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Stock Code: 300415

Designed by Yizumi, April 2021

**YIZUMI**伊之密

# D1

## **D1 Series Two-platen Injection Molding Machine** ( 500T-3400T)

Innovative Practice of  
Large-tonnage Two-platen Machine

### 广东伊之密精密注压科技有限公司

Guangdong Yizumi Precision Injection Molding and Die Casting Technology Co., Ltd.

Address: No.12, Shunchang Road, Daliang, Shunde, Foshan, Guangdong Province, China 528306  
TEL:86-757-2921 9800 86-757-2926 5150(overseas) www.yizumi.com

1.We reserve the right to change specifications without prior notice.  
2.The pictures are only for reference, please refer to the real object.  
3.Data above come from Yizumi lab, available for reference.



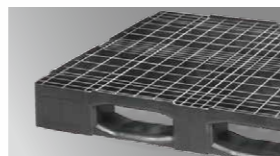
Based on importation and absorption of advanced German technology and years of experience in product application, we continue to move on and undertake the historic project of large-tonnage two-platen injection molding machine, striving to become a pioneer to fulfill such an innovative mission.



Deep-cavity parts



Household appliances



Logistics materials



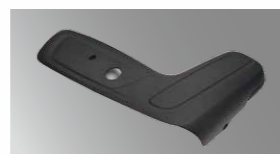
Auto parts



Auto bumper



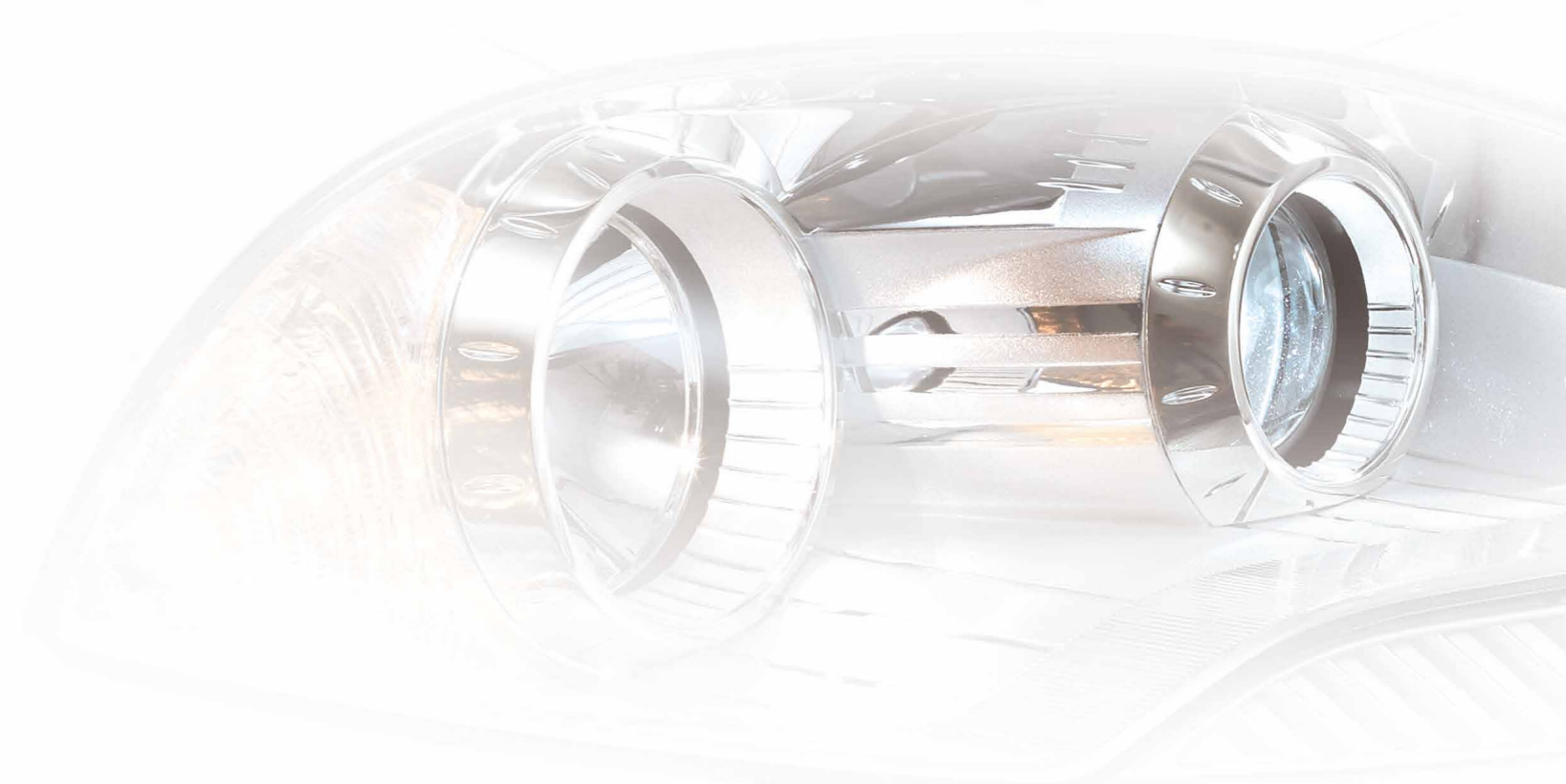
Auto sunroof



Auto interior decoration



Auto lamp



# Core Value Propositions

## Fast

Synchronized lock nut mechanism, precision movable platen supports, quick hydraulic cylinders, differential fast mold opening, low-resistance hydraulic circuit design and high-response servo system enable the machine to operate more efficiently and response faster.

## Stable

High-rigidity clamping unit, uniform stress distribution on tie bar threads, high-response dual proportional valve, high-speed closed-loop control, precision filter and efficient cooling system enable the machine to be more stable for injection molding.

**Higher stability of mold-open position**  
Variation up to  $\pm 0.2\text{mm}$ , meeting higher requirements on automated part removal and inserting.

**Shorter dry cycle**  
Compared with a three-platen machine of the same clamp tonnage, mold opening and closing during dry cycle is about 55% faster.

**More reliable low-pressure mold protection**  
Mold protection is so sensitive that it can sense three pieces of A4 paper, which is more effective.

**Outstanding injection stability**  
Repeatability of part weight  $\leq 3\%$ , excellent quality, saving materials and costs.

**Smaller footprint**  
D1 series machine occupies less floor space than a three-platen machine, improving factory utilization and reducing costs of production facilities.

**Smaller variation of force on tie bar**  
Variation  $\leq 3\%$ , high mold-close accuracy, hardly any flash, higher stability of injection molding.

**Professional control system**  
Short scan time, fast response and high movement repeatability.

**New-generation servo system driven by fully oil-cooled two-headed motor**  
Fast response, strong power and low energy consumption.

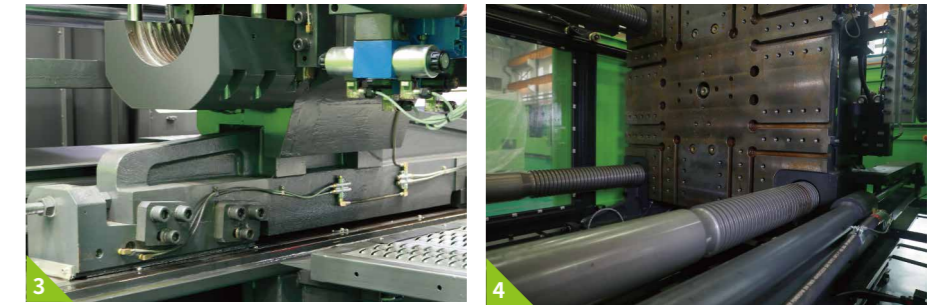
\*Data above come from Yizumi lab, available for reference.



# Clamping Unit

## Short dry cycle, reliable and stable

D1 series two-platen injection molding machine, based on high-rigidity clamping unit, precision guide device, synchronized lock nut mechanism, quick hydraulic cylinders, fast control system and controlled by high-response dual proportional valve, delivers higher movement efficiency and control stability.



**① Impact-proof synchronized lock nut mechanism**

Impact-cushioning synchronized lock nut closing is fast and more reliable.

**③ Highly-rigid accurate guide device**

High-rigidity L-shape guide rails on machine frame, with guiding precision up to 0.05mm, facilitate fast and steady motion of platens.

**⑤ High repeatability of mold-open end position**

Repeatability of mold-open position is up to ± 0.2mm, five times higher than that of a three-platen machine. (proven by in-house 1300T machine test result)

**⑦ Short dry cycle**

Efficient mold opening and closing and short dry cycle directly improve manufacturing efficiency and capacity. (proven by in-house 1300T machine test result)

**② Independent high-pressure cylinder (optional)**

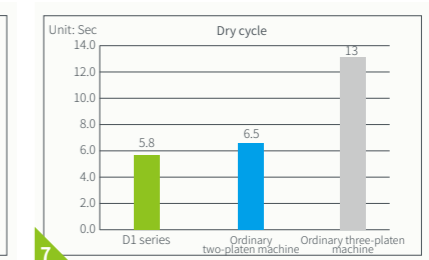
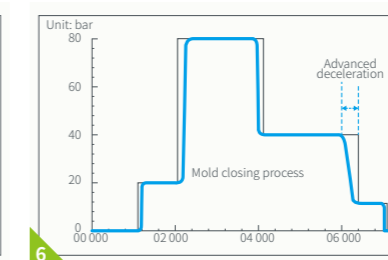
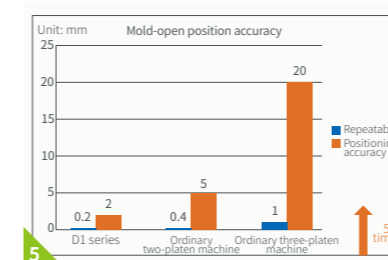
Mold opening under low speed and high pressure, as well as mold change through tie bar pulling in a factory with excessively low ceiling are available.

**④ Wear & corrosion resistant tie bars with uniform stress distribution**

With special technical treatment, tie bars are highly-rigid and resistant to wear and corrosion. Uniformity of stress distributed on tie bar threads is over 99% without unbalanced force, bringing durability.

**⑥ Sensitive mold protection**

With the use of smart prior deceleration control, even three pieces of A4 paper can be sensed. Mold protection is more reliable and sensitive.







## Injection Unit

### Stable injection end position and high repeatability of part weight

Linear guide rails, with the benefits of low resistance and quick acceleration, are a standard feature of D1 series two-platen injection molding machine. Incorporating other features, such as high-rigidity injection unit and ultrasonic displacement sensor for monitoring, D1 series has achieved accurate position control and high repeatability of part weight.

#### ① High-rigidity injection unit

Casts of injection unit are made from ductile cast iron. The platens are highly rigid with little deformation. Injection is more stable.

#### ③ Integral linear guide rails for injection

Linear guide rails are a standard feature of D1 series, bringing benefits of low resistance, quick acceleration and accurate injection.

#### ⑤ Adaptive PID temperature control

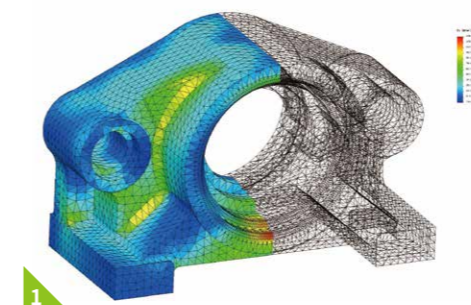
With the use of durable ceramic heater bands and adaptive PID control performed by the Austrian controller, temperature control accuracy is up to  $\pm 0.5^{\circ}\text{C}$ .

#### ② Excellent injection performance

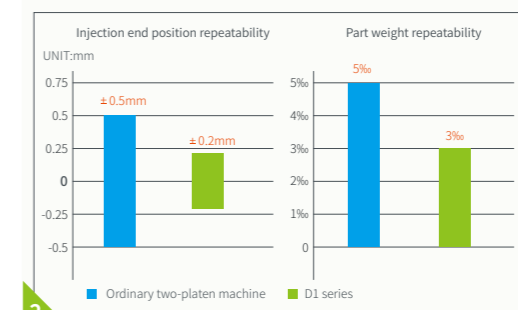
Repeatability of injection end position up to  $\pm 0.2\text{mm}$  and repeatability of part weight  $\leq 3\%$  meet the needs of increasing efficiency and lowering costs.

#### ④ Ultrasonic displacement sensor

D1 series is equipped with an ultrasonic digital displacement sensor, characterized by little signal interference and high position control accuracy.



1



2



3



4



5

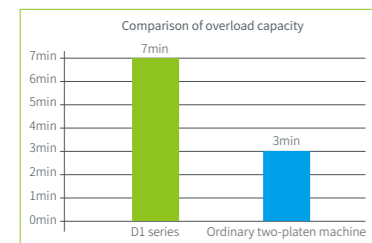
## Hydraulic System

### Precise filtration, efficient cooling, higher stability

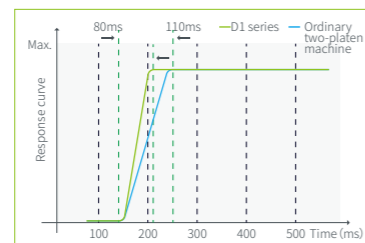
D1 series is based on a hydraulic system with stability and fast response at the core, which enables hydraulic circuit to be in optimal operating conditions. The hydraulic system is characterized by fast response, strong overload capacity and low energy consumption that is superior to China energy efficiency grade 1.

#### ① Servo system driven by fully oil-cooled two-headed motor

The fully oil-cooled two-headed motor-driven servo system is the quintessence of highly-integrated servo pump system. It eliminates the influence of instability in machine operation due to the work environment and further reduces energy consumption of hydraulic circuit. Synchronized drive technology makes hydraulic circuit response faster and movements more efficient.



● Strong overload capacity



● Rapid acceleration



● Durable and reliable

#### ② Precise filtration and independent cooling system

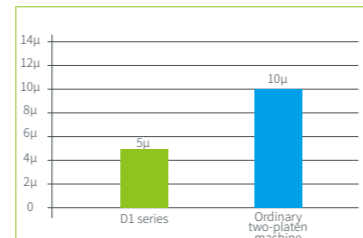
Filter fineness is up to 5 $\mu$ m and cooling effect is 2-3 times better than ordinary two-platen injection molding machines, which ensure long service life of seals. Machine becomes more stable.



● Good cooling effect



● High filter fineness



● Comparison of filter fineness



#### ③ Motor protected with L-shape plates

L-shape plates are easy to install and they can be opened directly so that there is open space for more efficient maintenance of the drive system.

## Control System

### Accurate control, humanized design, reliable and stable

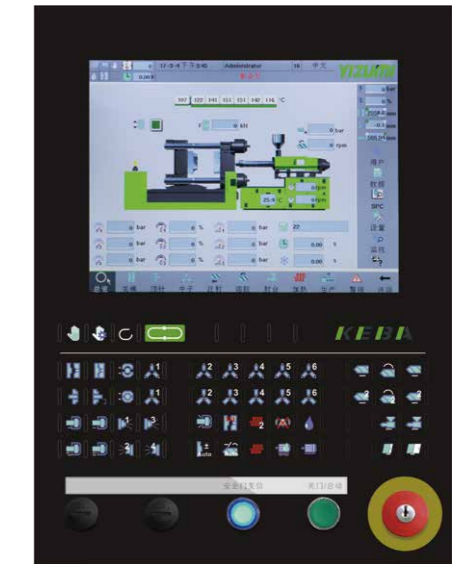
D1 series adopts Austria's KEBA control system dedicated to two-platen injection molding machine. This powerful system can accurately control the position, pressure, speed, temperature and other parameters. The whole control system is engineered based on reliability, stability, safety and user-friendly operation for better user experience.

#### ● Stable, fast and accurate control

- D1 series two-platen injection molding machine adopts Austria's KEBA control system, with double CPUs, 1ms of scan cycle and high reliability.
- Fast mold opening and closing and high repeatability thanks to the high-response dual proportional valve control technology.
- Fully-closed-loop control of injection speed, pressure and back pressure, with fast response and high accuracy.
- Self-tuning of temperature parameters of barrel and hot runner makes temperature control more accurate.

#### ● Data and safety

- Storage of process data without limit
- Memory of alarm and process parameter change
- Record of process parameter change curve
- Production process data control (PDP) and statistic process control (SPC)
- Multi-level user access to protect data
- Multiple protections of equipment and people through software and hardware



#### ● Easy to operate

- Real-time remote control (optional)
- Online conversion of languages and units
- Quick input by means of graph and virtual keyboard
- Quick settings page for easy and convenient process parameter setting



#### ① IP54 electrical enclosure

The electrical enclosure is designed with IP54 rating, resistance to water and dust and good cooling effect, so that the electrical system is more stable in operation.



#### ② Separate connector module for auxiliary equipment

External separate power control without opening the electrical cabinet makes operation safer and more convenient.



#### ③ Euromap-based robot interface

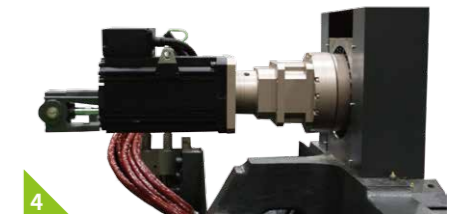
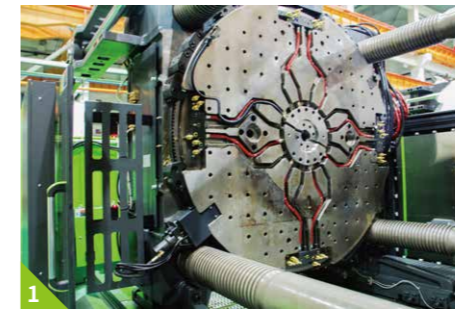
Euromap 12 robot interface is a standard feature, meeting customer's need for safer connection.



# MultiPro Injection Molding Solution

## Modular design, free combination as needed

Based on professional technology, different injection units can be combined to inject different materials for plastic parts. With Yizumi MultiPro process, a new product made from various materials can be produced via an injection molding machine and a production step. MultiPro has become an innovation in the field of high-end multi-component injection molding.



### ① Integrated turntable

The integrated turntable with high rigidity, high load-bearing capacity and compact structure can be equipped with large-capacity, multi-channel swiveling water, oil and gas distribution system.

### ② Automatic flow distribution system

Based on German technology, the three-in-one (water, oil and gas) distribution system is designed with a double-layer structure for water-oil separation. The turntable can rotate 360 degrees without the tangle of lines to meet the rotation needs of multiple stations.

### ③ Parallel injection unit

The nozzle center distance is adjustable (optional) with high compatibility. The injection structure with a single well-sealed cylinder has high injection speed.

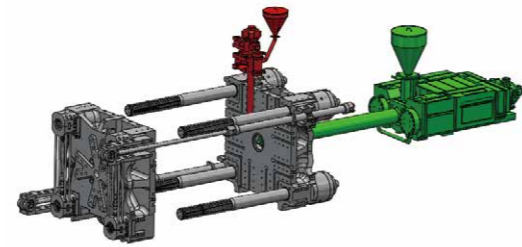
### ④ Digital closed-loop positioning control technology

The DCPC technology enables the servo-driven turntable to rotate fast and smoothly without impact. The positioning of turntable is accurate with repeatability of  $\pm 0.005^\circ$ .



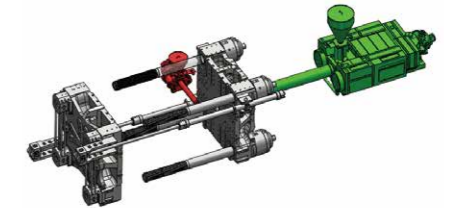
# Modular Combinations of Multi-component Injection Units

Injection unit	190	295	420	604	895
Screw	22	26	30	35	40
	35	43	48	43	48
	53	43	48	53	43
	48	53			
V-arranged injection unit					
UN500D1					
UN700D1					
UN900D1					
UN1100D1					
UN1200D1					
UN1300D1					
UN1400D1					
UN1600D1					
UN1850D1					
UN2100D1					
UN2400D1					



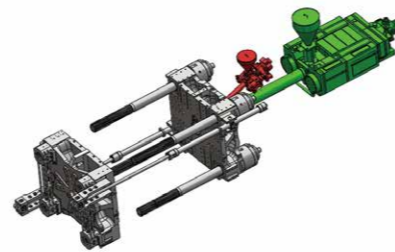
H/V combination: suitable for production of multi-component parts with low shot weight  
Main injection unit provides power support for V-arranged injection unit, matching with the standard machine.

Injection unit	190	295	420	604	895	1269	1885	2695	3330	4800
Screw	22	26	30	35	40	35	43	48	43	48
	43	48	53	43	48	53	60	68	60	68
	68	60	68	76	68	76	84	76	84	92
	84	76	84	92	84	92	100			
L-arranged injection unit										
UN500D1										
UN700D1										
UN900D1										
UN1100D1										
UN1200D1										
UN1300D1										
UN1400D1										
UN1600D1										
UN1850D1										
UN2100D1										
UN2400D1										



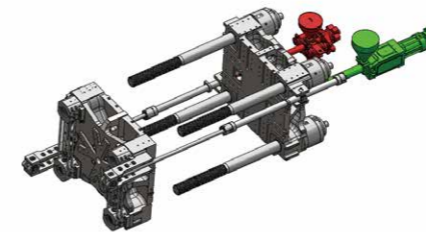
H/L combination: flexible application but large footprint  
L-arranged injection unit can be matched with independent injection unit for power support.

W-arranged injection unit	190	295	420	604	895	1269	1885	2695	3330	4800
Screw	22	26	30	35	40	35	43	48	43	48
	43	48	53	43	48	53	60	68	60	68
	68	60	68	76	68	76	84	76	84	92
	92	84	92	100	84	92	100			
W-arranged injection unit										
H-arranged injection unit										
43										
895										
53										
1269										
60										
68										
1885										
68										
76										
2695										
68										
76										
84										
3330										
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116										
10900										
116										
135										
14500										
125										
135										
18500										
145										
165										
37500										
185										
50000										
200										



H/W combination: suitable for production of multi-component parts with high space-saving requirements

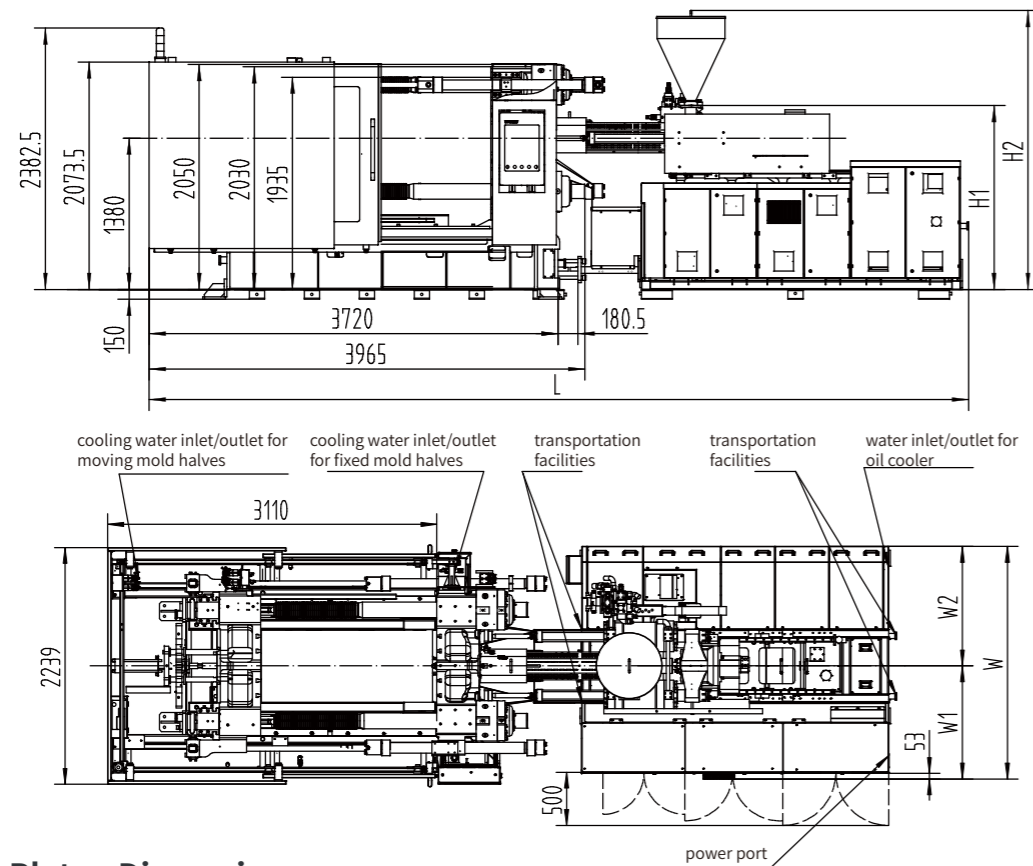
Injection unit	300	420	630	930	1310	1870	2720	3700	5000	7000	9200	13200
Screw	30	35	40	35	43	48	43	48	53	60	68	60
	68	60	68	76	68	76	84	76	84	92	108	92
	108	100	116	100	108	125	116	125	135			
H-arranged injection unit												
UN500D1												
UN700D1												
UN900D1												
UN1100D1												
UN1200D1												
UN1300D1												
UN1400D1												
UN1600D1												
UN1850D1												
UN2100D1												
UN2400D1												



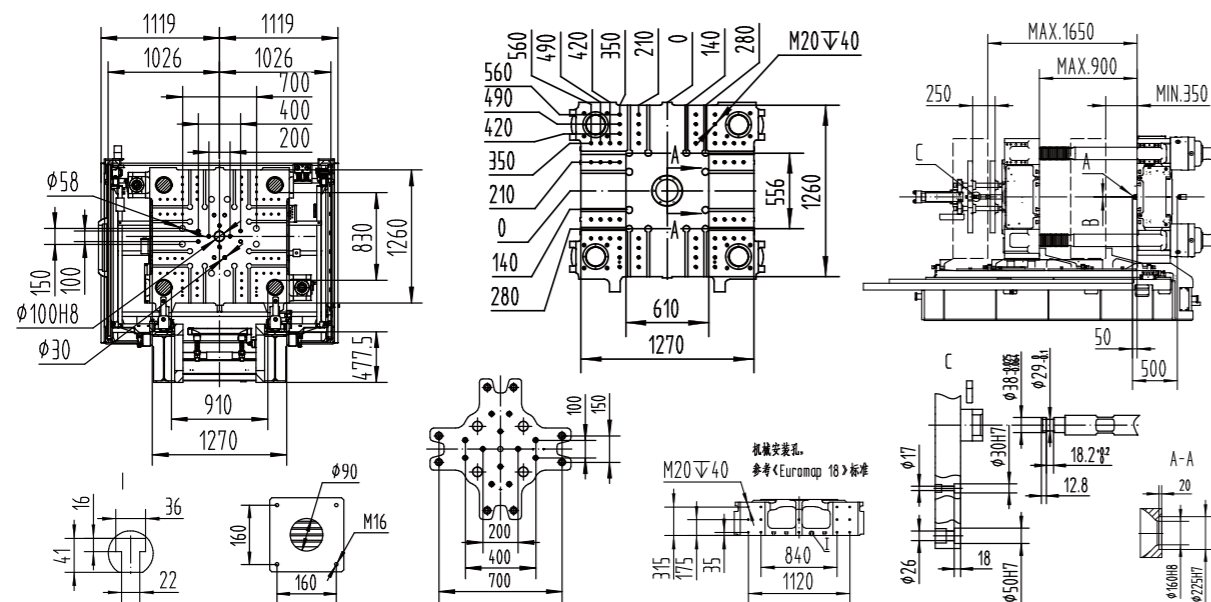
H/P combination: suitable for shot nozzle distance, with adjustable nozzle center distance

Note: The H injection units above are horizontal main injection units.

## UN500D1 Machine Dimensions



## UN500D1 Platen Dimensions



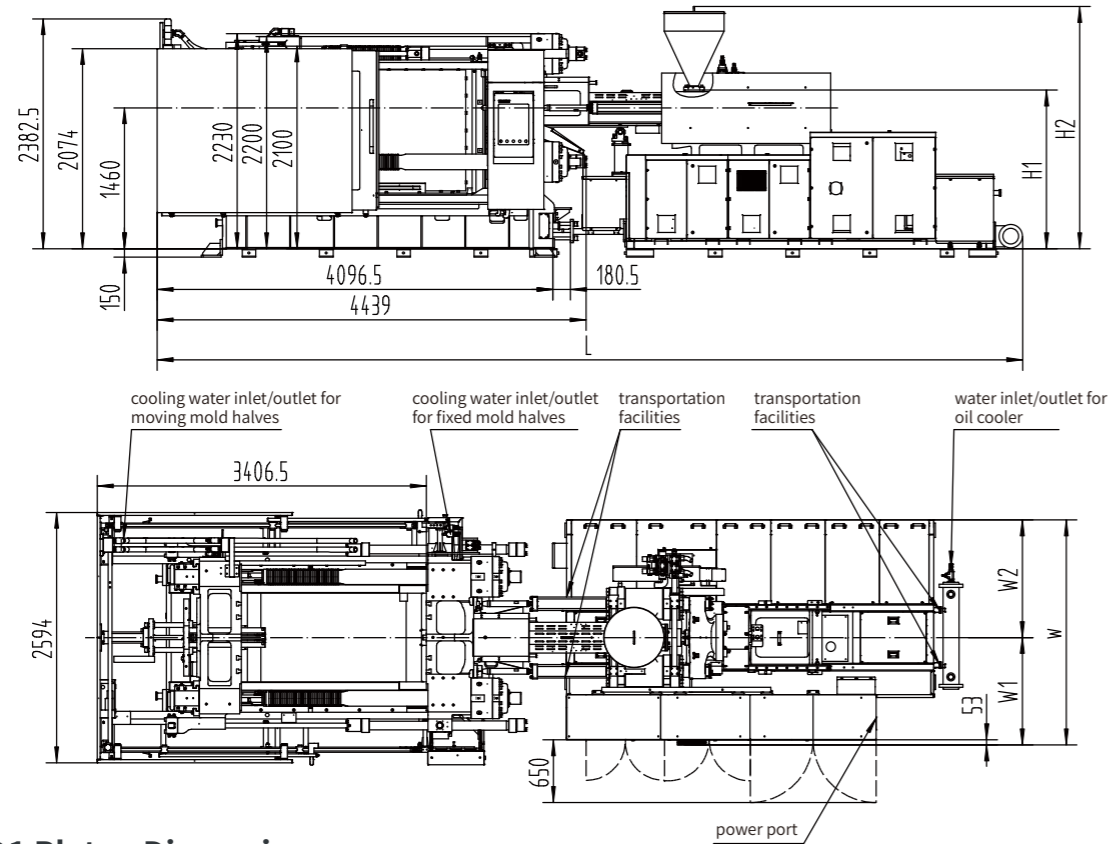
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN500D1-IU1885	SR10	Φ3.5	7456	1617	2360	2198	1063	1135	70	161.46	7.5	(8+8)×11	150	3~4	5~6
UN500D1-IU2695	SR15	Φ4	7456	1677	2542	2198	1063	1135	70	176.74	7.5	(8+8)×11	150	3~4	5~6
UN500D1-IU3330	SR15	Φ4	7456	1555	2420	2198	1063	1135	70	186.89	7.5	(8+8)×11	150	3~4	5~6
UN500D1-IU4800	SR15	Φ4.5	8580	1565	2430	2333	1113	1220	70	215.49	7.5	(8+8)×11	150	3~4	5~6

## UN500D1 Specifications

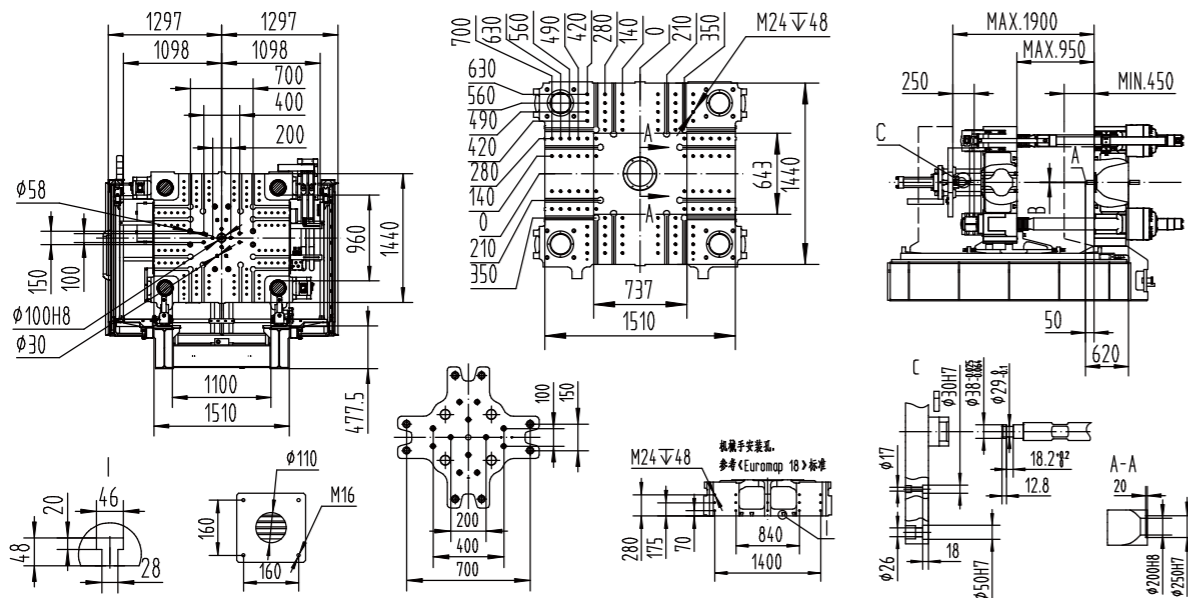
Injection Unit													
Model	IU1885			IU2695			IU3330			IU4800			
Screw diameter (mm)	60	68	76	68	76	84	76	84	92	84	92	100	108
Shot volume (cm <sup>3</sup> )	834	1071	1338	1198	1497	1829	1678	2050	2460	2217	2659	3142	3664
Shot weight (g)	767	986	1231	1103	1377	1683	1544	1886	2263	2039	2446	2890	3371
Injection pressure (MPa)	226	176	141	225	180	147	199	162	136	218	181	154	134
L/D ratio	22.6	20	20	22.3	20	20	22.1	20	20	21.9	20	21.6	20
Injection rate (cm <sup>3</sup> /s)	322	414	517	383	478	584	430	526	632	516	619	730	853
Max.injection speed (mm/s)	114			105			95			93.9			
Screw stroke (mm)	295			330			370			400			
Max.screw speed (r/min)	250			184			147			154			
Barrel heating zone (PCS)	5			6			6			6			
Clamping Unit													
Clamping force (kN)	5000												
Opening force (kN)	390												
Platen size (mm)	1270×1260												
Space between tie bars (mm)	910×830												
Max. mold thickness (mm)	900												
Min. mold thickness (mm)	350												
Opening stroke (mm)	1300/750												
Max. daylight (mm)	1650												
Ejector force (kN)	110												
Ejector stroke (mm)	250												
Ejector number (PCS)	21												
Power unit													
System pressure (MPa)	17.5/30			17.5/30			17.5/30			17.5/30			
Pump motor (kW)	55.6+5.5			60+5.5			60+5.5			66+5.5			
Total power (kW)	83.3	83.3	85.7	91.9	91.9	96.4	98.6	98.6	101.7	108.6	108.6	118.5	118.5
Heater power (kW)	22.2	22.2	24.6	26.4	26.4	30.9	33.1	33.1	36.2	37.14	37.14	47	47
General													
Oil tank capacity (L)	650			750			750			1000			
Machine dimensions (m)	7.5×2.3×2.4			7.5×2.3×2.6			7.5×2.3×2.4			8.6×2.4×2.5			
Max. mold weight (T)	8			8			8			8			

- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.

## UN700D1 Machine Dimensions



## UN700D1 Platen Dimensions



Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN700D1-IU2695	SR15	Φ4	7833	1757	2622	2198	1063	1135	70	176.74	7.5	(8+8)×11	150	3~4	5~6
UN700D1-IU3330	SR15	Φ4	7833	1635	2500	2198	1063	1135	70	186.89	7.5	(8+8)×11	150	3~4	5~6
UN700D1-IU4800	SR15	Φ4.5	8957	1645	2510	2333	1113	1220	70	215.49	7.5	(8+8)×11	150	3~4	5~6
UN700D1-IU6800	SR15	Φ4.5	8957	1645	2510	2711	1352	1359	75	259.84	7.5	(8+8)×11	150	3~4	5~6

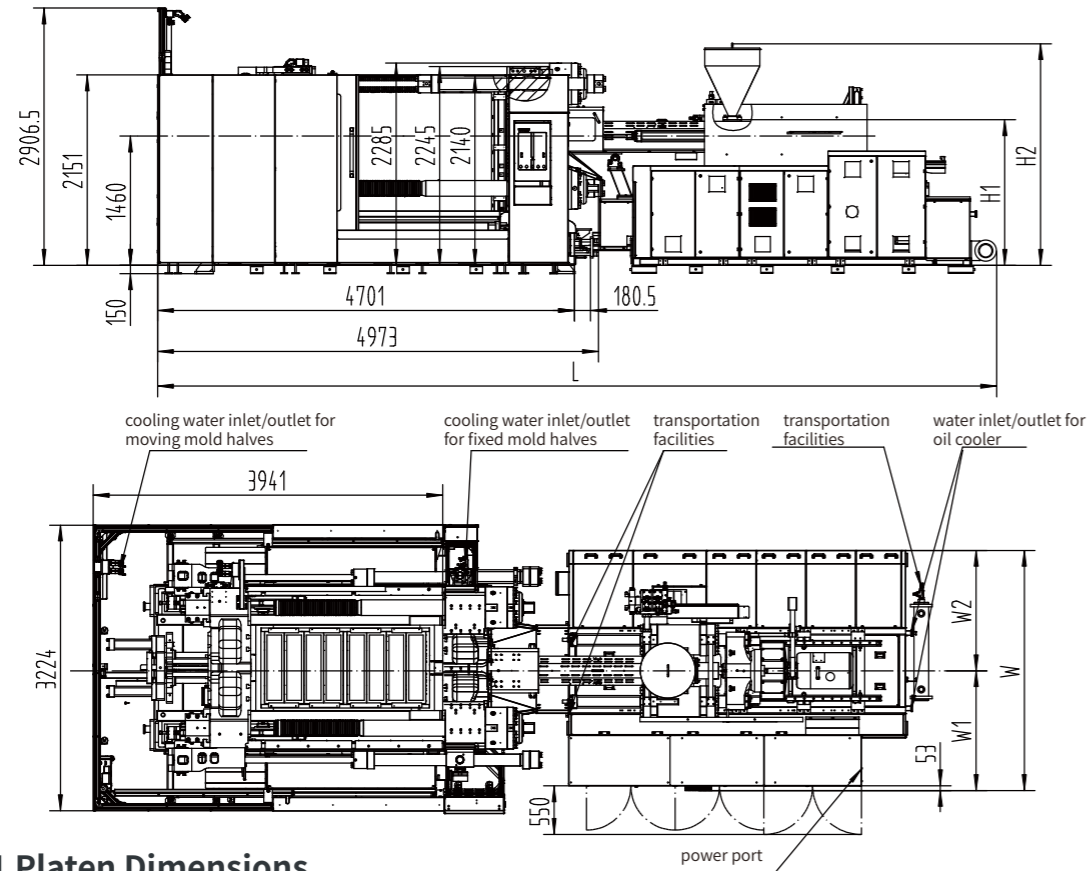
## UN700D1 Specifications

Injection Unit														
Model	IU2695			IU3330			IU4800				IU6800			
Screw diameter (mm)	68	76	84	76	84	92	84	92	100	108	92	100	108	116
Shot volume (cm <sup>3</sup> )	1198	1497	1829	1678	2050	2460	2217	2659	3142	3664	3191	3770	4397	5073
Shot weight (g)	1103	1377	1683	1544	1886	2263	2039	2446	2890	3371	2936	3468	4045	4667
Injection pressure (MPa)	225	180	147	199	162	136	218	181	154	134	213	180	154	134
L/D ratio	22.3	20	20	22.1	20	20	21.9	20	21.6	20	21.7	22	21.5	20
Injection rate (cm <sup>3</sup> /s)	383	478	584	430	526	632	516	619	730	853	615	726	847	980
Max.injection speed (mm/s)	105			95			93.9				92.5			
Screw stroke (mm)	330			370			400				480			
Max.screw speed (r/min)	184			147			154				145			
Barrel heating zone (PCS)	6			6			6				7			
Clamping Unit														
Clamping force (kN)	7000													
Opening force (kN)	500													
Platen size (mm)	1510×1440													
Space between tie bars (mm)	1100×960													
Max. mold thickness (mm)	950													
Min. mold thickness (mm)	450													
Opening stroke (mm)	1450/950													
Max. daylight (mm)	1900													
Ejector force (kN)	110													
Ejector stroke (mm)	250													
Ejector number (PCS)	21													
Power unit														
System pressure (MPa)	17.5/30			17.5/30			17.5/30				17.5/30			
Pump motor (kW)	60+5.5			60+5.5			66+5.5				89+7.5			
Total power (kW)	91.9	91.9	96.4	98.6	98.6	101.7	108.6	108.6	118.5	118.5	143.5	143.5	153.1	153.1
Heater power (kW)	26.4	26.4	30.9	33.1	33.1	36.2	37.14	37.14	47	47	47	47	56.6	56.6
General														
Oil tank capacity (L)	750			750			1000				1150			
Machine dimensions (m)	7.9×2.6×2.7			7.9×2.6×2.5			9×2.6×2.5				9×2.7×2.5			
Max. mold weight (T)	11			11			11				11			

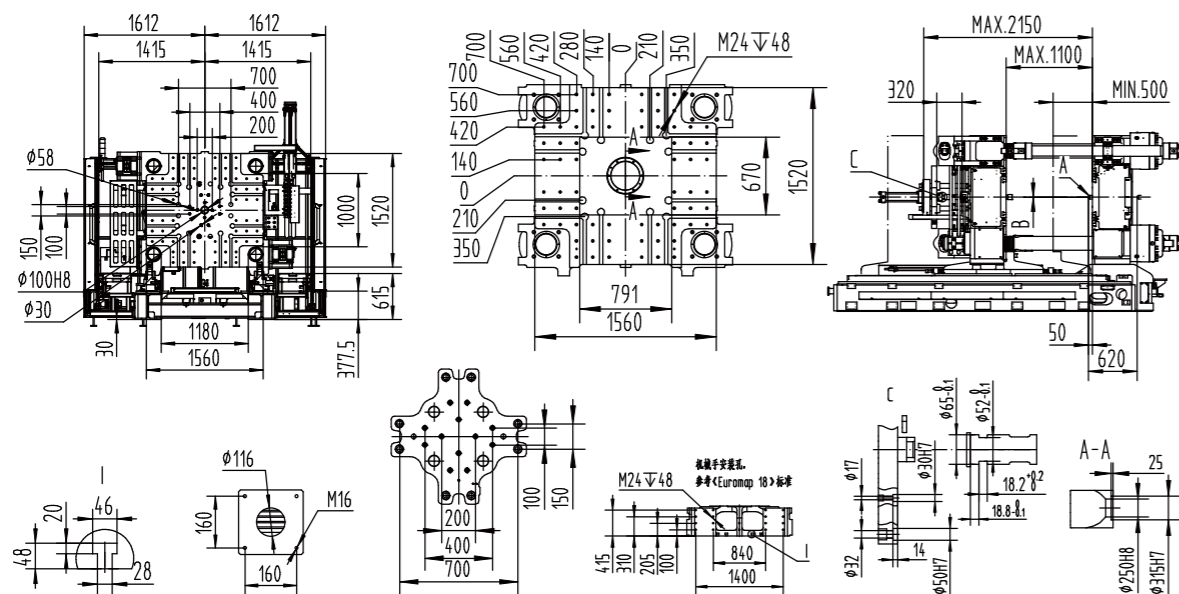
- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.



## UN900D1 Machine Dimensions



## UN900D1 Platen Dimensions



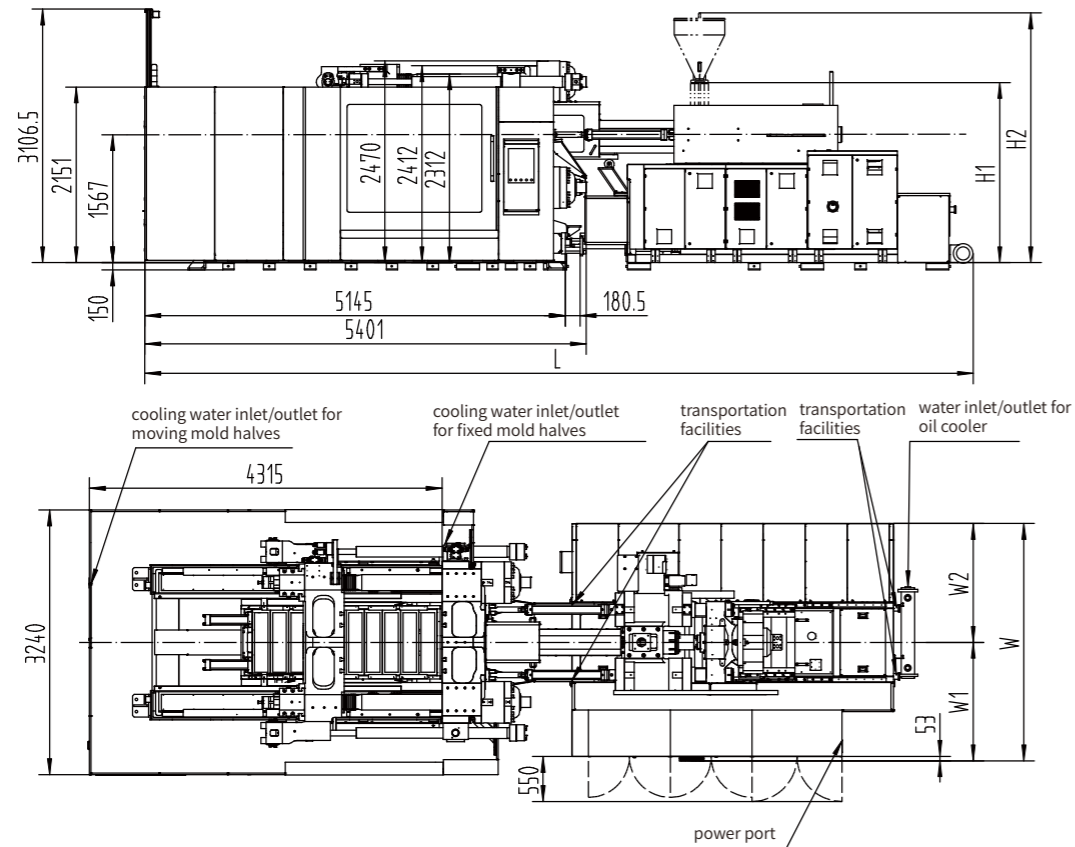
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN900D1-IU4800	SR15	Φ4.5	9461	1645	2510	2333	1113	1220	70	215.49	7.5	(8+8)×11	150	3~4	5~6
UN900D1-IU6800	SR15	Φ4.5	9461	1645	2510	2711	1352	1359	75	259.84	7.5	(8+8)×11	150	3~4	5~6
UN900D1-IU9000	SR15	Φ4.5	9591	2029	2871	2906	1450	1455.5	95	316.71	7.5	(8+8)×11	150	3~4	5~6

## UN900D1 Specifications

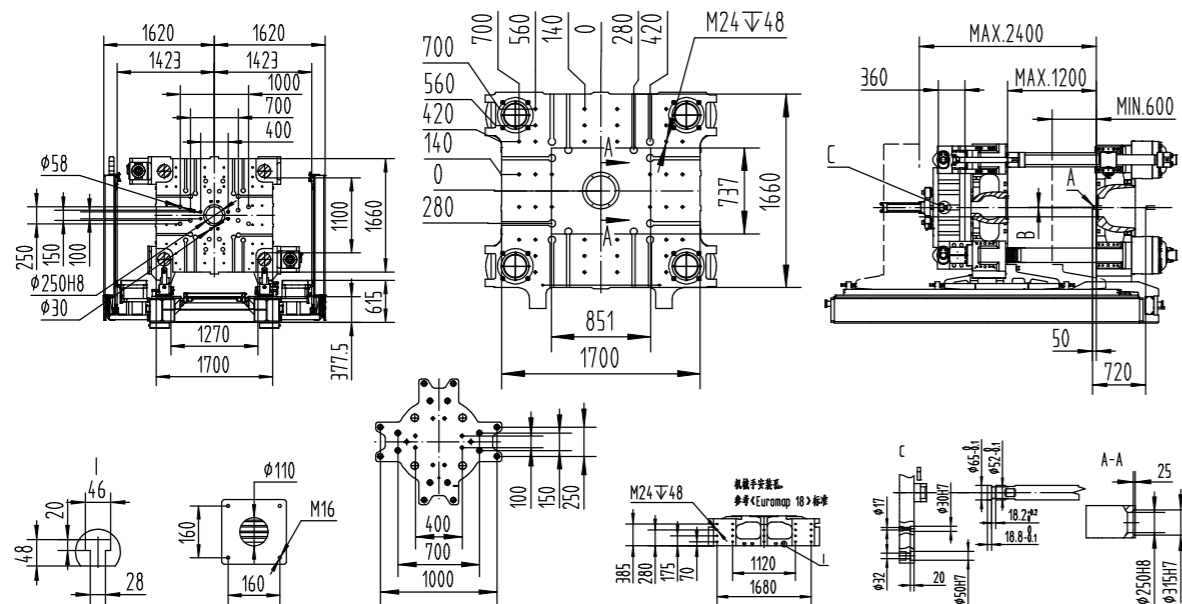
Model	Injection Unit											
	IU4800				IU6800				IU9000			
Screw diameter (mm)	84	92	100	108	92	100	108	116	100	108	116	125
Shot volume (cm <sup>3</sup> )	2217	2659	3142	3664	3191	3770	4397	5073	4320	5038	5813	6748
Shot weight (g)	2039	2446	2890	3371	2936	3468	4045	4667	3974	4636	5348	6208
Injection pressure (MPa)	218	181	154	134	213	180	154	134	209	179	155	134
L/D ratio	21.9	20	21.6	20	21.7	22	21.5	20	21.6	20	21.6	20
Injection rate (cm <sup>3</sup> /s)	516	619	730	853	615	726	847	980	766	894	1031	1197
Max.injection speed (mm/s)	93.9				92.5				97.6			
Screw stroke (mm)	400				480				550			
Max.screw speed (r/min)	154				145				128			
Barrel heating zone (PCS)	6				7				7			
Clamping Unit												
Clamping force (kN)	9000											
Opening force (kN)	640											
Platen size (mm)	1560×1520											
Space between tie bars (mm)	1180×1000											
Max. mold thickness (mm)	1100											
Min. mold thickness (mm)	500											
Opening stroke (mm)	1650/1050											
Max. daylight (mm)	2150											
Ejector force (kN)	220											
Ejector stroke (mm)	320											
Ejector number (PCS)	21											
Power unit												
System pressure (MPa)	17.5/30				17.5/30				17.5/30			
Pump motor (kW)	66+7.5				89+7.5				110+7.5			
Total power (kW)	110.6	110.6	120.5	120.5	143.5	143.5	153.1	153.1	169.3	169.3	178.4	178.4
Heater power (kW)	37.14	37.14	47	47	47	47	56.6	56.6	51.76	51.76	60.9	60.9
General												
Oil tank capacity (L)	1000				1150				1400			
Machine dimensions (m)	9.5×3.3×2.9				9.5×3.3×2.9				9.6×3.3×2.9			
Max. mold weight (T)	13				13				13			

1. Opening force refers to mold opening force generated during high-pressure mold open.
2. In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
3. Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
4. The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
5. Three kinds of screws are available for each model and the medium one is standard on the machine.
6. The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
7. The green figures are standard specifications of clamping unit and injection unit.
8. Because of constant technical improvement, the machine specifications are subject to change without notice.

## UN1100D1 Machine Dimensions



## UN1100D1 Platen Dimensions



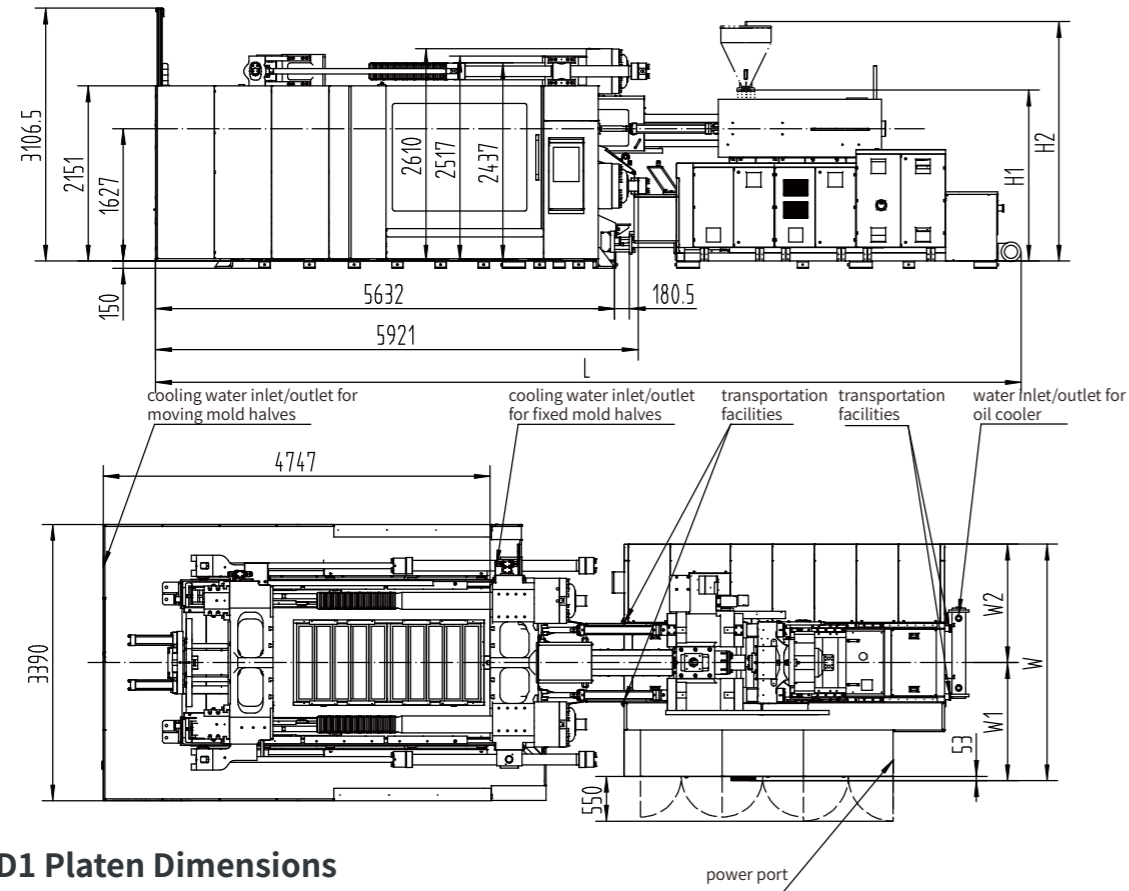
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN1100D1-IU4800	SR15	Φ4.5	10004	1752	2617	2333	1113	1220	70	215.49	8	(8+8)×11	150	3~4	5~6
UN1100D1-IU6800	SR15	Φ4.5	10004	1752	2617	2711	1352	1359	75	259.84	8	(8+8)×11	150	3~4	5~6
UN1100D1-IU9000	SR15	Φ4.5	10134	2136	2978	2906	1450.5	1455.5	95	316.71	8	(8+8)×11	150	3~4	5~6
UN1100D1-IU10900	SR20	Φ6	10604	2171	3013	2906	1450.5	1455.5	120	370.88	8	(8+8)×11	150	3~4	5~6

## UN1100D1 Specifications

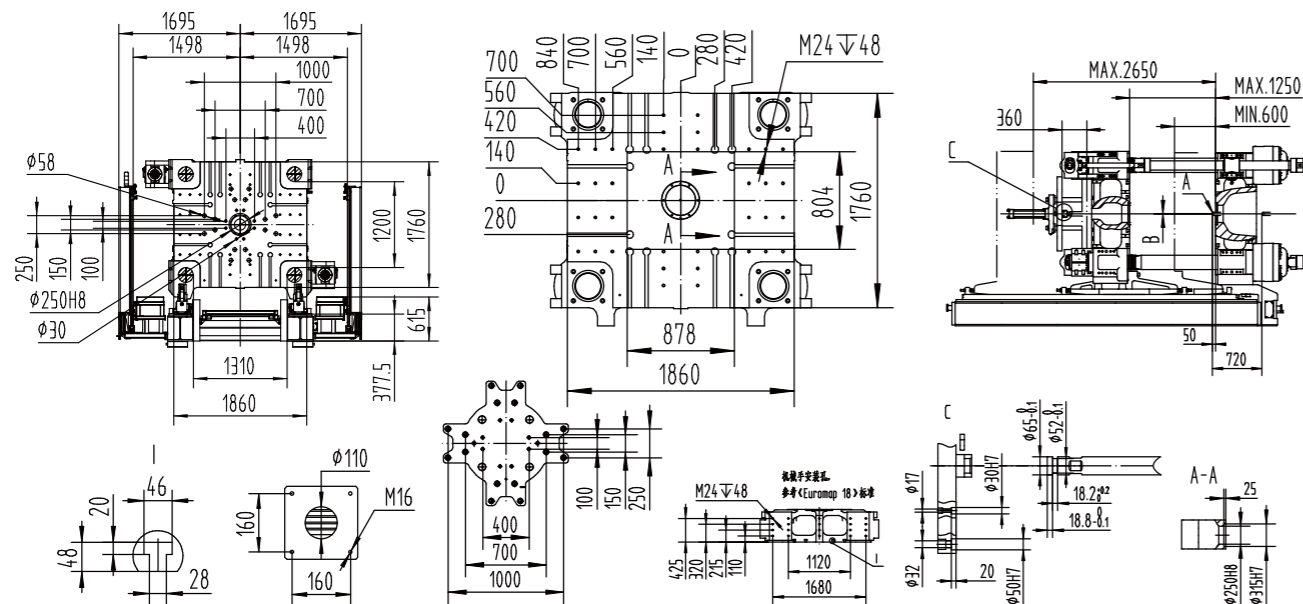
Model	Injection Unit																
	IU4800				IU6800				IU9000				IU10900				
Screw diameter (mm)	84	92	100	108	92	100	108	116	100	108	116	125	108	116	125	135	
Shot volume (cm <sup>3</sup> )	2217	2659	3142	3664	3191	3770	4397	5073	4320	5038	5813	6748	5222	6024	6995	8159	
Shot weight (g)	2039	2446	2890	3371	2936	3468	4045	4667	3974	4636	5348	6208	4804	5542	6435	7506	
Injection pressure (MPa)	218	181	154	134	213	180	154	134	209	179	155	134	210	182	157	135	
L/D ratio	21.9	20	21.6	20	21.7	22	21.5	20	21.6	20	21.6	20	22	22	21.6	20	
Injection rate (cm <sup>3</sup> /s)	516	619	730	853	615	726	847	980	766	894	1031	1197	823	950	1092	1287	
Max.injection speed (mm/s)	93.9				92.5				97.6				89				
Screw stroke (mm)	400				480				550				570				
Max.screw speed (r/min)	154				145				128				112				
Barrel heating zone (PCS)	6				7				7				8				
	Clamping Unit																
	Clamping force (kN)	11000															
	Opening force (kN)	760															
	Platen size (mm)	1700×1660															
	Space between tie bars (mm)	1270×1100															
	Max. mold thickness (mm)	1200															
	Min. mold thickness (mm)	600															
	Opening stroke (mm)	1800/1200															
	Max. daylight (mm)	2400															
	Ejector force (kN)	274															
Ejector stroke (mm)	360																
Ejector number (PCS)	25																
	Power unit																
	System pressure (MPa)	17.5/30				17.5/30				17.5/30				17.5/30			
	Pump motor (kW)	66+7.5				89+7.5				110+7.5				89+37+7.5			
	Total power (kW)	110.6	110.6	120.5	120.5	143.5	143.5	153.1	153.1	169.3	169.3	178.4	178.4	199.9	199.9	204.1	204.1
	Heater power (kW)	37.14	37.14	47	47	47	47	56.6	56.6	51.76	51.76	60.9	60.9	66.37	66.37	70.63	70.63
	General																
	Oil tank capacity (L)	1000				1150				1400				1600			
	Machine dimensions (m)	10×3.3×3.1				10×3.3×3.1				10.1×3.3×3.1				10.7×3.3×3.1			
Max. mold weight (T)	16				16				16				16				

- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.

## UN1200D1 Machine Dimensions



## UN1200D1 Platen Dimensions



Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN1200D1-U4800	SR15	Φ4.5	10491	1812	2677	2333	1113	1220	70	215.49	8	(8+8)×11	150	3~4	5~6
UN1200D1-U6800	SR15	Φ4.5	10491	1812	2677	2711	1352	1359	75	259.84	8	(8+8)×11	150	3~4	5~6
UN1200D1-U9000	SR15	Φ4.5	10621	2196	3038	2906	1450.5	1455.5	95	316.71	8	(8+8)×11	150	3~4	5~6
UN1200D1-U10900	SR20	Φ6	11091	2231	3073	2906	1450.5	1455.5	120	370.88	8	(8+8)×11	150	3~4	5~6

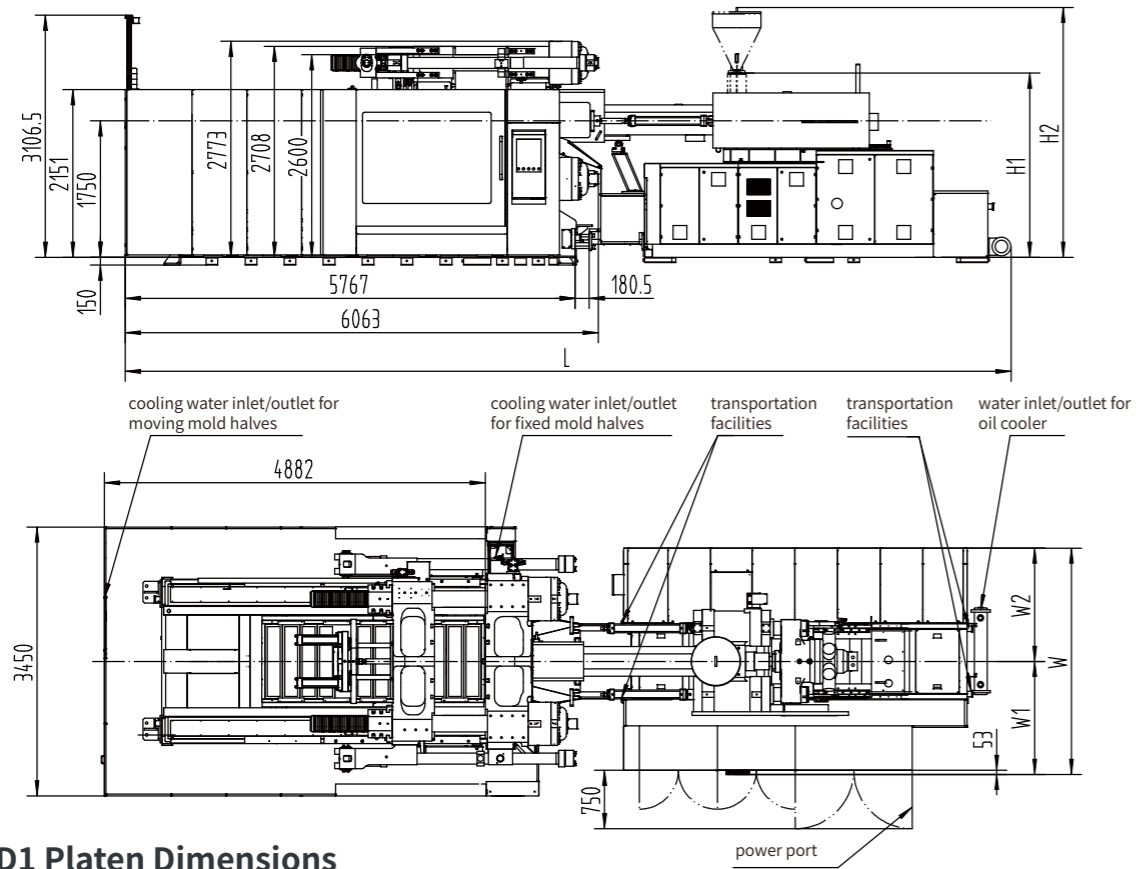
## UN1200D1 Specifications

Model	Injection Unit															
	IU4800				IU6800				IU9000				IU10900			
Screw diameter (mm)	84	92	100	108	92	100	108	116	100	108	116	125	108	116	125	135
Shot volume (cm <sup>3</sup> )	2217	2659	3142	3664	3191	3770	4397	5073	4320	5038	5813	6748	5222	6024	6995	8159
Shot weight (g)	2039	2446	2890	3371	2936	3468	4045	4667	3974	4636	5348	6208	4804	5542	6435	7506
Injection pressure (MPa)	218	181	154	134	213	180	154	134	209	179	155	134	210	182	157	135
L/D ratio	21.9	20	21.6	20	21.7	22	21.5	20	21.6	20	21.6	20	22	22	21.6	20
Injection rate (cm <sup>3</sup> /s)	516	619	730	853	615	726	847	980	823	894	1031	1197	823	950	1092	1287
Max.injection speed (mm/s)	93.9				92.5				97.6				89			
Screw stroke (mm)	400				480				550				570			
Max.screw speed (r/min)	154				145				128				112			
Barrel heating zone (PCS)	6				7				7				8			
Clamping Unit																
Clamping force (kN)	12000															
Opening force (kN)	875															
Platen size (mm)	1860×1760															
Space between tie bars (mm)	1310×1200															
Max. mold thickness (mm)	1250															
Min. mold thickness (mm)	600															
Opening stroke (mm)	2050/1400															
Max. daylight (mm)	2650															
Ejector force (kN)	274															
Ejector stroke (mm)	360															
Ejector number (PCS)	25															
Power unit																
System pressure (MPa)	17.5/30				17.5/30				17.5/30				17.5/30			
Pump motor (kW)	66+7.5				89+7.5				110+7.5				89+37+7.5			
Total power (kW)	110.6	110.6	120.5	120.5	143.5	143.5	153.1	153.1	169.3	169.3	178.4	178.4	199.9	199.9	204.1	204.1
Heater power (kW)	37.14	37.14	47	47	47	47	56.6	56.6	51.76	51.76	60.9	60.9	66.37	66.37	70.63	70.63
General																
Oil tank capacity (L)	1000				1150				1400				1600			
Machine dimensions (m)	10.5×3.4×3.1				10.5×3.4×3.1				10.6×3.4×3.1				11.1×3.4×3.1			
Max. mold weight (T)	20				20				20				20			

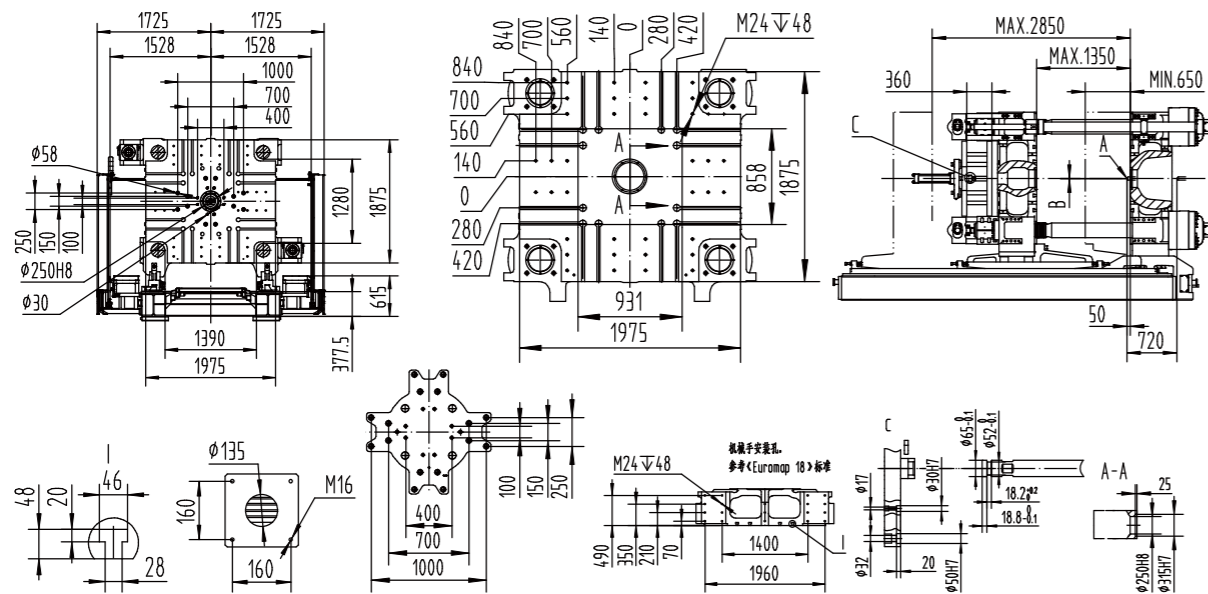
1. Opening force refers to mold opening force generated during high-pressure mold open.
2. In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
3. Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
4. The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
5. Three kinds of screws are available for each model and the medium one is standard on the machine.
6. The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
7. The green figures are standard specifications of clamping unit and injection unit.
8. Because of constant technical improvement, the machine specifications are subject to change without notice.



## UN1300D1 Machine Dimensions



## UN1300D1 Platen Dimensions



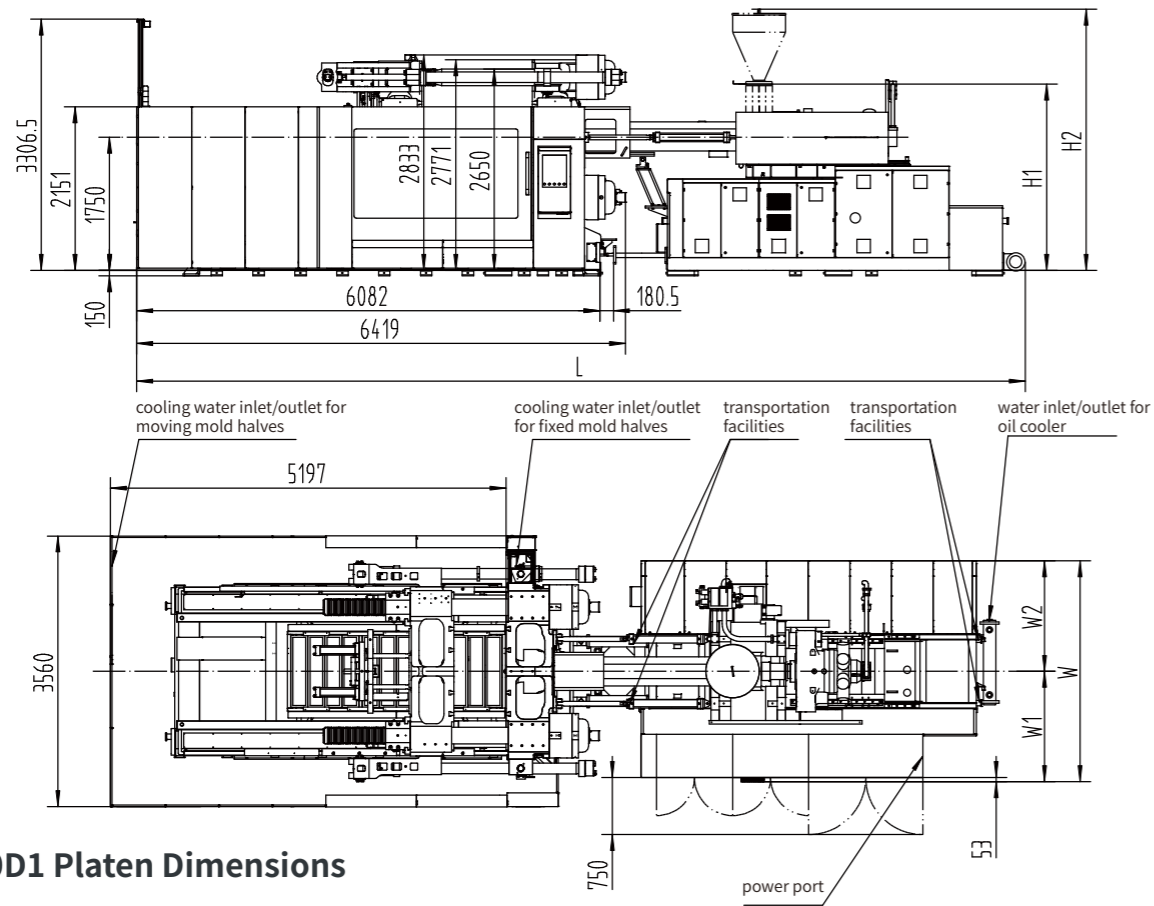
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN1300D1-IU6800	SR15	Φ4.5	10756	1935	2800	2711	1352	1359	95	259.84	8	(8+8)×11	150	3~4	5~6
UN1300D1-IU9000	SR15	Φ4.5	10886	2319	3161	2906	1450.5	1455.5	95	316.71	8	(8+8)×11	150	3~4	5~6
UN1300D1-IU10900	SR20	Φ6	11356	2354	3196	2906	1450.5	1455.5	120	370.88	8	(8+8)×11	150	3~4	5~6
UN1300D1-IU14500	SR20	Φ8	11681	2473	3460	3146	1548	1598	150	470.42	8	(8+8)×11	150	3~4	5~6

## UN1300D1 Specifications

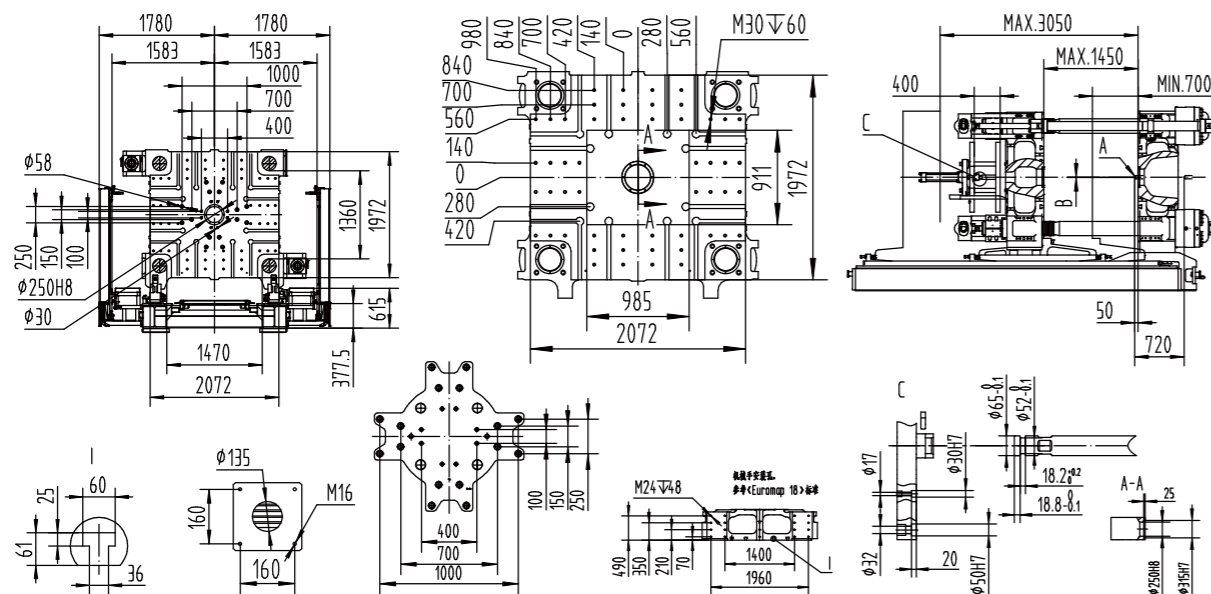
Injection Unit																
Model	IU6800				IU9000				IU10900				IU14500			
Screw diameter (mm)	92	100	108	116	100	108	116	125	108	116	125	135	125	135	145	
Shot volume (cm <sup>3</sup> )	3191	3770	4397	5073	4320	5038	5813	6748	5222	6024	6995	8159	7977	9304	10733	
Shot weight (g)	2936	3468	4045	4667	3974	4636	5348	6208	4804	5542	6435	7506	7339	8560	9875	
Injection pressure (MPa)	213	180	154	134	209	179	155	134	210	182	157	135	181	156	135	
L/D ratio	21.7	22	21.5	20	21.6	20	21.6	20	22	22	21.6	20	23.6	22	20	
Injection rate (cm <sup>3</sup> /s)	615	726	847	980	766	894	1031	1197	823	950	1092	1287	1316	1536	1772	
Max.injection speed (mm/s)	92.5				97.6				89				107			
Screw stroke (mm)	480				550				570				650			
Max.screw speed (r/min)	145				128				112				120			
Barrel heating zone (PCS)	7				7				8				8			
Clamping Unit																
Clamping force (kN)	13000															
Opening force (kN)	875															
Platen size (mm)	1975×1875															
Space between tie bars (mm)	1390×1280															
Max. mold thickness (mm)	1350															
Min. mold thickness (mm)	650															
Opening stroke (mm)	2200/1500															
Max. daylight (mm)	2850															
Ejector force (kN)	274															
Ejector stroke (mm)	360															
Ejector number (PCS)	25															
Power unit																
System pressure (MPa)	17.5/30				17.5/30				17.5/30				17.5/30			
Pump motor (kW)	89+7.5				110+7.5				89+37+7.5				89+66+11			
Total power (kW)	143.5	143.5	153.1	153.1	169.3	169.3	178.4	178.4	199.9	199.9	204.1	204.1	253.7		253.7	
Heater power (kW)	47	47	56.6	56.6	51.76	51.76	60.9	60.9	66.37	66.37	70.63	70.63	87.7		87.7	
General																
Oil tank capacity (L)	1150				1400				1600				2100			
Machine dimensions (m)	10.8×3.5×3.1				10.9×3.5×3.2				11.4×3.5×3.2				11.7×3.5×3.5			
Max. mold weight (T)	23				23				23				23			

- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.

## UN1400D1 Machine Dimensions



## UN1400D1 Platen Dimensions



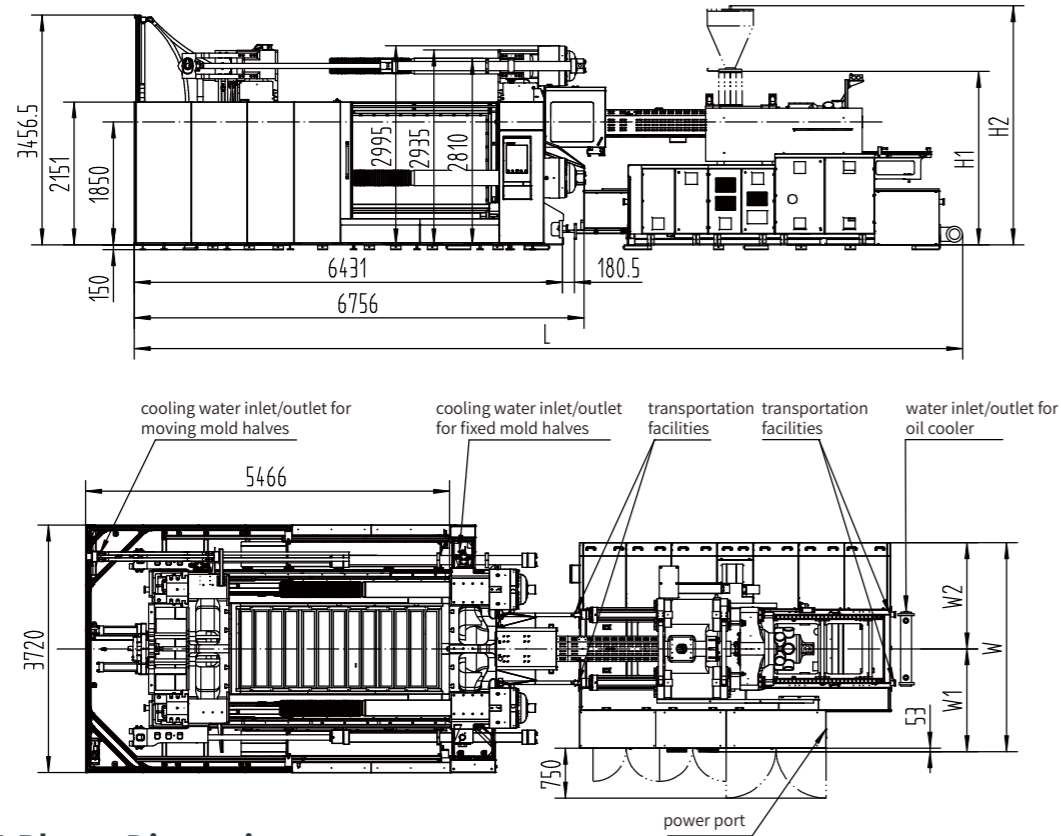
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN1400D1-IU6800	SR15	Φ4.5	11072	1935	2800	2711	1352	1359	75	259.84	8	(8+8)×11	150	3~4	5~6
UN1400D1-IU9000	SR15	Φ4.5	11202	2319	3161	2906	1450.5	1455.5	95	316.71	8	(8+8)×11	150	3~4	5~6
UN1400D1-IU10900	SR20	Φ6	11672	2354	3196	2906	1450.5	1455.5	120	370.88	8	(8+8)×11	150	3~4	5~6
UN1400D1-IU14500	SR20	Φ8	11997	2473	3460	3146	1548	1598	150	470.42	8	(8+8)×11	150	3~4	5~6

## UN1400D1 Specifications

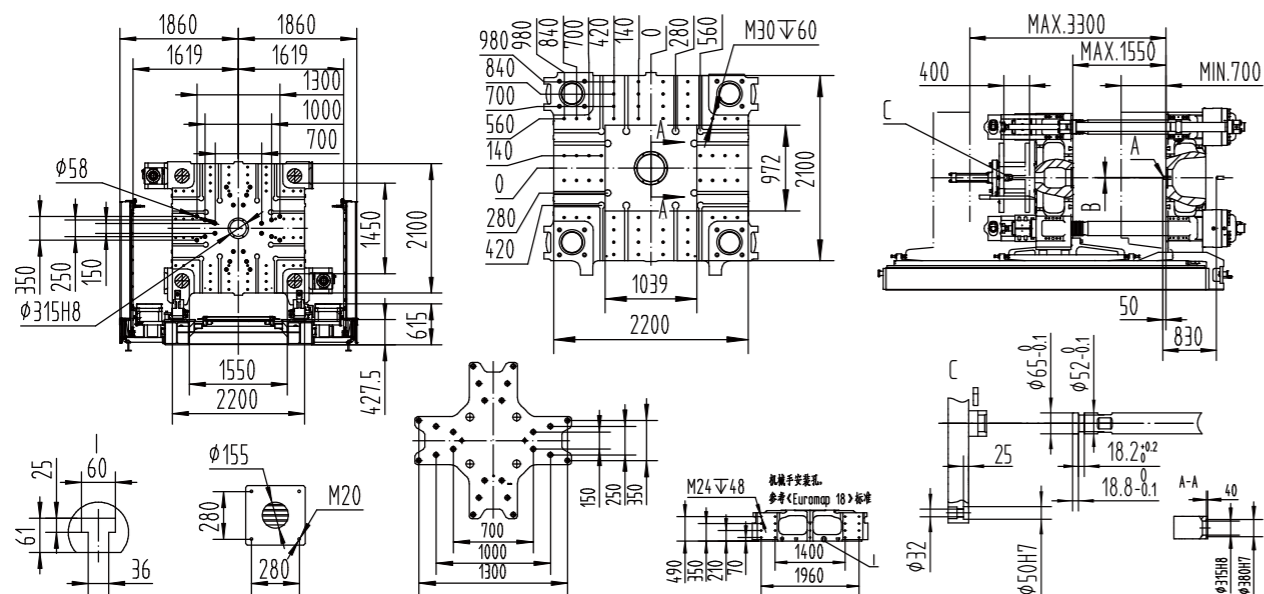
Model	Injection Unit															
	IU6800				IU9000				IU10900				IU14500			
Screw diameter (mm)	92	100	108	116	100	108	116	125	108	116	125	135	125	135	145	
Shot volume (cm <sup>3</sup> )	3191	3770	4397	5073	4320	5038	5813	6748	5222	6024	6995	8159	7977	9304	10733	
Shot weight (g)	2936	3468	4045	4667	3974	4636	5348	6208	4804	5542	6435	7506	7339	8560	9875	
Injection pressure (MPa)	213	180	154	134	209	179	155	134	210	182	157	135	181	156	135	
L/D ratio	21.7	22	21.5	20	21.6	20	21.6	20	22	22	21.6	20	23.6	22	20	
Injection rate (cm <sup>3</sup> /s)	615	726	847	980	766	894	1031	1197	823	950	1092	1287	1316	1536	1772	
Max.injection speed (mm/s)	92.5				97.6				89				107			
Screw stroke (mm)	480				550				570				650			
Max.screw speed (r/min)	145				128				112				120			
Barrel heating zone (PCS)	7				7				8				8			
Clamping Unit																
Clamping force (kN)	14000															
Opening force (kN)	950															
Platen size (mm)	2072×1972															
Space between tie bars (mm)	1470×1360															
Max. mold thickness (mm)	1450															
Min. mold thickness (mm)	700															
Opening stroke (mm)	2350/1600															
Max. daylight (mm)	3050															
Ejector force (kN)	300															
Ejector stroke (mm)	400															
Ejector number (PCS)	25															
Power Unit																
System pressure (MPa)	17.5/30				17.5/30				17.5/30				17.5/30			
Pump motor (kW)	89+7.5				110+7.5				89+37+7.5				89+66+11			
Total power (kW)	143.5	143.5	153.1	153.1	169.3	169.3	178.4	178.4	199.9	199.9	204.1	204.1	253.7	253.7	253.7	
Heater power (kW)	47	47	56.6	56.6	51.76	51.76	60.9	60.9	66.37	66.37	70.63	70.63	87.7	87.7	87.7	
General																
Oil tank capacity (L)	1150				1400				1600				2100			
Machine dimensions (m)	11.1×3.6×3.3				11.2×3.6×3.3				11.7×3.6×3.3				12×3.6×3.5			
Max. mold weight (T)	27				27				27				27			

- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.

## UN1600D1 Machine Dimensions



## UN1600D1 Platen Dimensions



Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN1600D1-IU9000	SR15	Φ4.5	11651	2419	3261	2906	1450.5	1455.5	95	316.71	10.5	(8+8)×11	200	3~4	5~6
UN1600D1-IU10900	SR20	Φ6	12121	2454	3296	2906	1450.5	1455.5	120	370.88	10.5	(8+8)×11	200	3~4	5~6
UN1600D1-IU14500	SR20	Φ8	12446	2573	3560	3146	1548	1598	150	470.42	10.5	(8+8)×11	200	3~4	5~6
UN1600D1-IU18500	SR20	Φ8	12446	2589	3576	3146	1548	1598	150	470.42	10.5	(8+8)×11	200	3~4	5~6

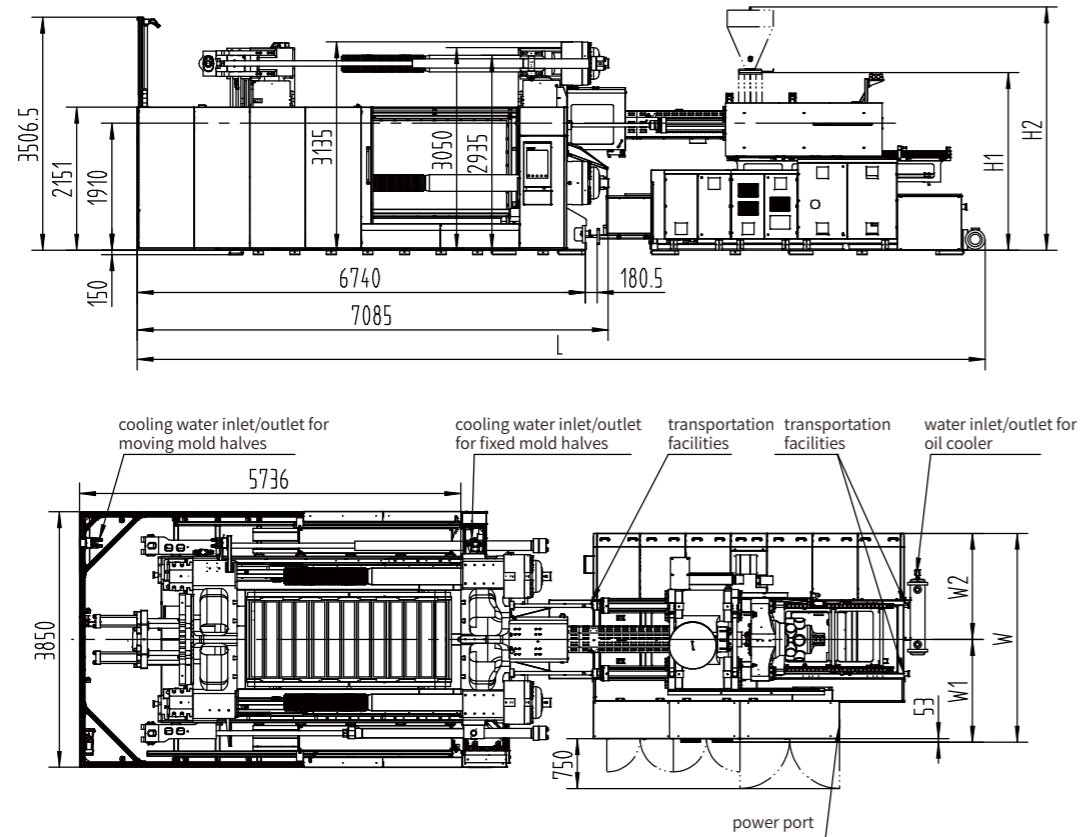
## UN1600D1 Specifications

Model	Injection Unit														
	IU9000			IU10900			IU14500			IU18500					
Screw diameter (mm)	100	108	116	125	108	116	125	135	125	135	145	135	145	155	165
Shot volume (cm <sup>3</sup> )	4320	5038	5813	6748	5222	6024	6995	8159	7977	9304	10733	10020	11559	13208	14968
Shot weight (g)	3974	4636	5348	6208	4804	5542	6435	7506	7339	8560	9875	9218	10634	12152	13770
Injection pressure (MPa)	209	179	155	134	210	182	157	135	181	156	135	184	160	140	123
L/D ratio	21.6	20	21.6	20	22	22	21.6	20	23.6	22	20	23.6	22	22	20
Injection rate (cm <sup>3</sup> /s)	766	894	1031	1197	823	950	1092	1287	1316	1536	1772	1295	1494	1717	1936
Max.injection speed (mm/s)		97.6				89				107					91
Screw stroke (mm)		550				570				650					700
Max.screw speed (r/min)		128				112				120					120
Barrel heating zone (PCS)		7				8				8					8
Clamping Unit															
Clamping force (kN)	16000														
Opening force (kN)	1100														
Platen size (mm)	2200×2100														
Space between tie bars (mm)	1550×1450														
Max. mold thickness (mm)	1550														
Min. mold thickness (mm)	700														
Opening stroke (mm)	2600/1750														
Max. daylight (mm)	3300														
Ejector force (kN)	300														
Ejector stroke (mm)	400														
Ejector number (PCS)	25														
Power Unit															
System pressure (MPa)	17.5/30			17.5/30			17.5/30			17.5/30					
Pump motor (kW)	110+7.5			89+37+7.5			89+66+11			89+66+11					
Total power (kW)	169.3	169.3	178.4	178.4	199.9	199.9	204.1	204.1	253.7	253.7	253.7	263.8	263.8	263.8	263.8
Heater power (kW)	51.76	51.76	60.9	60.9	66.37	66.37	70.63	70.63	87.7	87.7	87.7	97.8	97.8	97.8	97.8
General															
Oil tank capacity (L)	1400			1600			2100			2100					
Machine dimensions (m)	11.7×3.7×3.5			12.1×3.7×3.5			12.5×3.7×3.6			12.5×3.7×3.6					
Max. mold weight (T)	34			34			34			34					

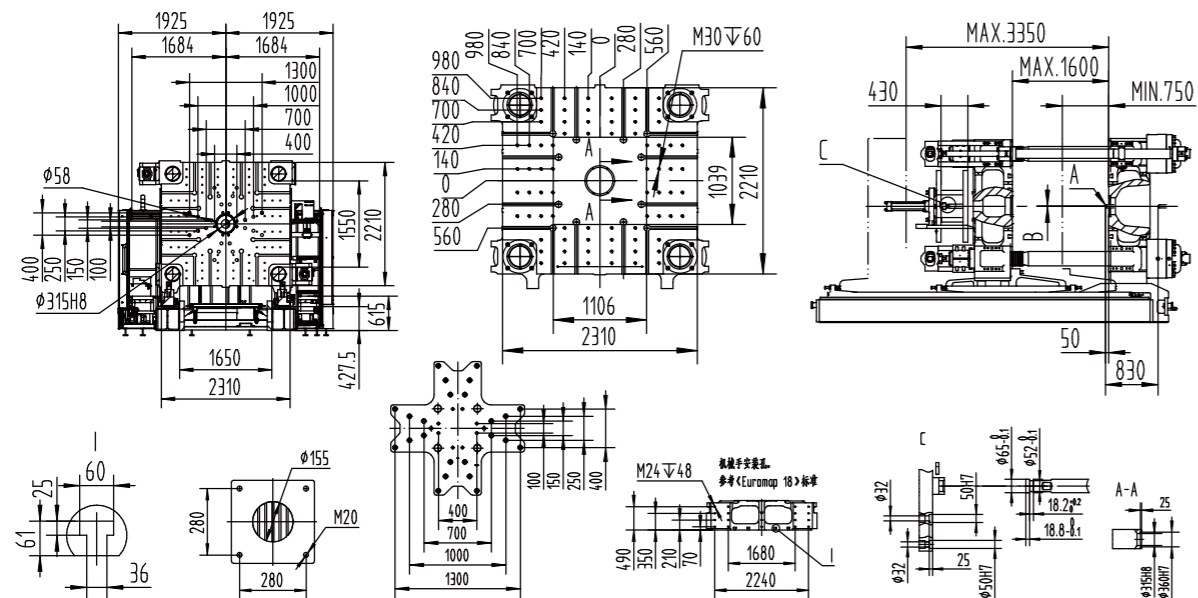
1. Opening force refers to mold opening force generated during high-pressure mold open.
2. In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
3. Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
4. The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
5. Three kinds of screws are available for each model and the medium one is standard on the machine.
6. The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
7. The green figures are standard specifications of clamping unit and injection unit.
8. Because of constant technical improvement, the machine specifications are subject to change without notice.



## UN1850D1 Machine Dimensions



## UN1850D1 Platen Dimensions



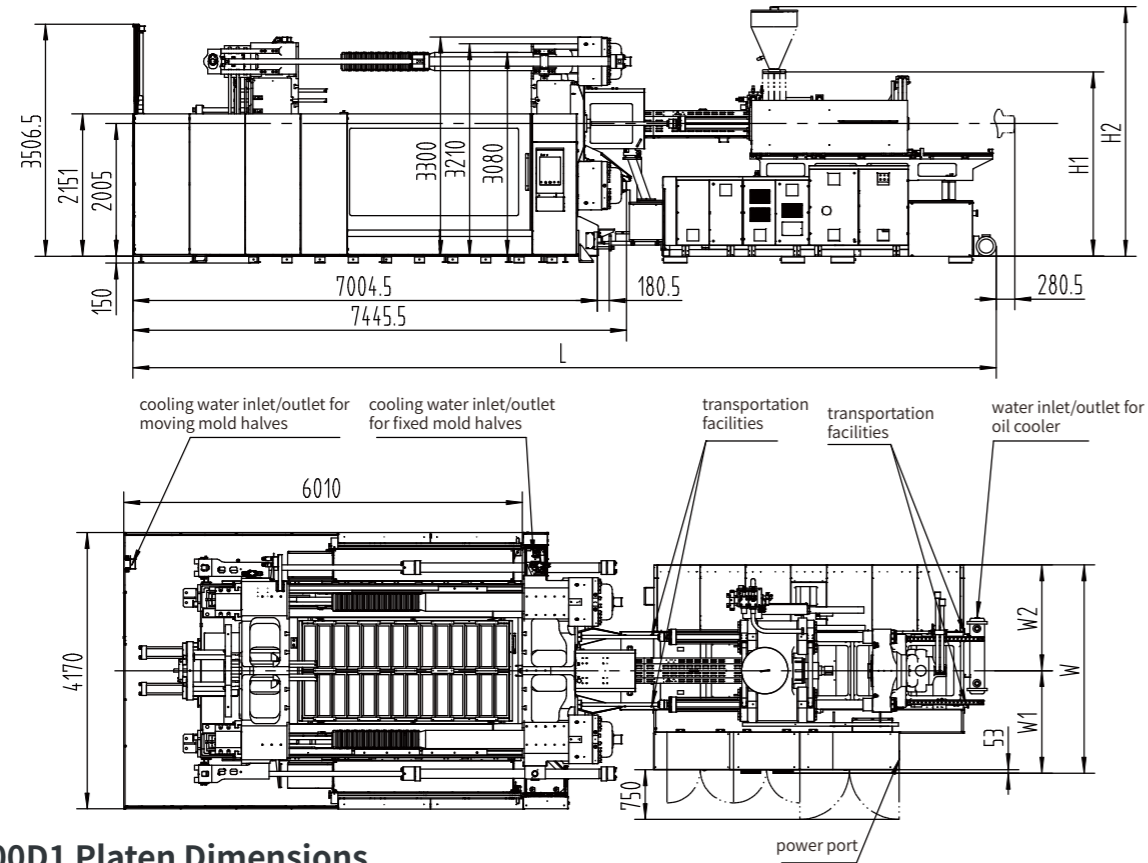
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN1850D1-IU9000	SR15	Φ4.5	11960	2479	3321	2906	1450.5	1455.5	95	316.71	10.5	(8+8)×11	200	3~4	5~6
UN1850D1-IU10900	SR20	Φ6	12430	2514	3356	2906	1450.5	1455.5	120	370.88	10.5	(8+8)×11	200	3~4	5~6
UN1850D1-IU14500	SR20	Φ8	12756	2633	3620	3146	1548	1598	150	470.42	10.5	(8+8)×11	200	3~4	5~6
UN1850D1-IU18500	SR20	Φ8	12756	2649	3636	3146	1548	1598	150	470.42	10.5	(8+8)×11	200	3~4	5~6

## UN1850D1 Specifications

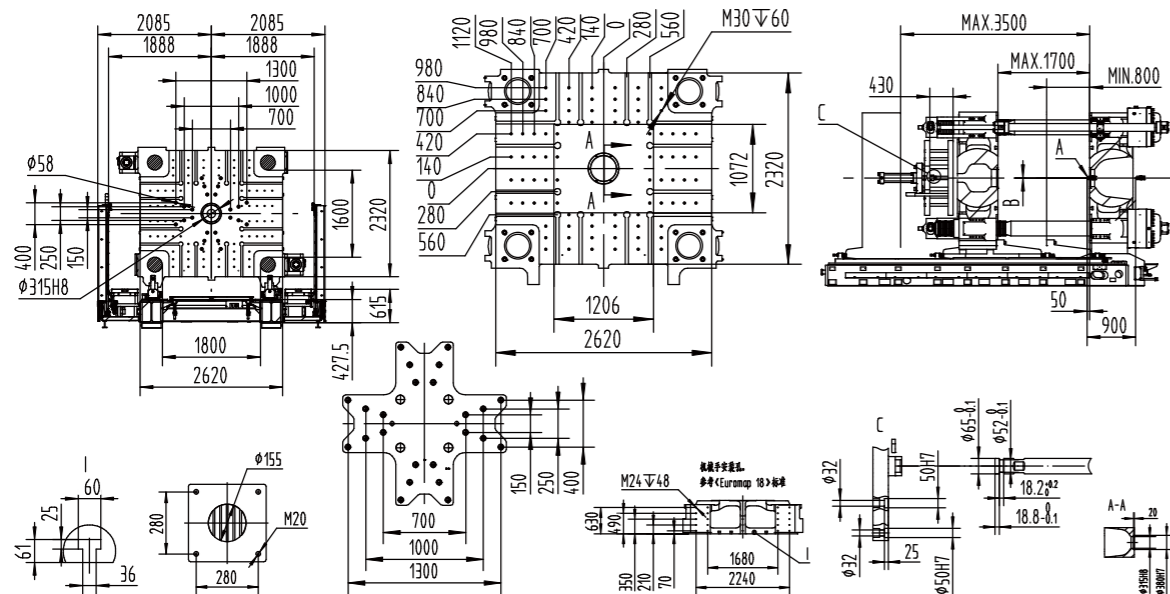
Injection Unit															
Model	IU9000				IU10900				IU14500			IU18500			
Screw diameter (mm)	100	108	116	125	108	116	125	135	125	135	145	135	145	155	165
Shot volume (cm <sup>3</sup> )	4320	5038	5813	6748	5222	6024	6995	8159	7977	9304	10733	10020	11559	13208	14968
Shot weight (g)	3974	4636	5348	6208	4804	5542	6435	7506	7339	8560	9875	9218	10634	12152	13770
Injection pressure (MPa)	209	179	155	134	210	182	157	135	181	156	135	184	160	140	123
L/D ratio	21.6	20	21.6	20	22	22	21.6	20	23.6	22	20	23.6	22	22	20
Injection rate (cm <sup>3</sup> /s)	766	894	1031	1197	823	950	1092	1287	1316	1536	1772	1295	1494	1717	1936
Max.injection speed (mm/s)	97.6				89				107			91			
Screw stroke (mm)	550				570				650			700			
Max.screw speed (r/min)	128				112				120			120			
Barrel heating zone (PCS)	7				8				8			8			
Clamping Unit															
Clamping force (kN)	18500														
Opening force (kN)	1230														
Platen size (mm)	2310×2210														
Space between tie bars (mm)	1650×1550														
Max. mold thickness (mm)	1600														
Min. mold thickness (mm)	750														
Opening stroke (mm)	2600/1750														
Max. daylight (mm)	3350														
Ejector force (kN)	460														
Ejector stroke (mm)	430														
Ejector number (PCS)	33														
Power unit															
System pressure (MPa)	17.5/30				17.5/30				17.5/30			17.5/30			
Pump motor (kW)	110+7.5				89+37+7.5				89+66+11			89+66+11			
Total power (kW)	169.3	169.3	178.4	178.4	199.9	199.9	204.1	204.1	253.7	253.7	253.7	263.8	263.8	263.8	263.8
Heater power (kW)	51.76	51.76	60.9	60.9	66.37	66.37	70.63	70.63	87.7	87.7	87.7	97.8	97.8	97.8	97.8
General															
Oil tank capacity (L)	1400				1600				2100			2100			
Machine dimensions (m)	12×3.9×3.5				12.4×3.9×3.5				12.8×3.9×3.7			12.8×3.9×3.7			
Max. mold weight (T)	42				42				42			42			

- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.

## UN2100D1 Machine Dimensions



## UN2100D1 Platen Dimensions



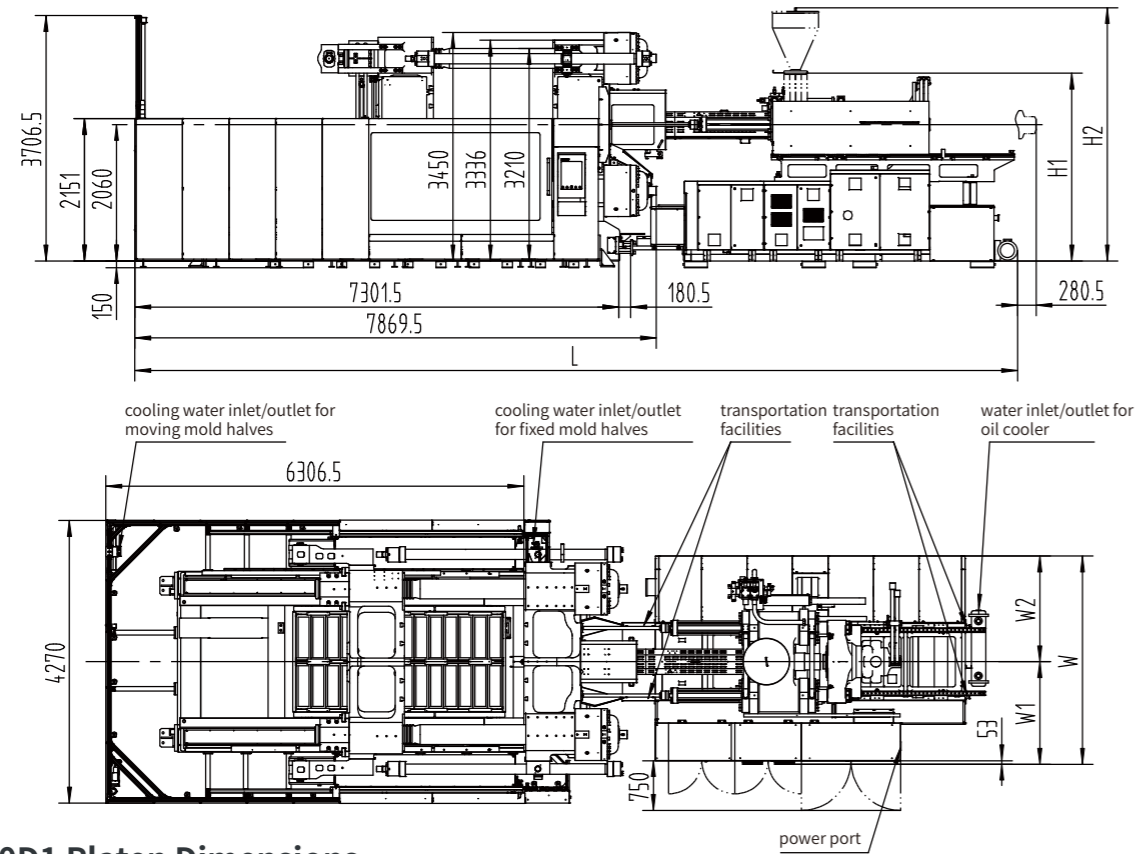
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN2100D1-IU10900	SR20	Φ6	12695	2609	3451	2906	1450.5	1455.5	120	370.88	12.5	(8+8)×11	200	3~4	5~6
UN2100D1-IU14500	SR20	Φ8	13021	2728	3715	3146	1548	1598	150	470.42	12.5	(8+8)×11	200	3~4	5~6
UN2100D1-IU18500	SR20	Φ8	13021	2744	3731	3146	1548	1598	150	470.42	12.5	(8+8)×11	200	3~4	5~6
UN2100D1-IU23750	SR25	Φ8	15475	2754	3760	3660.5	1847.5	1813	185	590.28	12.5	(8+8)×11	200	3~4	5~6
UN2100D1-IU37500	SR25	Φ8	15475	2830	3817	3660.5	1847.5	1813	185	643.48	12.5	(8+8)×11	200	3~4	5~6

## UN2100D1 Specifications

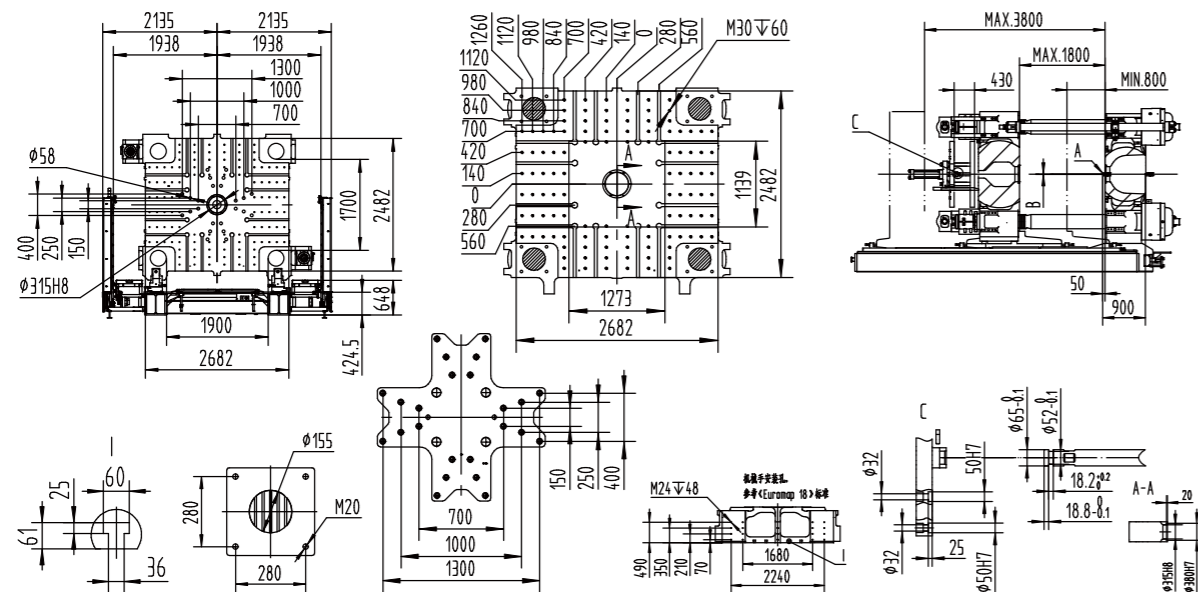
Model	IU10900				IU14500			IU18500				IU23750			IU37500
Screw diameter (mm)	108	116	125	135	125	135	145	135	145	155	165	145	155	165	185
Shot volume (cm <sup>3</sup> )	5222	6024	6995	8159	7977	9304	10733	10020	11559	13208	14968	12385	14152	16037	26343
Shot weight (g)	4804	5542	6435	7506	7339	8560	9875	9218	10634	12152	13770	11394	13020	14754	24235
Injection pressure (MPa)	210	182	157	135	181	156	135	184	160	140	123	190	167	147	151
L/D ratio	22	22	21.6	20	23.6	22	20	23.6	22	22	20	23.5	22	20.1	22
Injection rate (cm <sup>3</sup> /s)	823	950	1092	1287	1316	1536	1772	1295	1494	1717	1936	1532	1750	1983	1934
Max.injection speed (mm/s)	89				107			91				92.7			71.9
Screw stroke (mm)	570				650			700				750			980
Max.screw speed (r/min)	112				120			120				120			80
Barrel heating zone (PCS)	8				8			8				10			11
Clamping force (kN)	21000														
Opening force (kN)	1380														
Platen size (mm)	2620×2320														
Space between tie bars (mm)	1800×1600														
Max. mold thickness (mm)	1700														
Min. mold thickness (mm)	800														
Opening stroke (mm)	2700/1800														
Max. daylight (mm)	3500														
Ejector force (kN)	460														
Ejector stroke (mm)	430														
Ejector number (PCS)	25														
System pressure (MPa)	17.5/30				17.5/30			17.5/30				17.5/30			17.5/30
Pump motor (kW)	89+37+7.5				89+66+11			89+66+11				110+89+11			110+89+11
Total power (kW)	199.9	199.9	204.1	204.1	253.7			263.8				322.4			357.5
Heater power (kW)	66.37	66.37	70.63	70.63	87.7			97.8				112.4			147.5
Oil tank capacity (L)	1600				2100			2100				2850			2850
Machine dimensions (m)	12.7×4.2×3.5				13.0×4.2×3.8			13.0×4.2×3.8				15.5×4.2×3.9			15.5×4.2×3.9
Max. mold weight (T)	50				50			50				50			50

- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.

## UN2400D1 Machine Dimensions



## UN2400D1 Platen Dimensions



Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN2400D1-IU14500	SR20	Ø8	13318	2783	3770	3146	1548	1598	150	470.42	12.5	(8+8)×11	200	3~4	5~6
UN2400D1-IU18500	SR20	Ø8	13318	2799	3786	3146	1548	1598	150	470.42	12.5	(8+8)×11	200	3~4	5~6
UN2400D1-IU23750	SR25	Ø8	15772	2809	3815	3660.5	1847.5	1813	185	643.48	12.5	(8+8)×11	200	3~4	5~6
UN2400D1-IU37500	SR25	Ø8	15772	2885	3872	3660.5	1847.5	1813	185	643.48	12.5	(8+8)×11	200	3~4	5~6
UN2400D1-IU50000	SR28	Ø12	16472	2880	3867	3660.5	1847.5	1813	185	643.48	12.5	(8+8)×11	200	3~3	5~6

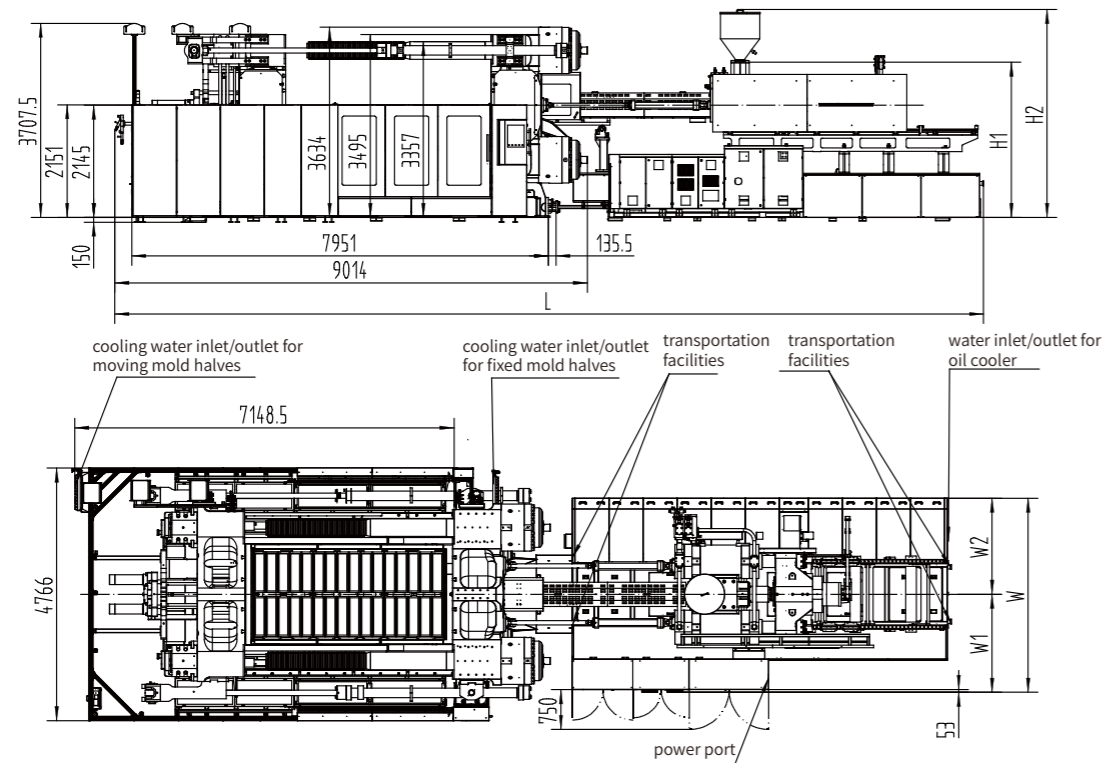
## UN2400D1 Specifications

Model	Injection Unit											
	IU14500			IU18500				IU23750			IU37500	IU50000
Screw diameter (mm)	125	135	145	135	145	155	165	145	155	165	185	200
Shot volume (cm <sup>3</sup> )	7977	9304	10733	10020	11559	13208	14968	12385	14152	16037	26343	35186
Shot weight (g)	7339	8560	9875	9218	10634	12152	13770	11394	13020	14756	24235	32371
Injection pressure (MPa)	181	156	135	184	160	140	123	190	167	147	151	158
L/D ratio	23.6	22	20	23.6	22	22	20	23.5	22	20.1	22	22
Injection rate (cm <sup>3</sup> /s)	1316	1536	1772	1295	1494	1717	1936	1532	1750	1983	1934	1843
Max.injection speed (mm/s)	107			91				92.7			71.9	58.7
Screw stroke (mm)	650			700				750			980	1120
Max.screw speed (r/min)	120			120				120			80	67
Barrel heating zone (PCS)	8			8				10			11	9
Clamping Unit												
Clamping force (kN)	24000											
Opening force (kN)	1640											
Platen size (mm)	2682×2482											
Space between tie bars (mm)	1900×1700											
Max. mold thickness (mm)	1800											
Min. mold thickness (mm)	800											
Opening stroke (mm)	3000/2000											
Max. daylight (mm)	3800											
Ejector force (kN)	460											
Ejector stroke (mm)	430											
Ejector number (PCS)	25											
Power Unit												
System pressure (MPa)	17.5/30			17.5/30				17.5/30			17.5/30	17.5/30
Pump motor (kW)	89+66+11			89+66+11				110+89+11			110+89+11	110+89+11
Total power (kW)	253.7			263.8				322.4			357.5	403
Heater power (kW)	87.7			97.8				112.4			147.5	193
General												
Oil tank capacity (L)	2100			2100				2850			2850	2850
Machine dimensions (m)	13.3×4.3×3.8			13.3×4.3×3.8				15.8×4.3×3.9			15.8×4.3×3.9	16.5×4.3×4.0
Max. mold weight (T)	59			59				59			59	59

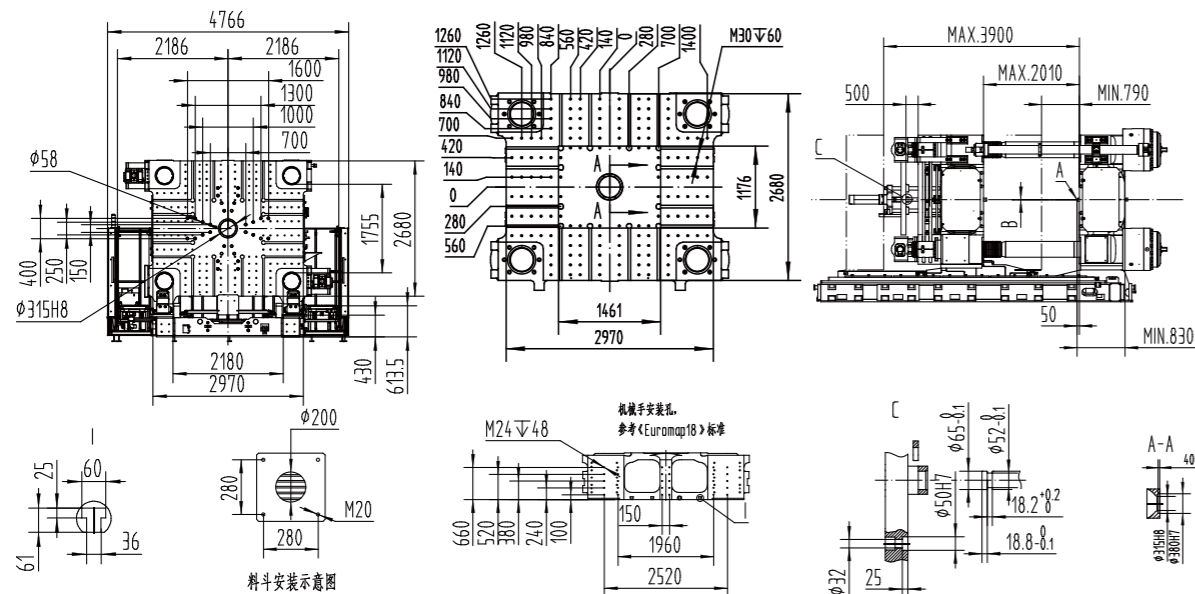
- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.



## UN2850D1 Machine Dimensions



## UN2850D1 Platen Dimensions



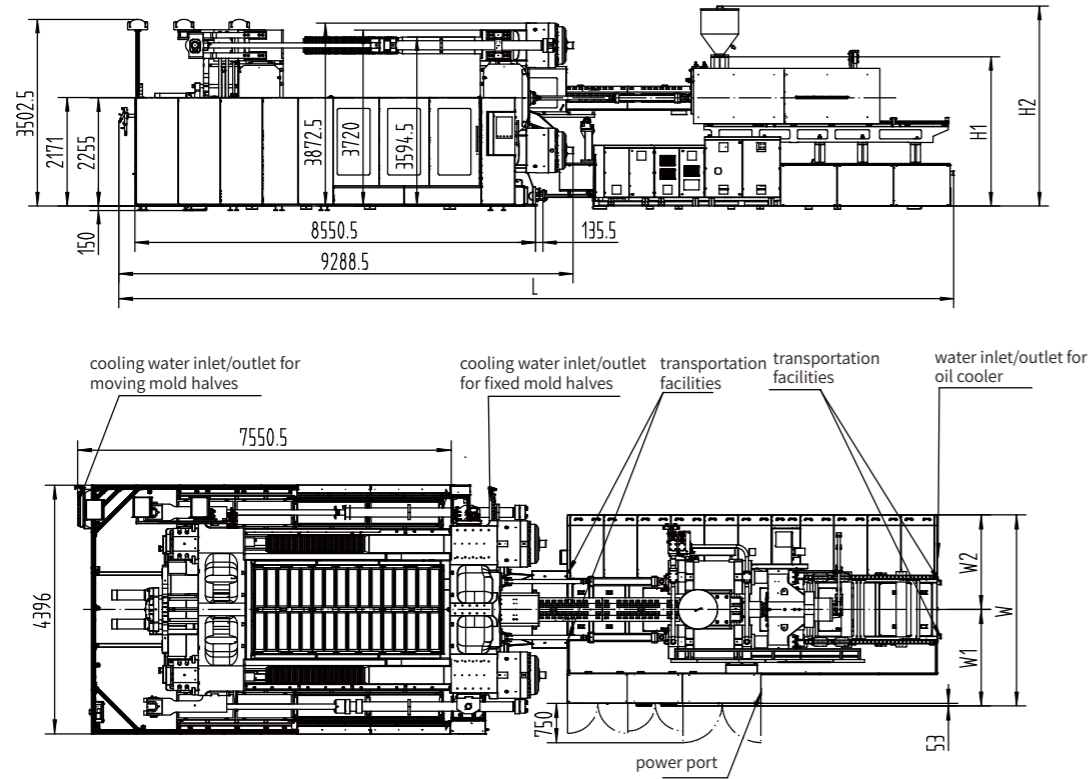
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN2850D1-IU18500	SR20	Ø8	14120	2939	3926	3146	1548	1598	150	470.42	14.5	(8+8)×11	200	3~4	5~6
UN2850D1-IU23750	SR25	Ø8	16574	2955	3942	3660.5	1847.5	1813	185	643.48	14.5	(8+8)×11	200	3~4	5~6
UN2850D1-IU23750	SR25	Ø8	16574	2965	3971	3660.5	1847.5	1813	185	643.48	14.5	(8+8)×11	200	3~4	5~6
UN2850D1-IU23750	SR28	Ø12	16964	3041	4028	3660.5	1847.5	1813	185	643.48	14.5	(8+8)×11	200	3~4	5~6

## UN2850D1 Specifications

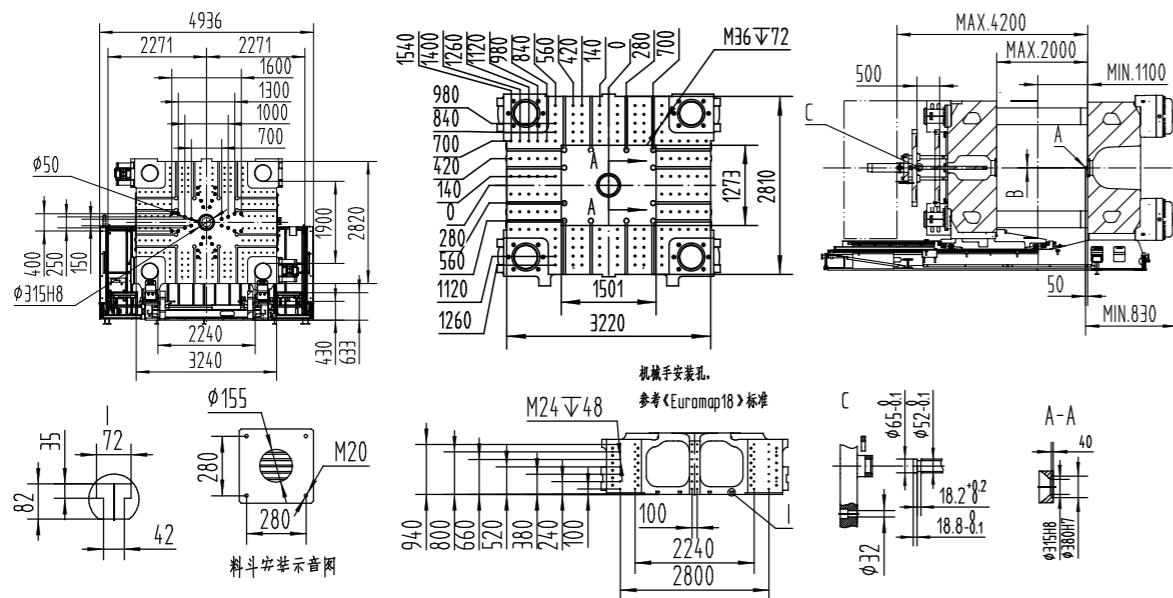
		Injection Unit							
Model	IU18500				IU23750			IU37500	IU50000
Screw diameter (mm)	135	145	155	165	145	155	165	185	200
Shot volume (cm <sup>3</sup> )	10020	11559	13208	14968	12385	14152	16037	26343	35186
Shot weight (g)	9218	10634	12152	13770	11394	13020	14756	24235	32371
Injection pressure (MPa)	184	160	140	123	190	167	147	151	158
L/D ratio	23.6	22	22	20	23.5	22	20.1	22	22
Injection rate (cm <sup>3</sup> /s)	1295	1494	1717	1936	1532	1750	1983	1934	1843
Max.injection speed (mm/s)	91				92.7			71.9	58.7
Screw stroke (mm)	700				750			980	1120
Max.screw speed (r/min)	120				120			80	67
Barrel heating zone (PCS)	8				10			11	9
		Clamping Unit							
Clamping force (kN)	28500								
Opening force (kN)	2200								
Platen size (mm)	2970×2680								
Space between tie bars (mm)	2180×1755								
Max. mold thickness (mm)	2010								
Min. mold thickness (mm)	790								
Opening stroke (mm)	3110								
Max. daylight (mm)	3900								
Ejector force (kN)	460								
Ejector stroke (mm)	500								
Ejector number (PCS)	33								
		Power unit							
System pressure (MPa)	17.5/30				17.5/30			17.5/30	17.5/30
Pump motor (kW)	89+66+11				110+89+11			110+89+11	110+89+11
Total power (kW)	263.8				322.4			357.5	403
Heater power (kW)	97.8				112.4			147.5	193
		General							
Oil tank capacity (L)	2100				2850			2850	2850
Machine dimensions (m)	14.1×4.8×4.0				16.6×4.8×4.0			16.6×4.8×4.0	17.0×4.8×4.0
Max. mold weight (T)	75				75			75	75

- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.

## UN3400D1 Machine Dimensions



## UN3400D1 Platen Dimensions



Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm <sup>2</sup>	A	t/m <sup>2</sup>	n×L/min	L/min	bar	bar
UN3400D1-IU23750	SR25	Ø8	17173.5	3065	4052	3660.5	1847.5	1813	185	643.48	14.5	(8+8)×11	200	3~4	5~6
UN3400D1-IU37500	SR25	Ø8	17173.5	3075	4081	3660.5	1847.5	1813	185	643.48	14.5	(8+8)×11	200	3~4	5~6
UN3400D1-IU50000	SR28	Ø12	17563.5	3151	4138	3660.5	1847.5	1813	185	643.48	14.5	(8+8)×11	200	3~4	5~6

## UN3400D1 Specifications

Model	Injection Unit			
	IU23750	IU37500	IU50000	
Screw diameter (mm)	145	155	165	185
Shot volume (cm <sup>3</sup> )	12385	14152	16037	26343
Shot weight (g)	11394	13020	14756	24235
Injection pressure (MPa)	190	167	147	151
L/D ratio	23.5	22	20.1	22
Injection rate (cm <sup>3</sup> /s)	1532	1750	1983	1934
Max.injection speed (mm/s)	92.7	71.9	58.7	71.9
Screw stroke (mm)	750	980	1120	980
Max.screw speed (r/min)	120	80	67	80
Barrel heating zone (PCS)	10	11	9	11
Clamping Unit				
Clamping force (kN)	34000			
Opening force (kN)	2550			
Platen size (mm)	3220×2810			
Space between tie bars (mm)	2240×1900			
Max. mold thickness (mm)	2000			
Min. mold thickness (mm)	1100			
Opening stroke (mm)	3100			
Max. daylight (mm)	4200			
Ejector force (kN)	460			
Ejector stroke (mm)	500			
Ejector number (PCS)	33			
Power unit				
System pressure (MPa)	17.5/30	17.5/30	17.5/30	17.5/30
Pump motor (kW)	110+89+11	110+89+11	110+89+11	110+89+11
Total power (kW)	322.4	357.5	403	357.5
Heater power (kW)	112.4	147.5	193	147.5
General				
Oil tank capacity (L)	2850	2850	2850	2850
Machine dimensions (m)	17.2×5.0×4.1	17.2×5.0×4.1	17.6×5.0×4.2	17.2×5.0×4.1
Max. mold weight (T)	81	81	81	81

- Opening force refers to mold opening force generated during high-pressure mold open.
- In the case of opening stroke, data before the slash refer to mold opening stroke with minimum mold height; data after the slash refer to opening stroke with maximum mold height.
- Mold-bearing capacity of the movable platen is 2/3 of total mold weight.
- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
- Three kinds of screws are available for each model and the medium one is standard on the machine.
- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm<sup>3</sup>] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
- Because of constant technical improvement, the machine specifications are subject to change without notice.

# Main Part List

(Standard) Part Name	Brand/Specifications	Place of Brand
Control system	KEBA	Austria
Oil seal	SKF	Sweden
Guide ring	SKF	Sweden
Directional valve	Rexroth/YUKEN/Atos	Germany/Japan/Italy
Proportional relief valve	YUKEN/Hydraulik Power	Japan/TAIWAN,CHINA
High-response proportional valve	Rexroth	Germany
Shaft seal cartridge valve	Rexroth	Germany
Cartridge type electromagnetic ball valve	HYDAC	Germany
Variable piston pump	Rexroth	Germany
Pressure sensor	Danfoss	Denmark
Magnetostrictive displacement sensor	Germanjet	Germany
Gear pump	SUMITOMO/HYTEK	Japan/CHINA
Servo motor	PHASE/MODROL	Italy/CHINA
Barrel assembly	HAYEUR/TONGDA	CHINA
Hydraulic motor	DANDUN/POCLAIN	CHINA/France
Tie bar	HUAXIAN/GENERAL&GENESIS	CHINA
Tie bar locking nut	HUAXIAN/GENERAL&GENESIS	CHINA
Clamping piston	HUAXIAN/GENERAL&GENESIS	CHINA
Clamping cylinder cover	YGG/QSQY	TAIWAN,CHINA / CHINA
Platen	YGG/QSQY/ZHONGTIAN	TAIWAN,CHINA / CHINA
Servo drive	PHASE/MODROL/INVANCE	Italy/CHINA/CHINA
Solid state relay	KUDOM	UK
Automatic switch	ABB	Switzerland
Air switch	FUJI	Japan
Position limit switch	SCHMERSAL/Schneider/Panasonic	Germany/France/Japan
Proximity switch	AUTONICS	Korea
AC contractor	FUJI	Japan

## Standard and Optional Features

● Standard  
○ Optional

● Clamping unit		
Clamping mechanism with tie bars independent of moving platen	●	
Quantitative volumetric automatic lubrication system	●	
High-response proportional control of pressure and flow for mold open & mold close	●	
Hydraulically-driven ejection device	●	
Low-pressure mold protection	●	
Clamping force adjustment as needed	●	
Forced reset function	●	
Ejector return protection	●	
Robot mounting hole (Euromap 18)	●	
Electric door ( optional for below or at 700T machine)	●	
T-slot platen	●	
Four clamp platens made of high-rigidity ductile iron	●	
Hydraulic and electrical safety devices	●	
Safety foot plate in mold area ( optional for below or at 700T machine)	●	
High-accuracy magnetostrictive displacement sensor for mold open/close control	●	
Mold with reset spring	●	
Safety foot plate in front & rear door areas		○
Synchronous ejection and core pulling		○
Secondary mold closing		○
Quick mold change system platform		○
Hydraulic mold clamp		○
Magnetic platen		○
Increased mold thickness		○
Increased ejector stroke		○
Mold lifting device		○
Heat insulating plate of mold		○
Special mold mounting hole		○
Increased mold opening stroke		○
Larger ejection force		○
● Electric control system		
Closed-loop PID barrel temperature control	●	
Manual, semi-auto and fully-auto operating mode	●	
Input and output inspection interface	●	
Automatic display of alarm messages and acousto-optic alarm system	●	
Built-in software with the oscilloscope function	●	
Unlimited technical parameter storage	●	
Automatic mold height adjustment	●	
Chinese and English operating system	●	
Safety gate emergency stop function	●	
Online cycle monitoring	●	
12" TFT color touch screen	●	
Visualized graphic programming	●	
PDP interface	●	
Injection monitoring protection	●	
Mold-close monitoring protection	●	
Statistical process control (SPC) interface	●	
Electrical enclosure rated IP54	●	
Screw speed detecting device	●	
Time/ position/ time + position control modes for switchover to holding phase	●	
Protective plate in mold area	●	
3 sets of 380V 32A socket (2 sets for 500T-900TD1)	●	
1 set of 380V 16A socket (2 sets for 500T-900TD1)	●	
16-level password security	●	
Reserved robot interfaces based on SPI, EUROMAP 12	●	
Automatic heat preserving, automatic heating settings	●	
Servo injection		○
Electric unscrewing device		○
Hot runner interface		○
Auxiliary emergency stop button		○
Air blast in mold		○
Power supply change		○

Central (networked) monitoring system		○
Protective light grid of safety gates		○
Opto-electronic safety switch of front and rear safety gates		○
Protective light grid of central safety foot plate		○
● Injection unit		
Double parallel cylinder injection unit with low-speed high-torque hydraulic motor	●	
Nitrided alloy steel screw & barrel	●	
Heat preservation cover for barrel and purge guard (with electrical protection)	●	
Selectable suck-back before or after plasticizing	●	
10-stage injection speed/ pressure/ position control	●	
10-stage holding speed/ pressure/ position/ time control	●	
5-stage plasticizing speed/ pressure/ position control	●	
Linear guides for injection unit	●	
Double-carriage cylinder	●	
Cold start protection	●	
Manual central lubrication system of injection unit	●	
Suck back function	●	
Automatic purging	●	
Screw rotation measuring device	●	
Injection carriage transducer(unavailable for 500-1600D1)		○
Mixing screw		○
Bi-metallic screw barrel		○
Swivelling injection unit		○
Extended nozzle (50/100/150/200mm longer)		○
Special screw components		○
Energy-saving barrel heat retaining device (silicone cover)		○
Spring shut-off nozzle		○
Increased injection stroke		○
● Hydraulic system		
Low-noise energy-saving hydraulic circuit	●	
Proportional back pressure control for plasticizing	●	
Oil pre-heating system	●	
2 sets of core pull (4 sets for UN2100D1 and larger models)	●	
Differential mold-open circuit	●	
Injection and mold-close pressure protection	●	
High-pressure mold opening	●	
Automatic pressure and flow calibration	●	
Oil temperature and oil level alarm	●	
High-performance servo pump system	●	
Multiple sets of sequence (injection) valve interface		○
Variable displacement pump system		○
Closed-loop proportional variable displacement pump system		○
High-response accumulating servo injection system		○
Enlarged oil cooler		○
Multi-capacity larger pump motor		○
Multi-capacity larger plasticizing motor		○
Servo injection (closed-loop control of injection, plasticizing, holding pressure and back pressure)		○
Plasticizing during mold opening		○
Multiple sets of core pull or unscrewing devices with electrical interfaces		○
● Other		
User manual	●	
Adjustable leveling pad	●	
8-in 8-out water manifold on platen (with general, quick connectors)	●	
Nozzle spanner	●	
Mold clamp	●	
Hopper (standard on UN500-900D1)		○
Hydraulic oil (standard on UN500-1400D1)		○
Loading platform		○
Mold temperature controller		○
Automatic loader		○
Dehumidification dryer		○



## YFO:6 Premium Services



## YIZUMI e-service 24h



## Global Operations

