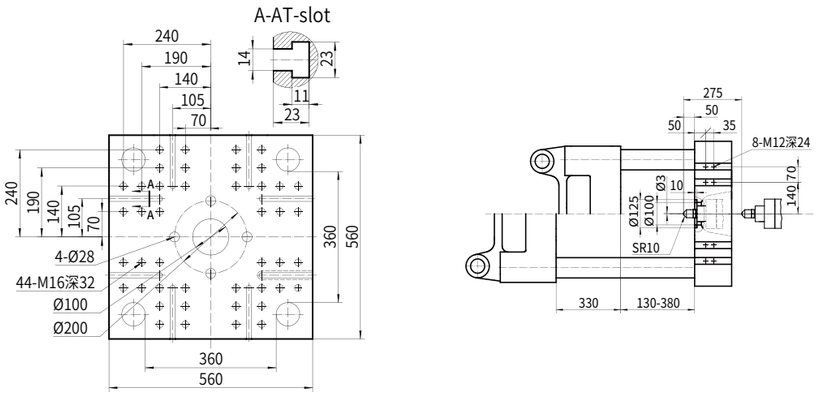

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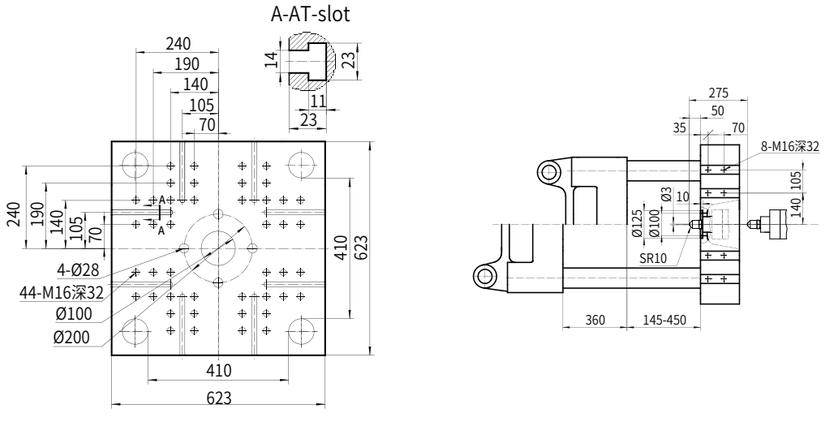

Machine Dimensions

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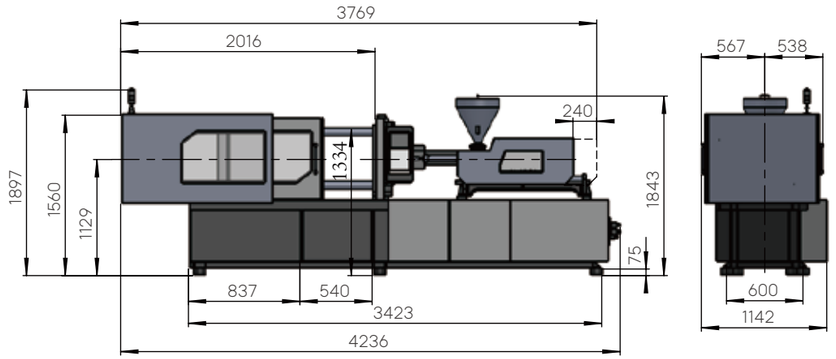

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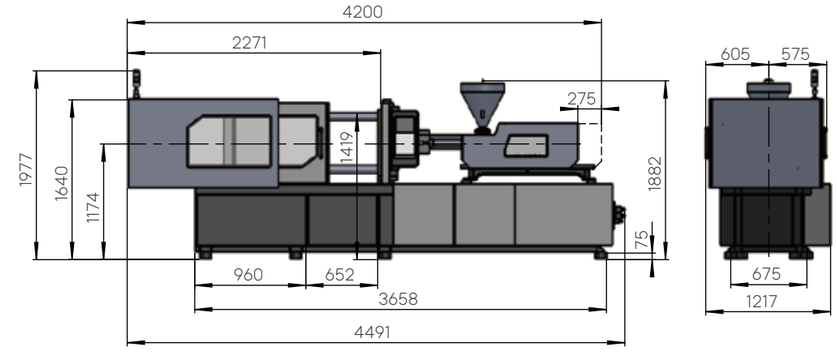

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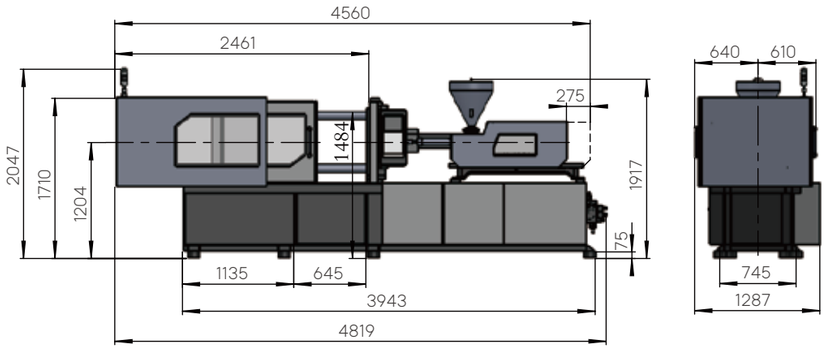

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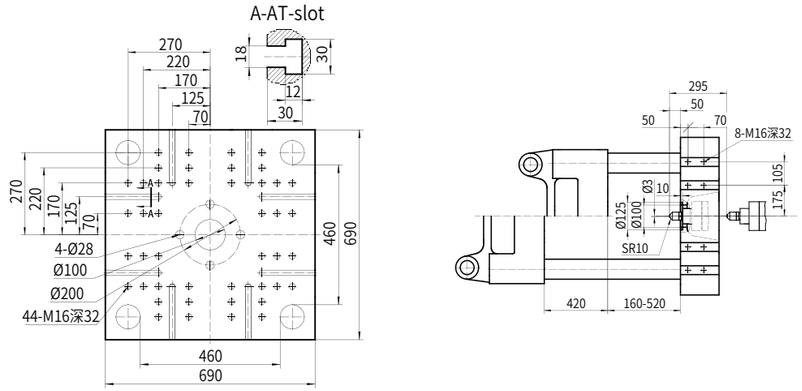

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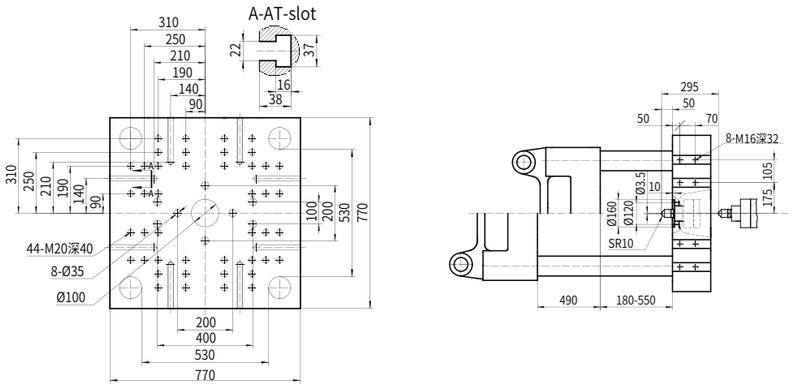

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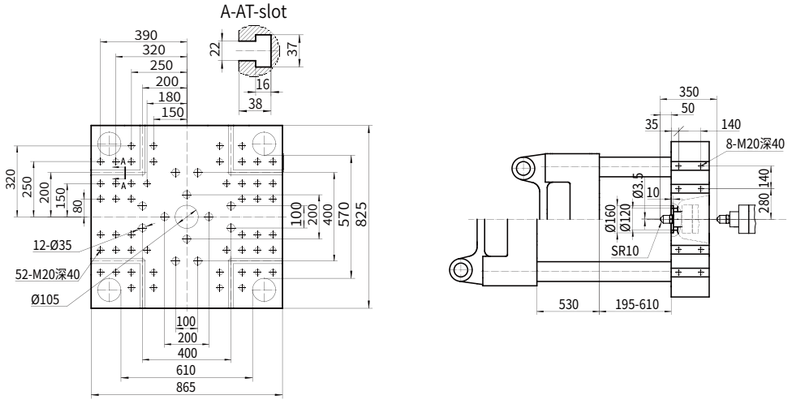

Machine Dimensions

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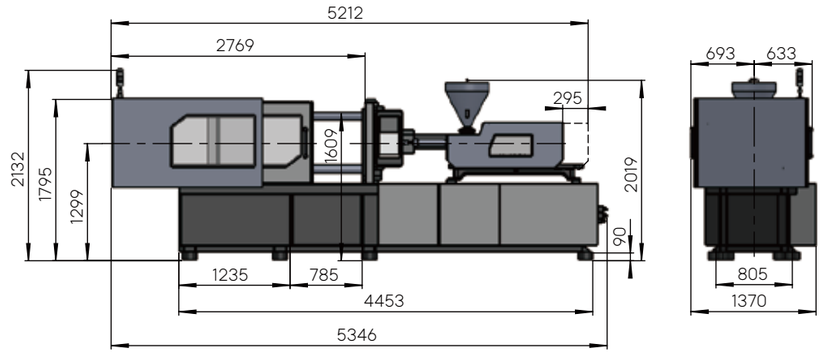

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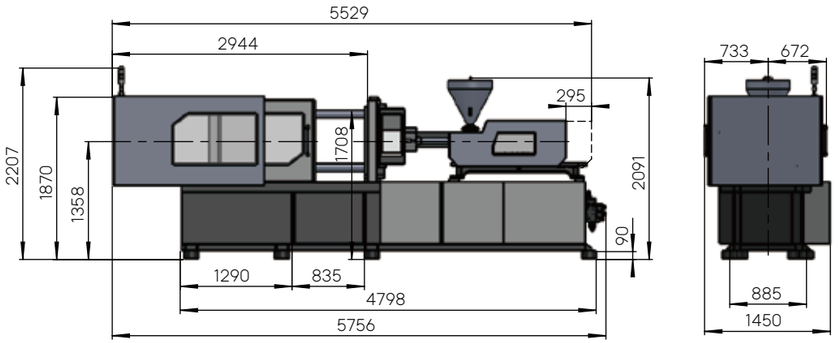

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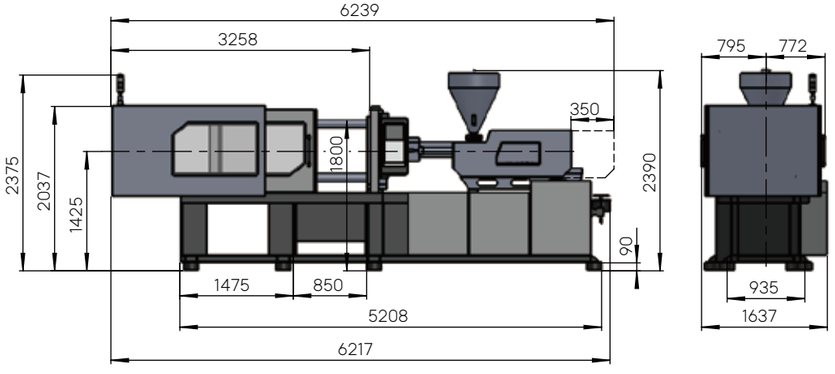

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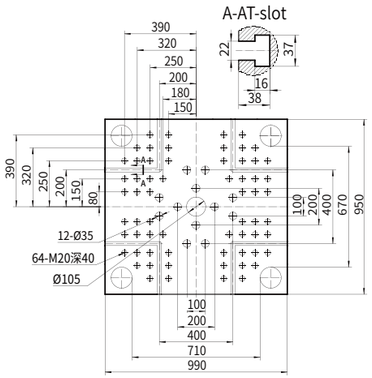

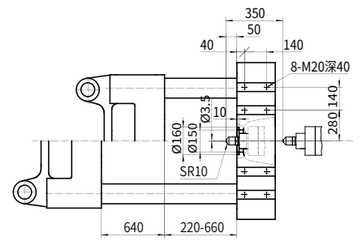

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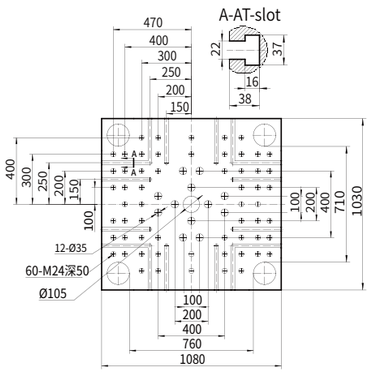

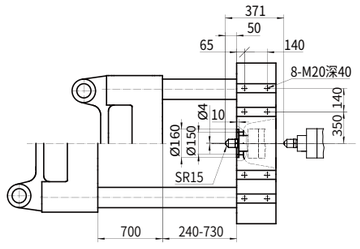

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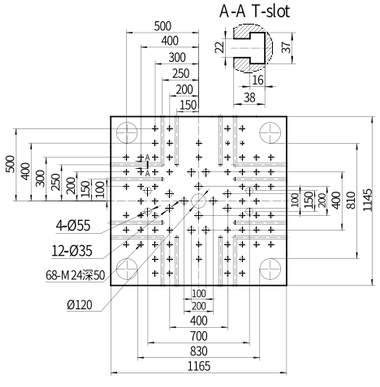
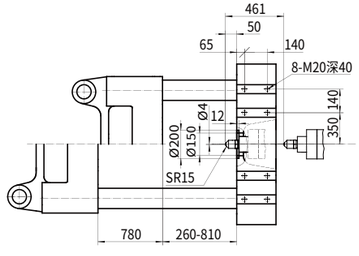
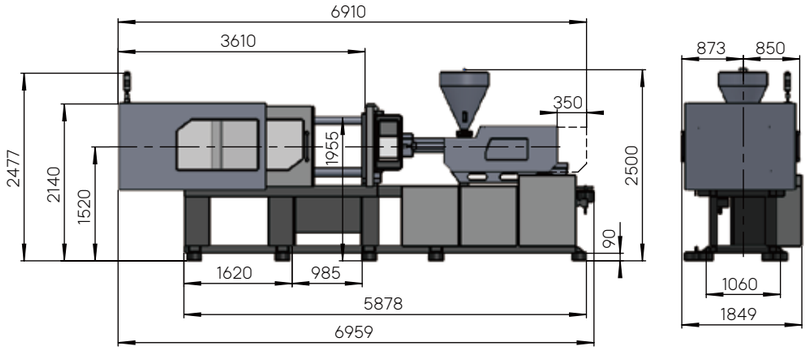




Machine Dimensions

UN320A5



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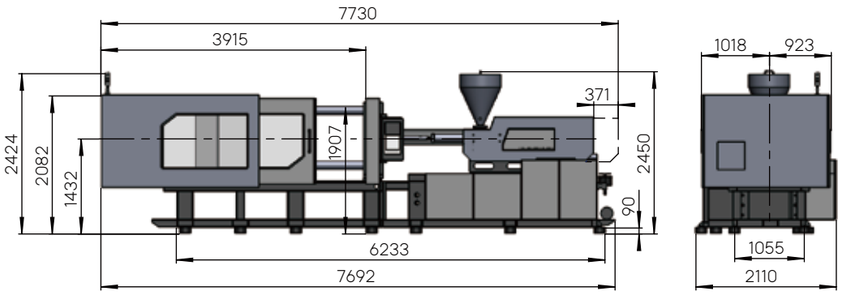

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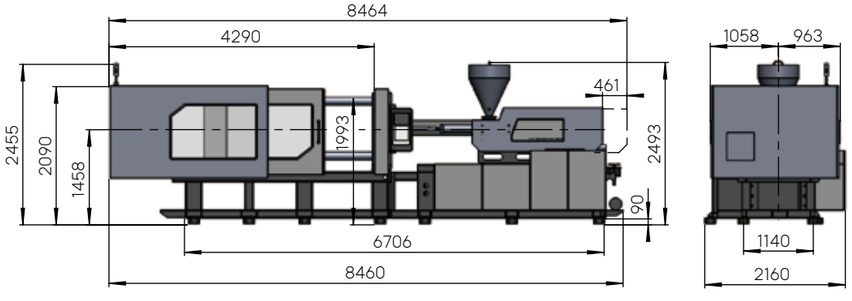

Platen Dimensions

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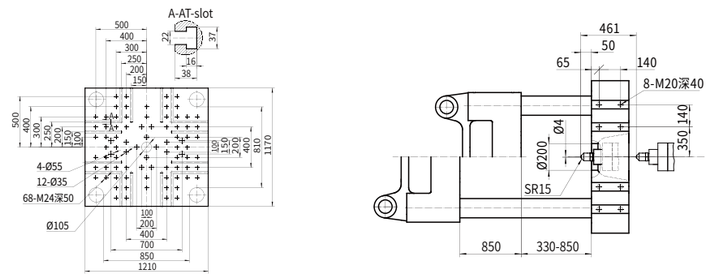

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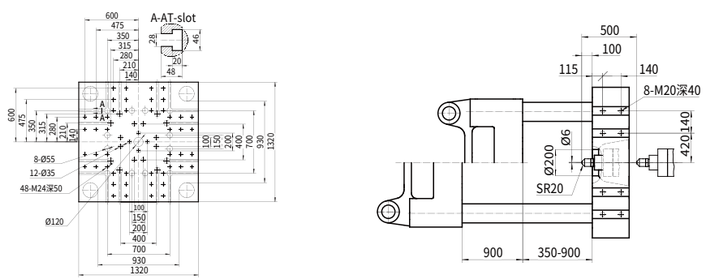

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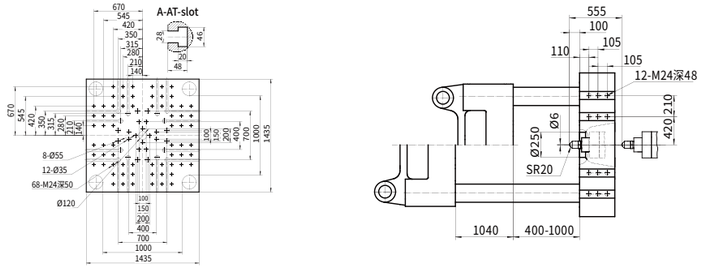

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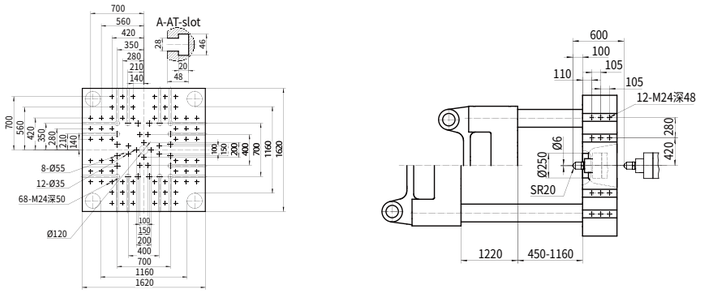
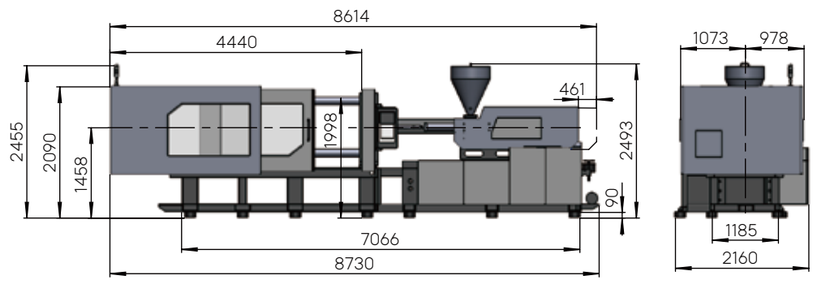


Machine Dimensions

UN560A5



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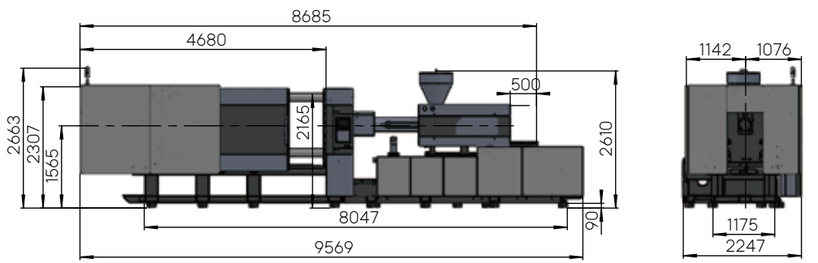

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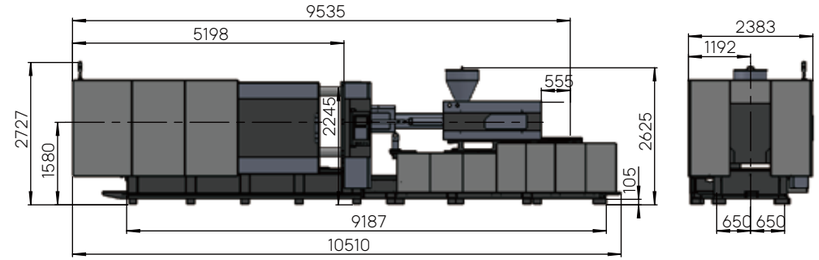

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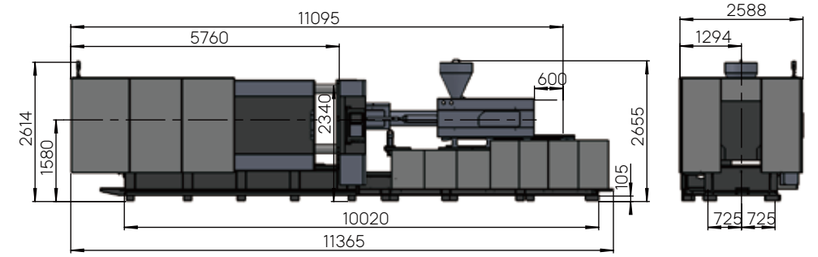

Platen Dimensions

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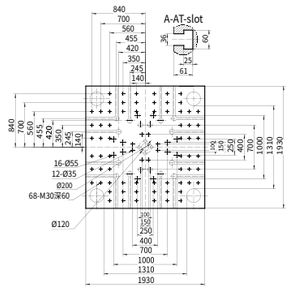

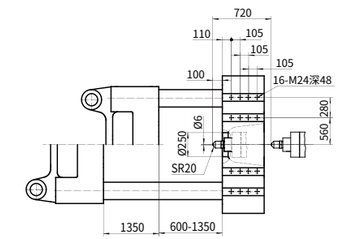

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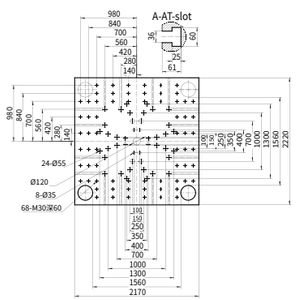

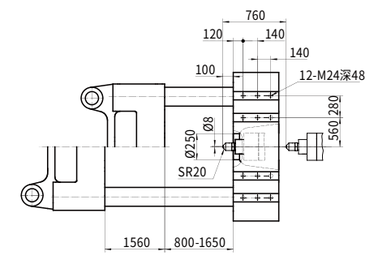

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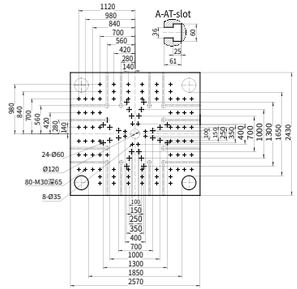

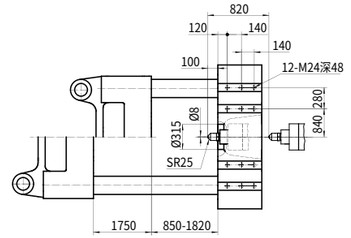

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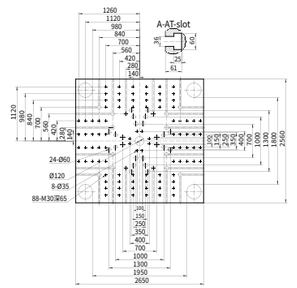

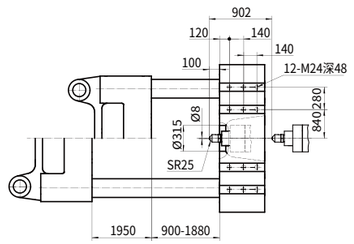

Machine Dimensions

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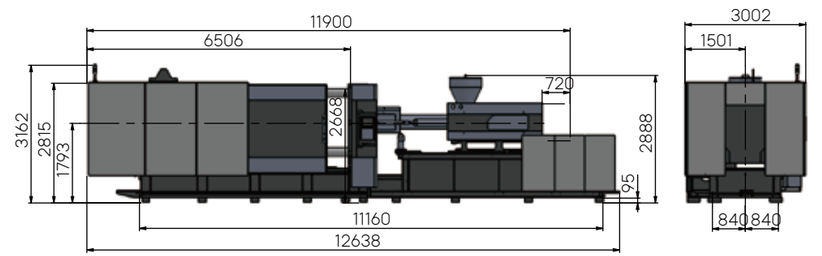

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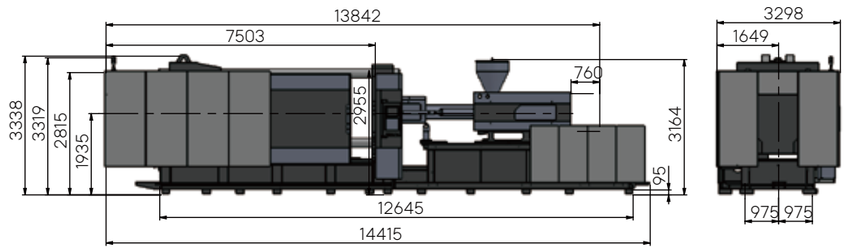

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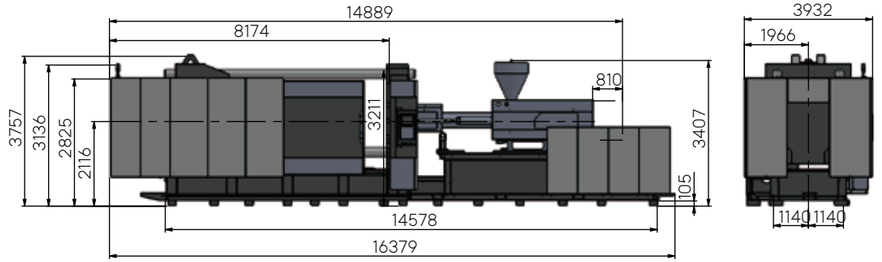
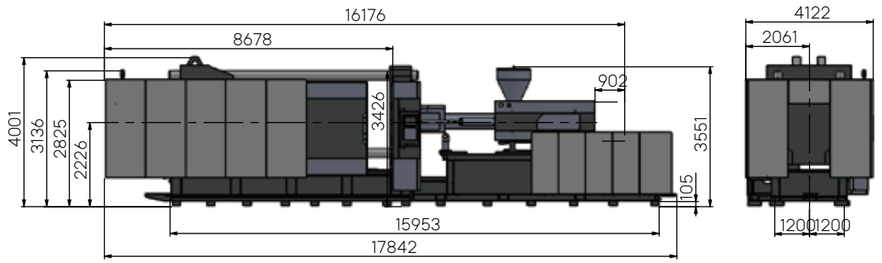


UN2600A5



Standard and Optional Features of UN60~560A5

	Standard	Optional
Injection Unit		
One-piece injection unit support with linear guides	●	
Nitrided alloy-steel screw and barrel	●	
Energy-saving groove design of barrel (patented design)	●	
Multi-stage PID barrel temperature control	●	
Double-carriage cylinder	●	
Fully-closed heat retaining cover/ purge guard (without electrical protection)	●	
Cold start protection	●	
Automatic purging	●	
Selectable suck-back before or after plasticizing	●	
Automatic detection of injection and plasticizing faults	●	
Precision transducer for injection / plasticizing stroke control	●	
6-stage injection speed / pressure / position control	●	
5-stage holding pressure speed / pressure / time control	●	
4-stage plasticizing speed / pressure / time control	●	
Screw speed detection	●	
Proportional back pressure	●	
Hard chrome plated screw component		○
Bi-metallic barrel unit		○
Dedicated screw assembly		○
Barrel air-cooling device		○
Purge guard (with electrical protection)		○
Spring shut-off nozzle		○
Hopper dryer		○
Hopper loading platform		○
Clamping Unit		
Precision transducer for clamping / ejector stroke control	●	
Clamping platens / toggles made of highly-rigid ductile iron QT500-7A	●	
EUROMAP-based robot mounting holes	●	
Computer controlled two-stage ejection forward/backward movement	●	
Hydraulic mold height adjustment device	●	
Adjustment-free mechanical safety lock rod	●	
Mechanical / electrical / hydraulic safety devices	●	
Wear-resistant manganese steel supporting tracks for movable platen	●	
Automatic centralized lubrication system	●	
Multiple ejector function settings	●	
Platen with T-slots and screw holes	●	
Low-pressure mold protection	●	
Safety edges for machine gates	●	
Special mold mounting hole		○
Mold thermal insulation plate		○
Increased ejector stroke		○
Increased mold thickness		○
Magnetic platen		○
Hydraulic System		
Third-generation servo pump system	●	
High-precision bypass oil filter	●	
Automatic correction of system pressure and flow	●	
Brand-name hydraulic valve	●	
Brand-name hydraulic seal	●	
Automatic oil temperature detection and alarm	●	

	Standard	Optional
Low noise hydraulic system	●	
Hydraulic oil cooling device	●	
2 sets of hydraulic core puller (one each for fixed platen and movable platen)	●	
2 sets of core puller interface (one each for fixed platen and movable platen)	●	
Multi-channel cooling water devices with fast connectors	●	
Variable displacement pump system		○
Larger oil pump and motor		○
Hydraulic unscrewing device		○
Independent oil temperature control system		○
High-response servo injection system with accumulator		○
Highly-responsive servo injection system		○
High-response servo mold opening and closing system		○
Synchronized ejection unit		○
Enlarged oil cooler		○
Control System		
Enhanced barrel heater protection	●	
Input/output inspection	●	
Automatic heat retaining and automatic heating setting	●	
Time / position / time + position controlled switchover from injection to holding	●	
10.4" TFT true color display	●	
100 sets of process parameters storage memory	●	
Multiple operating languages	●	
Two-color alarm light	●	
Independent motion slope adjustment	●	
Two sets of core pulling/ unscrewing electrical interface	●	
Process parameter locking feature	●	
Robot interface	●	
Emergency stop buttons for front and rear safety gates	●	
Statistical process control (SPC) interface	●	
Three sets of 3-phase power socket (2×32A+16A)	●	
Synchronous injection valve open signal	●	
Automatic clamping force adjustment	●	
Hot runner interface		○
Interface for electric unscrewing interface		○
Air-assisted injection device		○
Working light/ one- or three-color alarm light		○
Single-phase / three-phase power socket		○
Air blow device		○
Interface for electric unscrewing device		○
Change of power supply voltage		○
Other		
Operation manual	●	
Leveling pad	●	
A tool kit and a precision filter element	●	
Stainless steel hopper	●	
Mold clamp		○
Auto loader		○
Glass-tube water flowmeter		○
Dehumidifier		○
Mold temperature controller		○

Standard and Optional Features of UN650~2600A5

	Standard	Optional
Injection Unit		
One-piece injection unit support with linear guides	●	
Parallel double-cylinder injection system	●	
Low-speed high-torque hydraulic motor	●	
Nitrided alloy-steel screw and barrel	●	
Energy-saving groove design of barrel (patented design)	●	
Multi-stage PID barrel temperature control	●	
Double-carriage cylinder	●	
Fully-closed heat retaining cover/ purge guard (without electrical protection)	●	
Cold start protection	●	
Automatic purging	●	
Selectable suck-back before or after plasticizing	●	
Movable or rolling hopper device (60T-320T)	●	
Three-bearing drive shaft (260T-2600T)	●	
Screw speed detection	●	
Proportional back pressure	●	
Dedicated barrel and screw assembly (electroplating, alloy, PC, PMMA, PBT, PA, etc.)		○
Barrel air-cooling device		○
Purge guard (with electrical protection)		○
Spring shut-off nozzle		○
Increased injection stroke or one-size larger (smaller) injection unit		○
Swivel injection uni		○
Ceramic heater band (standard on machines over 800T)		○
Barrel heat-retaining energy-saving device (silicone heat preservation, infrared heating)		○
Clamping Unit		
Precision transducer for clamping / ejector stroke control/ injection stroke	●	
Clamping platens / toggles made of highly-rigid ductile iron QT500-7A	●	
EUROMAP-based robot mounting holes	●	
Hydraulic mold height adjustment device	●	
Mechanical / electrical safety devices	●	
Adjustment-free mechanical safety lock rod	●	
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 screw holes	●	
One-button automatic mold height adjustment	●	
Compulsory ejector-back function	●	
Safety edges for machine gates	●	
Special mold mounting hole		○
Mold thermal insulation plate		○
Increased ejector force and ejector stroke		○
Increased mold thickness		○
Magnetic platen		○
Mold lifting device		○
Hydraulic System		
Third-generation servo pump system	●	
High-precision bypass oil filter	●	
Automatic correction of system pressure and flow	●	
Brand-name hydraulic valve	●	
Brand-name hydraulic seal	●	

	Standard	Optional
Differential fast mold closing device	●	
Built-in cooler	●	
Hydraulic circuit design of mold-open deceleration	●	
Automatic oil temperature detection and alarm	●	
Cable hose restraint for exposed HP hydraulic hose	●	
1 set of core puller interface	●	
Multi-channel cooling water devices with fast connectors	●	
Variable displacement pump system		○
Larger oil pump and motor		○
Larger plasticizing motor		○
Synchronized ejection, core pulling and plasticizing system		○
High-response servo injection system with accumulator		○
Multiple sets of core puller		○
Hydraulic unscrewing device		○
Control System		
Enhanced barrel heater protection	●	
Input/output inspection	●	
Automatic heat retaining and automaticheating setting	●	
Time / position / time + position controlled switchover from injection to holding	●	
10.4" TFT true color display	●	
240 sets of process parameters storage memory	●	
Multiple operating languages	●	
Two-color alarm light	●	
All transducers, weak-current switches and reversing solenoid valves enclosed by water-proof and rat-proof corrugated pipes	●	
Multi-level password security and key-locked operation panel	●	
Emergency stop buttons for front and rear safety gates	●	
PDP interface	●	
Statistical process control (SPC) interface	●	
Reserved interfaces for air blowing, core pulling, ejector back protection devices, etc.	●	
Three sets of 3-phase power socket (2×32A+16A)	●	
Synchronous injection valve open signal	●	
Automatic clamping force adjustment	●	
Hot runner interface		○
Pneumatic sequence valve		○
Interface for electric unscrewing interface		○
Air blow device		○
Air-assisted injection device		○
Central (networked) monitoring system		○
Protective light grid of safety gates		○
Display of overall energy consumption		○
Change of power supply voltage		○
Other		
Operation manual	●	
Leveling pad	●	
A tool kit and a precision filter element	●	
Stainless steel hopper	●	
Mold clamp		○
Auto loader		○
Glass-tube water flowmeter		○
Dryer		○

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