THINK TECH FORWARD

Designed by YIZUMI, August 2023

YIZUMI

90T-480T

FREE FROM OIL TYPE MTC

BAKELITE SPECIAL INJECTION MOLDING MACHINE

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THINK TECH FORWARD

U1 Bakelite Special Injection Molding Machine

To create a cleaner production environment, YIZUMI will introduce an integrated feeding system. A turnkey solution including raw materials, molds, equipment and processes is ready for you.

Three value propositions

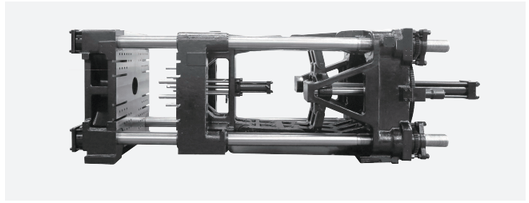
High stability | High cost-effective | High integration

U1

Technical Highlights

Uniform-stress clamping technology

Both the fixed and movable platen design adopts uniform-stress clamping technology, less platen deformation. Uniform-distribution of clamping force between mold and platen can prevent flash, parts missing and other undesirable defects, thus reducing the mold clamping force and extend the useful life of platens.

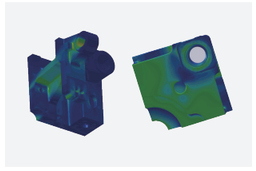


U1 series clamping unit

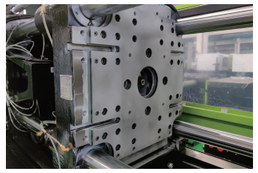
Platen with T-slot and mold mounting holes

Platen is arranged with T-slot and mold mounting holes horizontally, while with mold mounting holes vertically, which can not only facilitate assembling and disassembling the mold, but also improve the overall rigidity of platen.

Combination of thermal insulation plate and steel plate can reduce mold heat losing, showing better thermal insulation effect.



Uniform-stress clamping technology



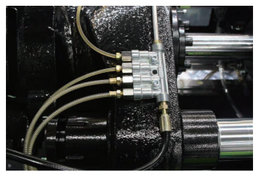
Platen with T-slot
and mold mounting holes

Optimized injection unit

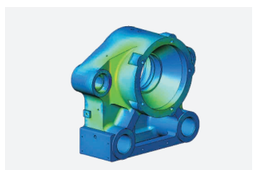
UN90-480U1 series injection molding machine adopts single-carriage injection unit. Optimized injection unit not only improves its rigidity, but also ensures coaxiality between movement direction of injection unit and injection force, reducing the resistance and improving the injection stability and accuracy.

- User-friendly design: standard centralized lubrication is more convenient for operation and maintenance.

Manual lubricating pump



Centralized lubricating module



Highly-rigid injection platen

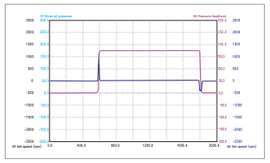
YIZUMI 3rd Generation Servo Energy-saving Technology

The 3rd generation energy-saving servo system is adopted, which has small moment of inertia, no bottom flow and lower energy consumption. The whole oil circuit is optimized in multiple ways, realizing the reduction in movement resistance and pressure flow loss during machine operation, to ensure lower power consumption of the complete machine.

Professional servo motor | High performance gear pump | INNOVANCE servo driver

Strong power and quick response

The power system is configured with sufficient power, and has strong overload capacity. Taking the 120T model as an example, during the full-speed and full-pressure test, the limit testing for 5 min can be achieved without overload alarm. The system response speed is further improved. Taking the 120T model as an example, its response time is about 40 ms.



MS control system

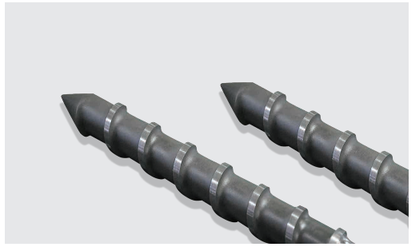
- The control unit adopts Cortex-A55 processor with scan time of 0.25ms, speedy response and accurate control.
- 1000 sets of mold data memory, USB port for extension of storage.
- 7+1 sections of PID temperature control supports switchover between type J and type K thermocouples. Automatic PID tuning 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.

*Data above come from YIZUMI lab, available for reference.

Thermosetting machine advantages

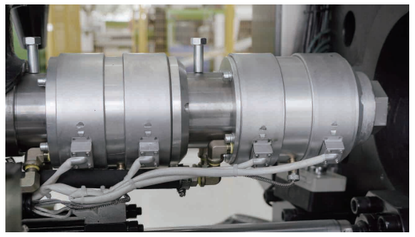
Nozzle

Detachable tungsten alloy insert nozzle for easy and fast cleaning. Low wear and long lasting.



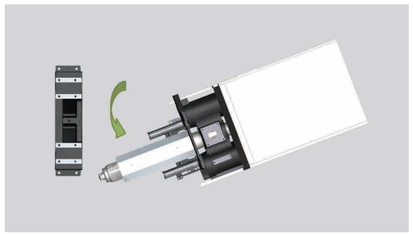
Fully-hardened screw

Fully-hardened screw, with superior and long lasting performance for high wear and corrosive resin processing.



Temperature control advantages of the barrel set

- Patented removable oil sleeve design, offering lower cost of use and more accurate temperature control.
- Detect barrel temperature by thermocouple, more directly and accurately.
- Built-in barrel temperature control system saves power and space.



Rotary injection table

- Rotating device for injection unit
- More convenient for changing screw and barrel
- Dual-purpose unit for thermoplasticization and thermosetting, high compatibility (Optional).

Application

Application case

Product: Electric hot pot base
Machine model: UN320U1
Product weight: 1355g
Product size(L×W×H): 490×420×100mm
Cavity: 1
Material: PF
Cycle time: 118s

Product advantages

1.Reduce investment in machine: Products previously manufactured by 450T injection molding machine and the above model now can be produced by 320T machine, greatly reducing the investment in machine;

2.Adopt the 3rd generation servo energy-saving technology, which can effectively save energy

Representative customer

① Guangdong Xinbao Electrical Appliances Holdings Co.,Ltd. (The largest manufacturer of bread machine in Asia)
② Guangdong Shuotai Intelligent Equipment Co.,Ltd. (OEM of Midea)
③ Shanghai European-Asian Synthetic Material Co., Ltd. (Top PM manufacturer in China)
④ SIEMENS INDUSTRYINC
⑤ Plastonium S.A de C.V (The largest bakelite manufacturer in the world)

Data above come from YIZUMI lab, available for reference.

U1 Bakelite Special Injection Molding Machine

Specification

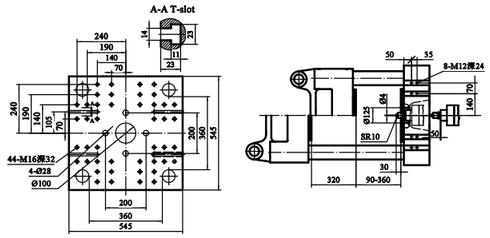
Description	UNIT	UN90U1	UN120U1	UN160U1	UN200U1	UN260U1	UN260U1 PLUS	UN320U1	UN320U1 PLUS	UN400U1	UN480U1
International size		290/900	420/1200	750/1600	1080/2000	1500/2600	1880/2600	2500/3200	3220/3200	3500/4000	3300/4800
Injection Unit											
Theoretical shot volume	cm^3	159	247	461	629	891	1071	1435	1792	1951	2050
Shot weight	g	175	272	508	692	980	1178	1578	1971	2146	2255
Screw diameter	mm	35	43	48	53	60	68	68	76	76	84
Injection pressure	MPa	185	170	163	173	169	176	176	180	180	162
Injection rate	g/s	113	150	161	192	249	232	291	274	434	554
Clamping Unit											
Clamping force	kN	900	1200	1600	2000	2600		3200		4000	4800
Opening stroke	mm	320	360	410	460	530		580		660	760
Space between tie bars (WxH)	mm	360x360	410x370	455x435	510x510	570x570		670x670		710x710	810×810
Max. daylight	mm	680	770	880	990	1100		1200		1350	1530
Mold thickness (Min.-Max.)	mm	90-360	140-410	160-470	175-530	190-570		200-620		230-690	230-770
Ejector stroke	mm	100	120	140	150	160		170		210	220
Ejector number		5	5	5	5	13		13		13	17
Ejector force	kN	28	42	42	49	77		77		110	110
Power Unit											
Max. system pressure	MPa	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Pump motor power	kW	11	16	16	19.6	24	24	34.7	34.7	59.6	60.5
Number of temp control zones (screw and barrel + mold)		2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2
Mold heating power (Single side)	kW	4	4	5	6	8	8	10	10	12	12
Other											
Dry cycle time	s	1.9	1.9	2.4	3.1	3.1	3.1	3.8	3.8	4.0	4.2
Oil tank capacity	L	135	165	200	260	335	335	445	445	570	760
Machine dimensions (LxWxH)	m	4.55×1.15×1.56	4.59×1.23×1.62	5.25×1.25×1.73	5.68×1.32×1.82	6.24×1.59×2.29	6.5×1.59×2.30	6.84×1.73×2.37	7.2×1.73×2.4	7.78×2.12×2.03	8.55×2.20×2.40
Machine weight	kg	3000	3500	4900	5800	7650	7850	9700	10000	14500	19000

*Data above come from YIZUMI lab, available for reference.

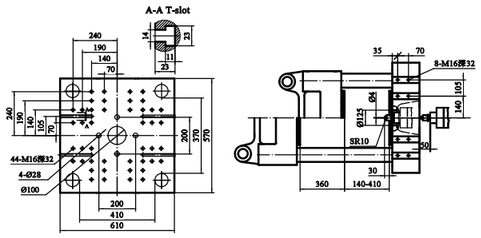
Note: 1. Theoretical injection volume=sectional area of barrel X injection stroke.
2. Actual injection volume=theoretical injection volumeX1.1(calculated with bakelite)
3. Due to improvement, specifications may be changed without prior notice.

U1 Bakelite Special Injection Molding Machine

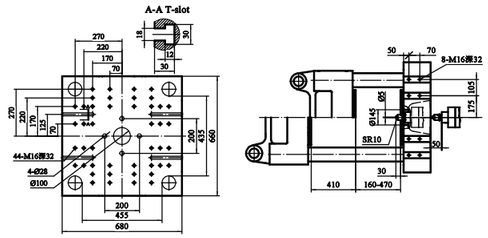
UN90U1



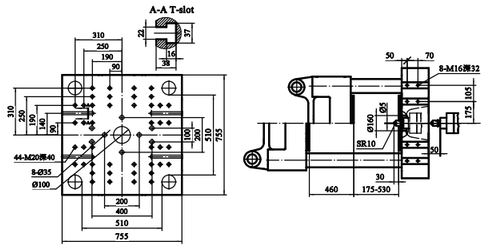
UN120U1



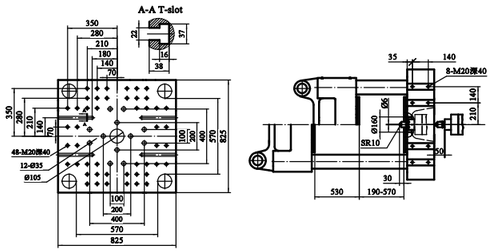
UN160U1



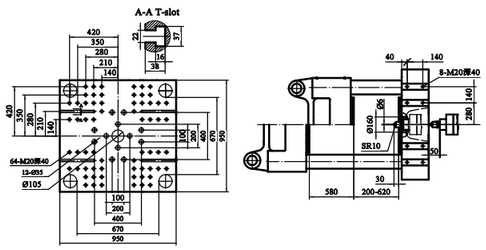
UN200U1



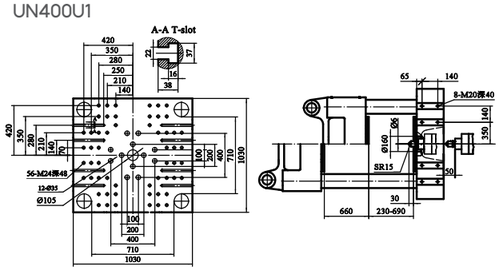
UN260U1



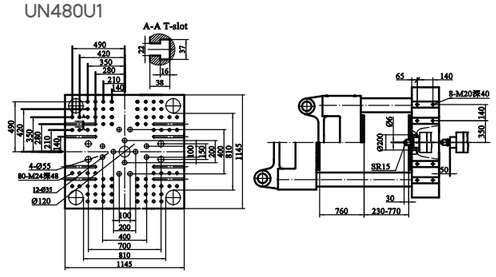
UN320U1



UN400U1



UN480U1



Standard and Optional Features

	Standard	Optional
Injection unit		
Integrated two-section temperature control system	●	
Single-carriage structure	●	
Dual-alloy barrel+removable oil sleeve	●	
Fully-hardened screw	●	
Parallel double-cylinder injection device	●	
Movable hopper device (90T-320T)	●	
Cold start protection	●	
Automatic purging	●	
Selectable suck-back before or after plasticizing	●	
Automatic fault detection during injection / plasticizing	●	
Precision transducer for injection stroke / plasticizing stroke	●	
6-stage injection speed / pressure / position control	●	
5-stage holding pressure speed / pressure / time control	●	
3-stage feeding speed / pressure / time control	●	
One-piece injection unit supported with linear guide rail	●	
3-Bearing drive for plasticization (for 260T or higher)	●	
Proportional back pressure		○
Purge guard (with electrical protection)		○
Upgraded injection unit		○
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 movement	●	
Low-pressure mold protection	●	
Multiple ejector function settings	●	
Hydraulic mold height adjustment device	●	
Mechanical / electrical safety devices	●	
Wear-resistant manganese steel supporting tracks for movable platen	●	
Platen with T-slots and screw holes	●	
Automatic centralized lubrication system	●	
EUROMAP-based robot mounting holes	●	
Mold heating power supply and temperature thermocouple	●	
Mold thermal insulation plate and anti-collision steel plate	●	
Mold exhausting	●	
Ejector forced reset	●	
Anti-pinch and anti-bump strips on the edge of safety doors	●	
Increased mold thickness		○
Increased ejector stroke		○
Mold hanger frame		○
Special mold mounting hole		○
Automatic safety door		○
Multi-mold temperature controller		○
Aviation plug for mold heating		○
Mold venting program		○
Hydraulic system		
Third-generation servo pump system	●	
Back pressure adjustment device	●	
High-precision bypass oil filter	●	
Automatic correction of system pressure and flow	●	
Imported hydraulic valve	●	
Imported hydraulic seal	●	
Low-noise hydraulic system	●	
Hydraulic oil cooling device	●	

	Standard	Optional
Differential fast mold closing device	●	
Built-in cooler	●	
Hydraulic circuit design of mold-opening deceleration	●	
Cable hose restraint for exposed high-pressure oil hoses	●	
One set of core-pull interface with valves for the entire machine	●	
Hydraulic oil temperature detection and temperature alarm		○
Hydraulic core-pulling/unscrewing device		○
Hydraulic safety protection		○
Independent oil temperature control system		○
High-response servo injection system with accumulator		○
High-response servo mold opening and closing system		○
Synchronized ejection unit		○
Enlarged oil cooler		○
Upgraded oil pump motor		○
Control system		
Input/output inspection	●	
Automatic heat retaining and automatic heating setting	●	
Switchover from injection to holding: Time / position / time + position controlled	●	
Independent motion slope adjustment	●	
Two sets of core pulling/ unscrewing electrical interface	●	
Process parameter locking feature	●	
Automatic clamping force adjustment	●	
10.4"true color LCD display	●	
120 sets of process parameters storage memory	●	
Multiple operating languages	●	
Robot interface	●	
One set of single-phase /Two sets of three-phase power socket (16A) / (32A+16A)	●	
Emergency stop buttons for front and rear safety gates	●	
Indicator/two-color alarm light	●	
240 sets of process parameters storage memory, with a USB port;	●	
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	●	
Statistical process control (SPC) interface	●	
Preserved interfaces for air blowing, core pulling, ejector back protection devices, etc.	●	
Synchronous injection valve open signal	●	
Interface for electric unscrewing interface		○
Air-assisted injection device		○
Air blow device		○
Interface for electric unscrewing device		○
Change of power supply voltage		○
Others		
Operation manual	●	
Leveling pad	●	
A tool kit	●	
Filter element	●	
Pressing plate for mold	●	
Special wrench for nozzle	●	
Nozzle and nozzle seat one piece	●	
Integrated automatic feeding system		○
Dual-purpose unit for thermoplasticization and thermosetting		○
Deburring machine		○
Pinning machine		○

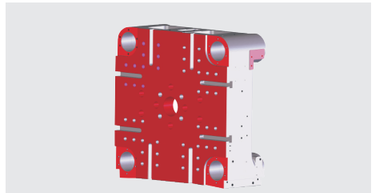
● Standard ○ Optional

U2 Bakelite Special Injection Molding Machine

Clamping Unit

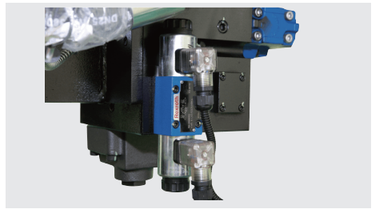
High-rigidity T-slot platen

- Full range of high-rigidity platens improve the overall rigidity of the clamping unit by 30%;
- Full range of standard T-slotted easy-to-mount molds reduce the rate of wear on screw hole threads after prolonged use and extend the useful life of platens.



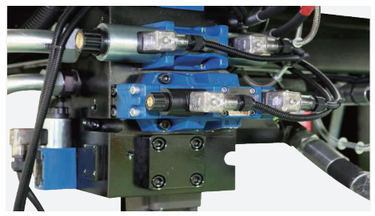
Closed-loop control of the mold opening position

- Increased positioning accuracy and repeatability of the mold opening to allow precise extraction by the robot for continuous automated production.
- Positioning accuracy <2mm. Repeatability <0.3mm.



Low pressure mold protection

Equipped with low pressure mold protection control unit to ensure effective protection of the mold.



Injection unit

Integral linear rail structure

- 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.

Electric control system

Customer needs: Faster controller, precision control, easy operation, and programs with powerful functions that meet a variety of process needs.

Solution: Controller upgrade —— using 10.4" TFT true color display; CPU processing time up to 0.25ms; comprehensive improvement of operation convenience; a collection of various commonly used process programs at customers' disposal.

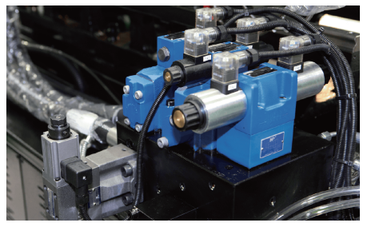
Controller function: MS controller

Adopt Mirle MS control system to improve machine control performance, resulting in more stable products and stability of the overall machine performance.

- 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.



U2 series special bakelite servo injection molding machine

Specification

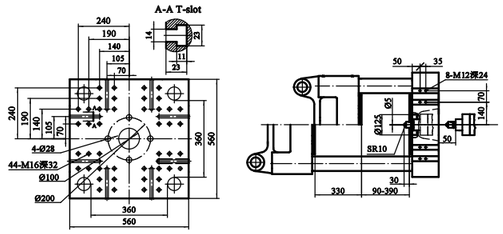
Description	UNIT	UN90U2	UN120U2	UN160U2	UN200U2	UN260U2	UN260U2 PLUS	UN320U2	UN320U2 PLUS	UN400U2	UN480U2
International size		290/900	420/1200	750/1600	1080/2000	1500/2600	1880/2600	2500/3200	3220/3200	3500/4000	3300/4800
Injection Unit											
Theoretical shot volume	cm^3	159	247	461	629	891	1071	1435	1792	1951	2050
Shot weight	g	175	272	508	692	980	1178	1578	1971	2146	2255
	oz	6.2	9.6	17.9	24.4	34.6	41.6	55.7	69.5	75.7	79.6
Screw diameter	mm	35	43	48	53	60	68	68	76	76	84
Injection pressure	MPa	185	170	163	173	169	176	176	180	180	162
Injection rate	g/s	113	150	197	216	246	232	363	274	444	554
Screw L:D rate		16:1	16:1	16:1	16:1	16:1	16:1	16:1	16:1	16:1	16:1
Clamping Unit											
Clamping force	kN	900	1200	1600	2000	2600	2600	3200	3200	4000	4800
Opening stroke	mm	330	360	420	490	530	530	640	640	700	780
Space between tie bars (WxH)	mm×mm	360×360	410×410	460×460	530×530	610×570	610×570	710×670	710×670	760×710	830×810
Max. daylight	mm	720	820	950	1050	1100	1100	1260	1260	1390	1550
Max. distance between standard machine platens	mm	710	810	940	1040	1140	1140	1300	1300	1430	1590
Max. daylight (min. - max. thickness) (from the inner side of the insulation board or steel plate)	mm	90-390	105-460	120-530	140-560	155-570	155-570	180-620	180-620	200-690	220-770
Standard machine max. daylight (min. - max thickness)	mm	130-380	145-450	160-520	180-550	195-610	195-610	220-660	220-660	240-730	260-810
Ejector stroke	mm	100	120	140	150	160	160	170	170	210	220
Ejector number		5	5	5	5	13	13	13	13	13	17
Ejector force	kN	28	42	42	49	77	77	77	77	110	110
Power Unit											
Max. system pressure	MPa	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Pump motor power	kW	11	15	25	25	30	30	51	51	60	70
Electric heating power of barrels	kW	3.5	4.5	4.88	6.45	8	11	11	13	13	18
Number of temp control zones (screw and barrel + mold)		2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2
Mold heating power (Double sides)		4+4	4+4	5+5	6+6	8+8	8+8	10+10	10+10	12+12	12+12
Other											
Dry cycle time	s	1.8	2.0	2.4	2.7	2.8	2.8	3.2	3.2	4.0	4.5
Oil tank capacity	L	150	155	220	255	335	335	445	445	570	760
Machine dimensions (LxWxH)	m×m×m	4.49×1.22×1.98	4.82×1.30×2.05	5.35×1.37×2.13	5.76×1.45×2.21	6.24×1.64×2.39	6.24×1.64×2.39	6.96×1.85×2.50	6.96×1.85×2.50	7.73×2.16×2.45	8.47×2.16×2.49
Machine weight	kg	3100	3700	4600	5600	7600	7800	10300	10600	14700	17300

*Data above come from YIZUMI lab, available for reference.

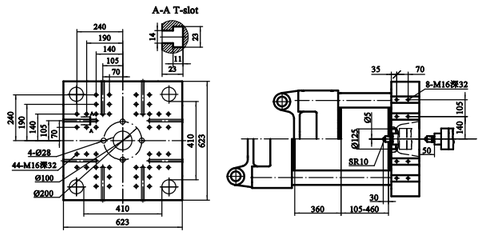
Note: 1. Theoretical injection volume=sectional area of barrel X injection stroke.
2. Actual injection volume=theoretical injection volumeX1.1(calculated with bakelite)
3. Due to improvement, specifications may be changed without prior notice.

U2 series special bakelite servo injection molding machine platen dimensions

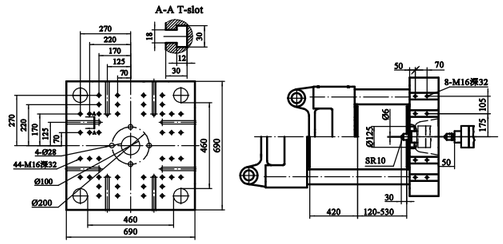
UN90U2



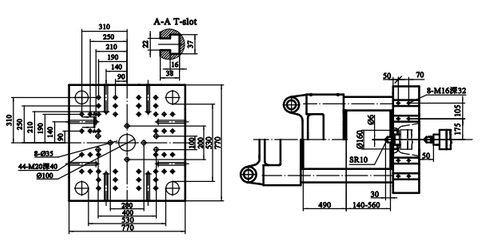
UN120U2



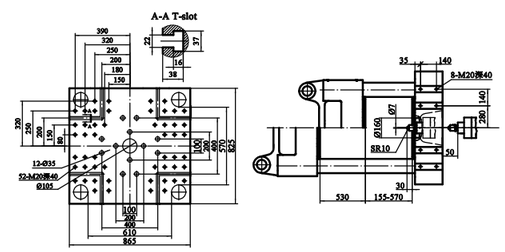
UN160U2



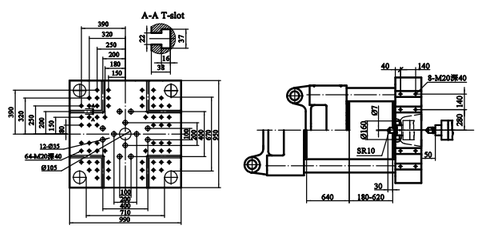
UN200U2



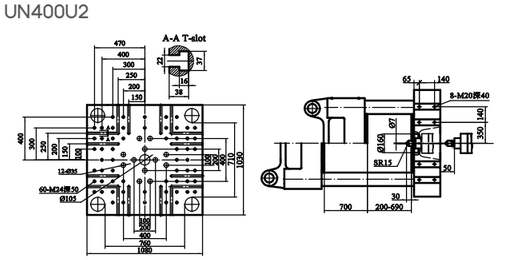
UN260U2



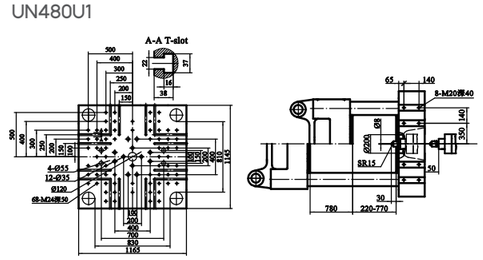
UN320U2



UN400U2



UN480U1



Standard and Optional Features

	Standard	Optional
Injection unit		
Integrated two-section temperature control system	●	
Single-carriage structure	●	
Dual-alloy barrel+removable oil sleeve	●	
Fully-hardened screw	●	
Parallel double-cylinder injection device	●	
Movable hopper device (90T-320T)	●	
Cold start protection	●	
Automatic purging	●	
Selectable suck-back before or after plasticizing	●	
Automatic fault detection during injection/ plasticizing	●	
Precision transducer for injection stroke/ plasticizing stroke	●	
6-stage injection speed / pressure /position control	●	
5-stage holding pressure speed / pressure / time control	●	
3-stage feeding speed / pressure / time control	●	
One-piece injection unit supported with linear guide rail	●	
3-Bearing drive for plasticization (for 260T or higher)	●	
Proportional back pressure	●	
Purge guard (with electrical protection)		○
Upgraded injection unit		○
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 movement	●	
Low-pressure mold protection	●	
Multiple ejector function settings	●	
Hydraulic mold height adjustment device	●	
Mechanical / electrical safety devices	●	
Wear-resistant manganese steel supporting tracks for movable platen	●	
Platen with T-slots and screw holes	●	
Automatic centralized lubrication system	●	
EUROMAP-based robot mounting holes	●	
Mold heating power supply and temperature thermocouple	●	
Mold thermal insulation plate and anti-collision steel plate	●	
Mold exhausting	●	
Ejector forced reset	●	
Anti-pinch and anti-bump strips on the edge of safety doors	●	
Increased mold thickness		○
Increased ejector stroke		○
Mold hanger frame		○
Special mold mounting hole		○
Automatic safety door		○
Multi-mold temperature controller		○
Aviation plug for mold heating		○
Mold venting program		○
Hydraulic system		
Third-generation servo pump system	●	
Back pressure adjustment device	●	
High-precision bypass oil filter	●	
Automatic correction of system pressure and flow	●	
Imported hydraulic valve	●	
Imported hydraulic seal	●	
Low-noise hydraulic system	●	
Hydraulic oil cooling device	●	

	Standard	Optional
Differential fast mold closing device	●	
Built-in cooler	●	
Hydraulic circuit design of mold-opening deceleration	●	
Cable hose restraint for exposed high-pressure oil hoses	●	
One set of core-pull interface with valves for the entire machine	●	
Hydraulic oil temperature detection and temperature alarm		○
Hydraulic core-pulling/unscrewing device		○
Hydraulic safety protection		○
Independent oil temperature control system		○
High-response servo injection system with accumulator		○
High-response servo mold opening and closing system		○
Synchronized ejection unit		○
Enlarged oil cooler		○
Upgraded oil pump motor		○
Control system		
Input/output inspection	●	
Automatic heat retaining and automatic heating setting	●	
Switchover from injection to holding: Time / position / time + position controlled	●	
Independent motion slope adjustment	●	
Two sets of core pulling/ unscrewing electrical interface	●	
Process parameter locking feature	●	
Automatic clamping force adjustment	●	
10.4"true color LCD display	●	
120 sets of process parameters storage memory	●	
Multiple operating languages	●	
Robot interface	●	
One set of single-phase /Two sets of three-phase power socket (16A) / (32A+16A)	●	
Emergency stop buttons for front and rear safety gates	●	
Indicator/two-color alarm light	●	
240 sets of process parameters storage memory, with a USB port;	●	
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	●	
Statistical process control (SPC) interface	●	
Preserved interfaces for air blowing, core pulling, ejector back protection devices, etc.	●	
Synchronous injection valve open signal	●	
Interface for electric unscrewing interface		○
Air-assisted injection device		○
Air blow device		○
Interface for electric unscrewing device		○
Change of power supply voltage		○
Others		
Operation manual	●	
Leveling pad	●	
A tool kit	●	
filter element	●	
Pressing plate for mold	●	
Special wrench for nozzle	●	
Nozzle and nozzle seat one piece	●	
Integrated automatic feeding system		○
Dual-purpose unit for thermoplasticization and thermosetting		○
Deburring machine		○
Pinning machine		○

● Standard ○ Optional

Special bakelite powder feeder

The special bakelite powder feeder uses the negative pressure suction principle for material conveying, suitable for transporting materials that mix powder and pellets - a perfect substitute for manual operation. It is the ideal auxiliary equipment for the bakelite machine.

Highlights:

- Fully enclosed feeding operation, eliminating dust pollution.
- High reliability. Maintenance-free.
- Also suitable for the conveying of plastic colorant.
- Can be used to construct the centralized feeding system for bakelite power.

Special hopper for bakelite machine

Special conveyor for bakelite machine

A5-BMC series injection molding machine

BMC special screw and barrel unit design, good wear resistance and corrosion resistance; Professional plasticizing section design, convenient for feeding, high measurement accuracy, and less damage to glass fiber.

Large-tonnage injection molding machine is equipped with feeding platform stairs, convenient for feeding.

Independent temperature control system, high accuracy and efficiency.

Automatic feeder for fast and accurate operation.

BMC

UN160~480A5-BMC

Specification

Description	UNIT	UN160A5			UN200A5			UN260A5			UN320A5			UN400A5			UN480A5		
		Standard Injection Unit			Standard Injection Unit			Standard Injection Unit			Standard Injection Unit			Standard Injection Unit			Standard Injection Unit		
		UN160A5-BMC			UN200A5-BMC			UN260A5-BMC			UN320A5-BMC			UN400A5-BMC			UN480A5-BMC		
International size		604/1200	604/1200	604/1200	895/1600	895/1600	895/1600	1269/2200	1269/2200	1269/2200	1885/2800	1885/2800	1885/2800	2693/3500	2693/3500	2693/3500	3330/4200	3330/4200	3330/4200
Injection Unit																			
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Theoretical shot volume	cm^3	298	371	452	425	518	664	584	749	962	834	1071	1338	1198	1496	1828	1678	2049	2458
Shot weight	g	536	667	814	765	933	1195	1052	1348	1731	1501	1927	2408	2156	2693	3290	3020	3689	4425
	oz	18.9	23.5	28.7	27.0	32.9	42.2	37.1	47.5	61.1	52.9	68.0	84.9	76.1	95.0	116.1	106.5	130.1	156.1
Screw diameter	mm	43	48	53	48	53	60	53	60	68	60	68	76	68	76	84	76	84	92
Injection pressure	MPa	203	163	134	211	173	135	217	169	132	226	176	141	225	180	147	199	163	136
Injection rate	g/s	258.5	322.1	392.7	290.1	353.7	453.4	312.1	400.0	513.8	463.8	595.7	744.1	583.5	728.9	890.4	739.8	903.7	1084.0
Screw L:D rate		13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1	13:1
Max. injection speed	mm/s	99	99	99	89	89	89	79	79	79	91	91	91	89	89	89	91	91	91
Screw stroke	mm	205	205	205	235	235	235	265	265	265	295	295	295	330	330	330	370	370	370
Screw speed	r/min	0-235	0-235	0-235	0-194	0-194	0-194	0-161	0-161	0-161	0-200	0-200	0-200	0-156	0-156	0-156	0-140	0-140	0-140
Volume of storage barrel	L	35			35			60			60			90			90		
Clamping Unit																			
Clamping force	kN	1600			2000			2600			3200			4000			4800		
Space between tie bars (WxH)	mmxmm	460x460			530x530			610X570			710X670			760x710			830x810		
Mold thickness (Min.-Max.)	mm	160-620			180-650			195-710			220-760			240-830			260-910		
Opening stroke	mm	420			490			530			640			700			780		
Max. daylight	mm	1040			1140			1240			1400			1530			1690		
Ejector force	kN	42			49			77			77			110			110		
Ejector stroke	mm	140			150			160			170			210			220		
Ejector number		5			5			13			13			13			17		
Power Unit																			
Max. system pressure	MPa	17.5			17.5			17.5			17.5			17.5			17.5		
Pump motor power	kW	25			25			30			51			60			70		
Number of mold temp control zones (Fixed+ moveable platen side)		1+1			1+1			1+1			1+1			1+1			1+1		
Mold heating power (Fixed+ moveable platen side)	kW	5+5			6+6			8+8			10+10			12+12			14+14		
Other																			
Dry cycle time	s	2.4			2.7			2.8			3.2			4			4.5		
Oil tank capacity	L	220			255			335			445			570			760		
Machine dimensions (LxWxH)	mxmxm	5.35x1.37x2.02			5.76x1.45x2.09			6.24x1.64x2.39			6.96x1.85x2.50			7.73x2.16x2.45			8.47x2.21x2.49		
Machine weight	kg	5000			6500			8500			13500			16000			20500		

*Data above come from YIZUMI lab, available for reference.

Note: 1. Theoretical injection volume=sectional area of barrel X injection stroke.
2. Actual injection volume=theoretical injection volumeX1.1(calculated with bakelite)
3. Due to improvement, specifications may be changed without prior notice.

THINK
TECH FORWARD