

D1

500T-4000T

D1 SERIES TWO-PLATEN
INJECTION MOLDING MACHINE

Innovative Practice of
Large-tonnage Two-platen Machine



Yizumi Precision Molding Technology Co., Ltd.

Address: No.12 Shunchang Road, Shunde, Foshan, Guangdong 528300, China
TEL: 86-757-2921 9764 86-757-2921 9001(overseas) Email: imm@yizumi.com
www.yizumi.com

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



THINK TECH FORWARD

D1

PRODUCT DETAILS

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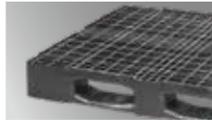
Based on importation and absorption of advanced German technology and years of experience in product application, we continue to move on and undertake the historic project of large-tonnage two-platen injection molding machine, striving to become a pioneer to fulfill such an innovative mission.



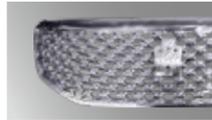
Deep-cavity parts



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.

Smaller footprint

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

Higher stability of mold-open position

Variation up to $\pm 0.2\text{mm}$, meeting higher requirements on automated part removal and inserting.

More reliable low-pressure mold protection

Mold protection is so sensitive that it can sense three pieces of A4 paper, which is more effective.

New-generation servo system driven by fully oil-cooled two-headed motor

Fast response, strong power and low energy consumption.

Professional control system

Short scan time, fast response and high movement repeatability.

$\leq 3\%$

Smaller variation of force on tie bar

Variation $\leq 3\%$, high mold-close accuracy, hardly any flash, higher stability of injection molding.

55%

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.

$\leq 3\text{‰}$

Outstanding injection stability

Repeatability of part weight $\leq 3\text{‰}$, excellent quality, saving materials and costs.



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.



Impact-proof synchronized lock nut mechanism

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



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.



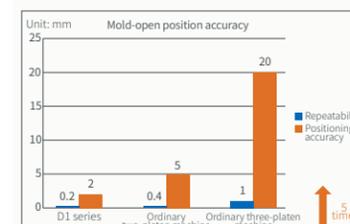
Highly-rigid accurate guide device

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



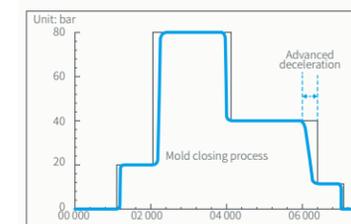
Wear & corrosion resistant tie bars with uniform stress distribution

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.



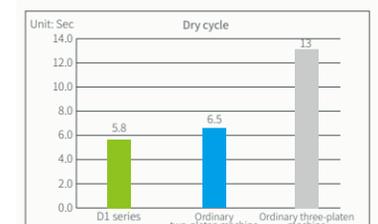
High repeatability of mold-open end position

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



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.



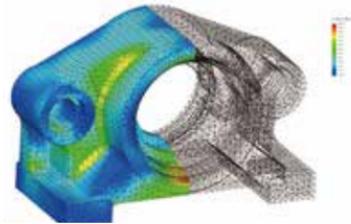
Short dry cycle

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

Injection Unit

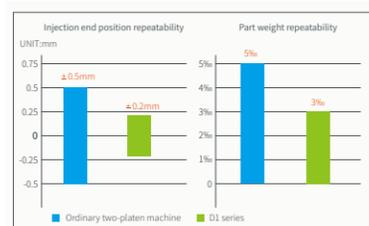
Stable injection end position and high repeatability of part weight

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.



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.



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.



Ultrasonic displacement sensor

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



Integral linear guide rails for injection

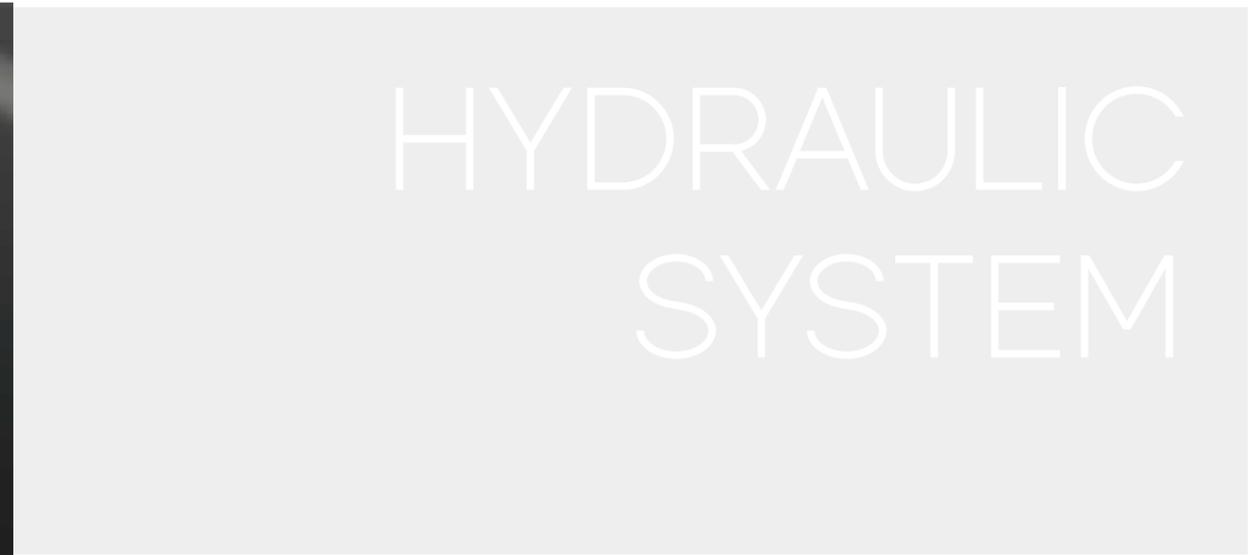
Linear guide rails are a standard feature of D1 series, bringing benefits of low resistance, quick acceleration and accurate injection.



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 $\pm 0.5\text{C}$.

Hydraulic System

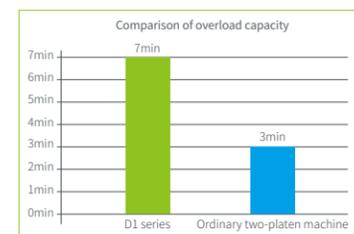


Precise filtration, efficient cooling, higher stability

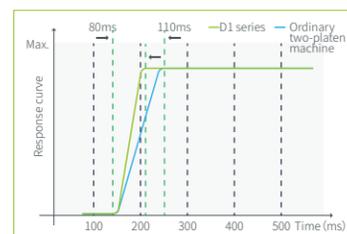
D1 series is based on a hydraulic system with stability and fast response at the core, which enables hydraulic circuit to be in optimal operating conditions. The hydraulic system is characterized by fast response, strong overload capacity and low energy consumption that is superior to China energy efficiency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

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

Precise filtration and independent cooling system

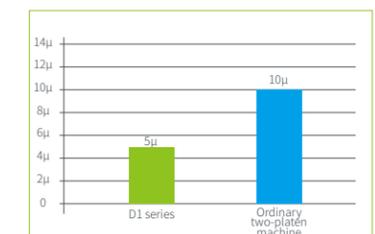
Filter fineness is up to 5 μ m and cooling effect is 2-3 times better than ordinary two-platen injection molding machines, which ensure long service life of seals. Machine becomes more stable.



Good cooling effect



High filter fineness



Comparison of filter fineness

Motor protected with L-shape plates

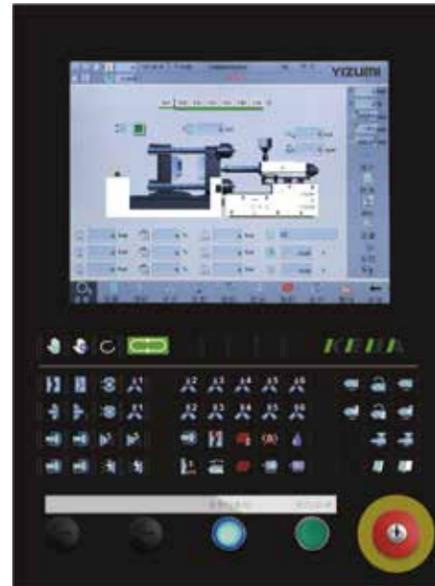
L-shape plates are easy to install and they can be opened directly so that there is open space for more efficient maintenance of the drive system.



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



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.



Separate connector module for auxiliary equipment

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



Euromap-based robot interface

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

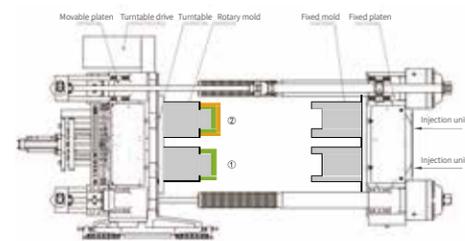
MultiPro injection molding machine

Molding with vertical turntable



Operating principle

After simultaneous injection by A unit and B unit, the product is ejected. Then the turntable rotates vertically by 180 degrees and the mold is closed for next-round injection. When the mold is finally opened, the molding process of two stations is completed. The rotary degree of turntable is set at 180 degrees in forward and reverse direction.

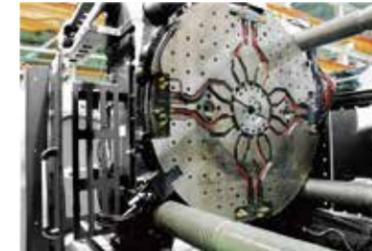


Feature

Station exchange can be achieved by rotating the turntable vertically. Good compatibility and mature mold technology, with wider application.

Application

Widely applied in the production of multi-component products, such as auto taillight, center console panel, interior and exterior parts, appliance shell, notebook parts, etc.



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.



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.



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.



Digital closed-loop positioning control technology

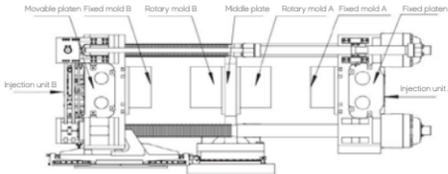
The DCPC technology enables the servo-driven turntable to rotate fast and smoothly without impact. The positioning of turntable is accurate with repeatability of $\pm 0.005^\circ$.

MultiPro injection molding machine

Molding with horizontal turntable

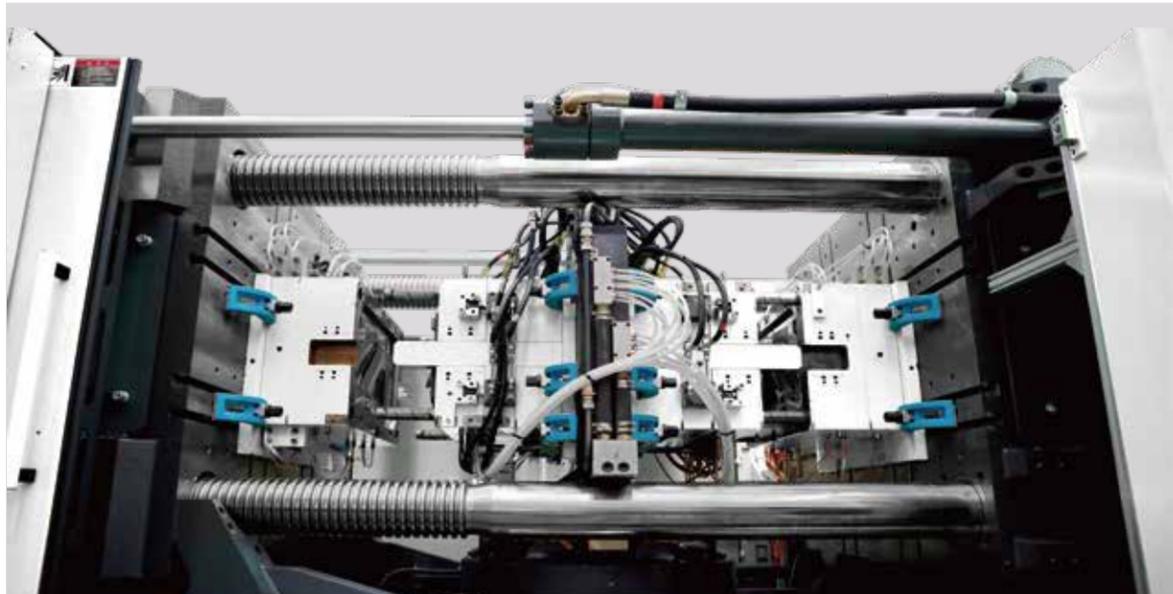
Operating principle

Injection unit B is moved along with the movable platen. The process of mold opening and closing is completed with the movement cooperation of movable platen and horizontal turntable. After mold closing, the injection by unit A and B is carried out as per process requirement. And the product is finally ejected by the core-pulling unit of middle plate or ejection unit after mold opening.



Feature

Station exchange can be achieved by rotating the turntable horizontally. Compared with vertical turntable, horizontal turntable can help machine double the production capacity with the same clamping force setting; or largely reduce clamping force under the same production capacity as required.

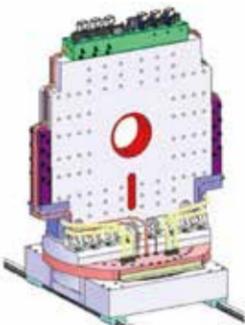


Application

Widely applied in the production of multi-component products, such as auto sunroof, side window, A-pillar, B-pillar, headlight, grill, door panel, center console screen, appliance panel, and outer frame.



Middle plate of horizontal turntable



- Core
- Hydraulic ejector
- Electronic signal
- Cooling water
- Steam



- Applied with German automatic flow distribution shaft system and double layer structure for oil-water separation, integrated management for oil, water and gas is achievable. Clockwise rotation is also available by 90°, 180° or 360°, no tangling for pipeline.

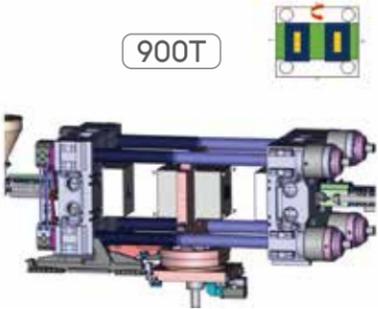
Technical advantages

Compared with traditional stack molds

- Using two independently controlled injection units to better control injection volume
- High flexibility, two different molds can be used synchronously
- Reduce length of hot runner for lower cost
- Improved hot runner balance for faster debugging and startup
- Reduce dwell time of raw materials in the barrel
- Less raw material degradation and better quality control

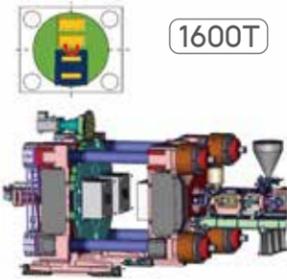
Compared with machine with vertical turntable

- More flexible and applicable to production of large two-color parts
- With double cavities and output under the same tonnage, more economical
- Nearly half of the required machine tonnage under the same production capacity requirement, less power consumption and lower cost.
- Provide innovative integrated solutions with horizontal turntable



Molding with horizontal turntable

VS



Molding with vertical turntable

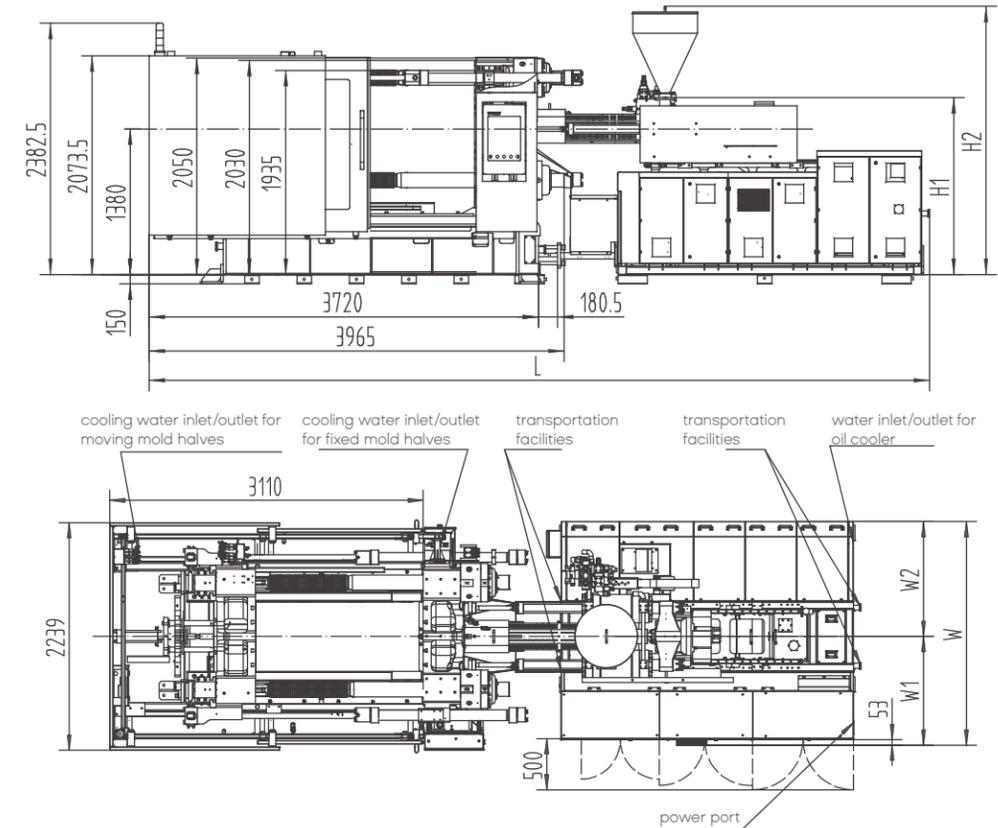
INJECTION UNIT													
Model	IU1885			IU2695			IU3330			IU4800			
Screw diameter (mm)	60	68	76	68	76	84	76	84	92	84	92	100	108
Shot volume (cm ³)	834	1071	1338	1198	1497	1829	1678	2050	2460	2217	2659	3142	3664
Shot weight (g)	767	986	1231	1103	1377	1683	1544	1886	2263	2039	2446	2890	3371
Injection 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 ³ /s)	322	414	517	383	478	584	430	526	632	520	624	737	860
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

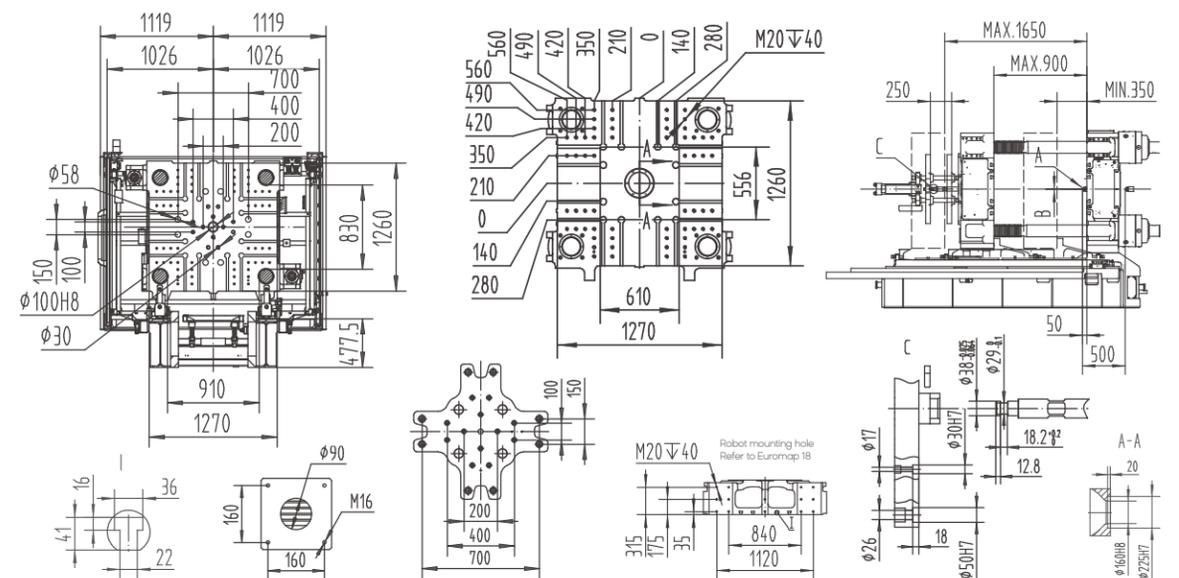
POWER UNIT													
System pressure (MPa)	17.5/30			17.5/30			17.5/30			17.5/30			
Pump motor (kW)	55.6+5.5			60+5.5			60+5.5			66+5.5			
Total power (kW)	83.3	83.3	85.7	91.9	91.9	96.4	98.6	98.6	101.7	108.6	108.6	118.5	118.5
Heater power (kW)	22.2	22.2	24.6	26.4	26.4	30.9	33.1	33.1	36.2	37.14	37.14	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 [cm³] × 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.



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 ²	A	t/m ²	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	100	3~4	5~6
UN500D1-IU2695	SR15	Φ4	7456	1677	2542	2198	1063	1135	70	176.74	7.5	(8+8)×11	100	3~4	5~6
UN500D1-IU3330	SR15	Φ4	7456	1555	2420	2198	1063	1135	70	186.89	7.5	(8+8)×11	100	3~4	5~6
UN500D1-IU4800	SR15	Φ4.5	8580	1565	2430	2333	1113	1220	70	215.49	7.5	(8+8)×11	100	3~4	5~6

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 ³)	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 ³ /s)	383	478	584	430	526	632	520	624	737	860	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			

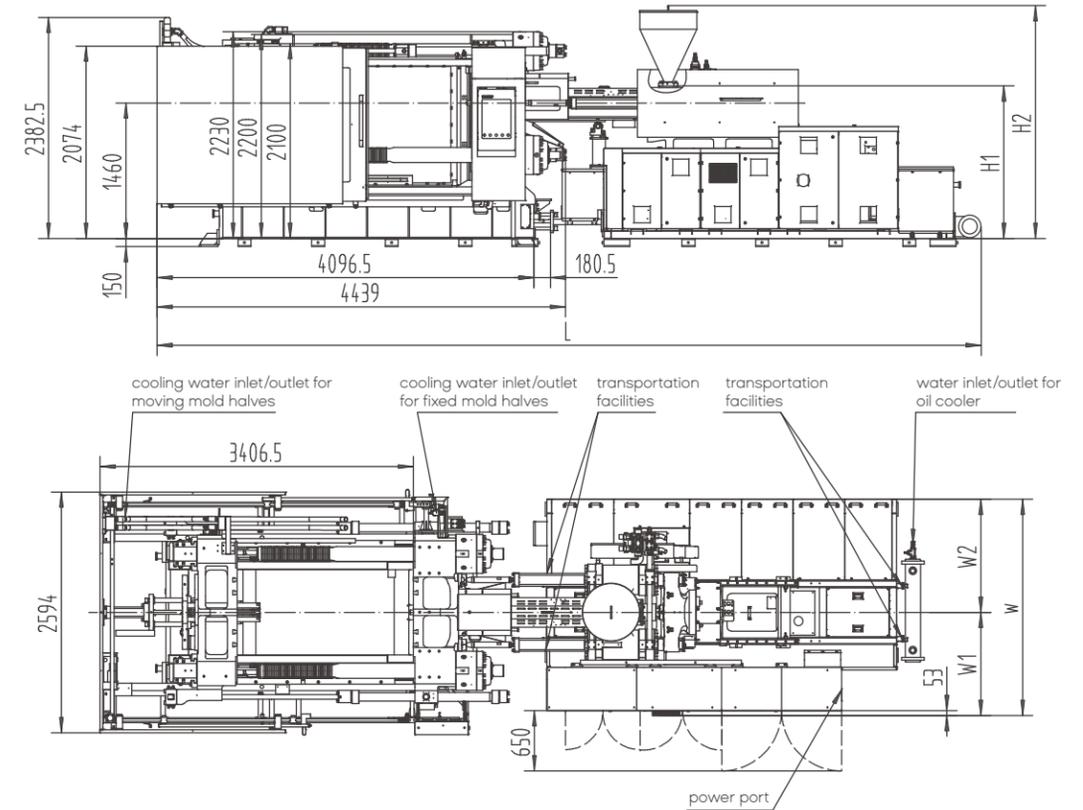
CLAMPING UNIT	
Clamping force (kN)	7000
Opening force (kN)	500
Platen size (mm)	1510×1440
Space between tie bars (mm)	1100×960
Max. mold thickness (mm)	950
Min. mold thickness (mm)	450
Opening stroke (mm)	1450/950
Max. daylight (mm)	1900
Ejector force (kN)	110
Ejector stroke (mm)	250
Ejector number (PCS)	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

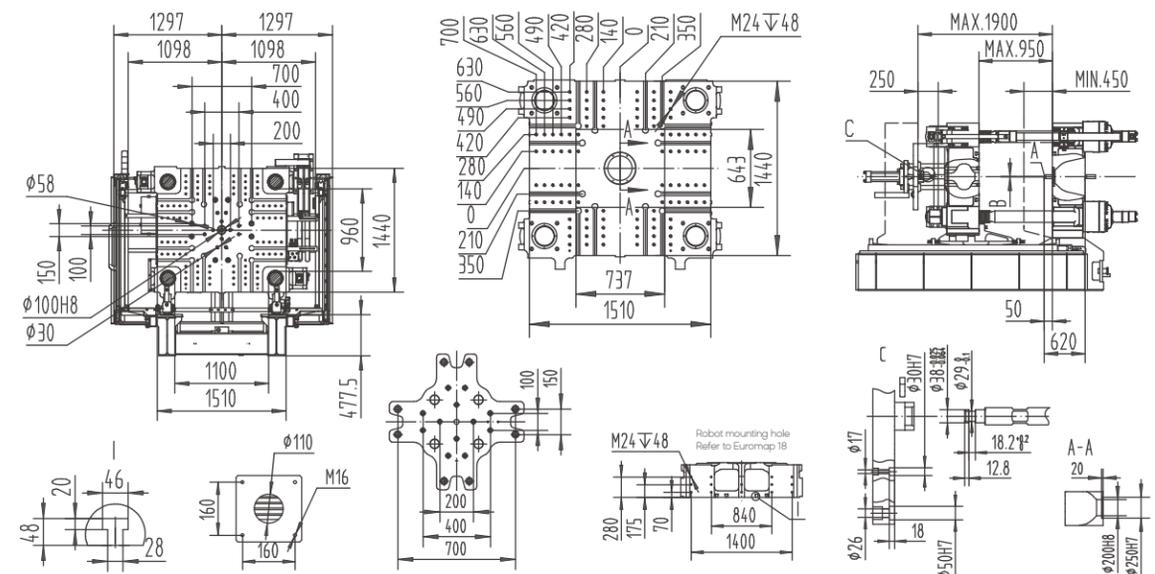
GENERAL													
Oil tank capacity (L)	750			750			1000				1150		
Machine dimensions (m)	7.9×2.6×2.7			7.9×2.6×2.5			9×2.6×2.5				9×2.7×2.5		
Max. mold weight (T)	11			11			11				11		

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- The shot weight is calculated by GPPS and it is 0.92 times of the theoretical shot volume.
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- The injection unit data are in international units and calculated as follows: theoretical shot volume [cm³] × 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



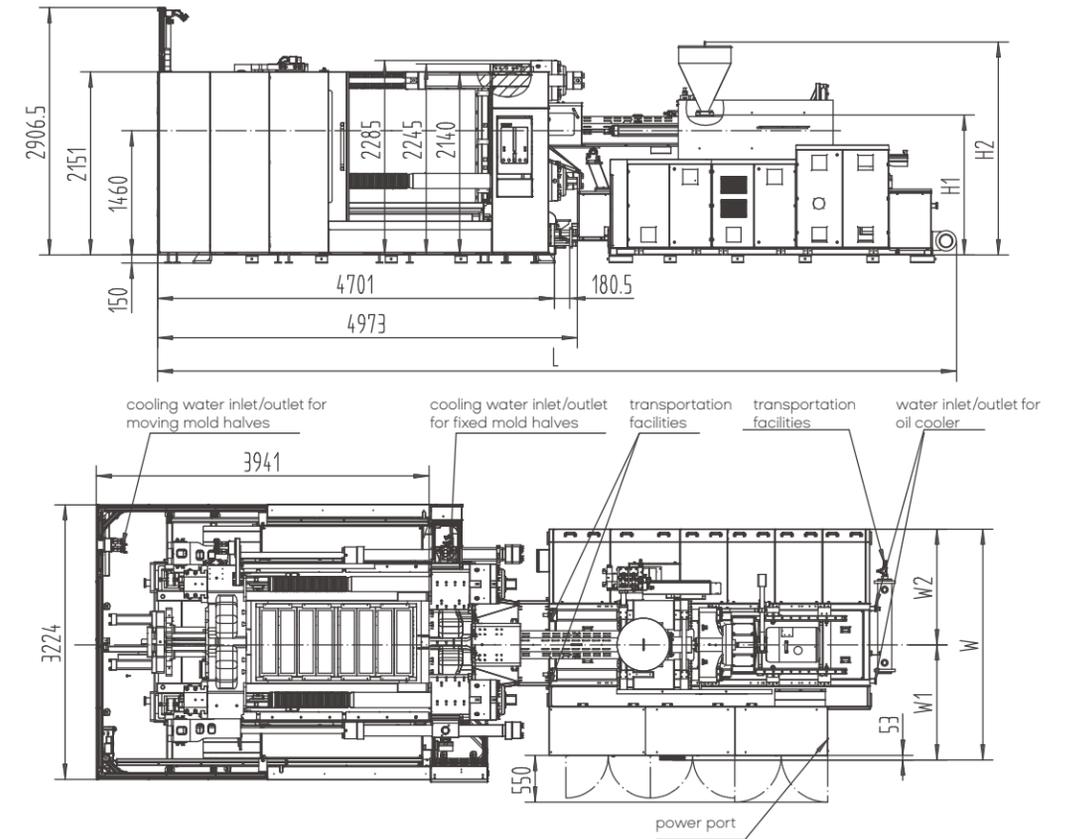
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm ²	A	t/m ²	n×L/min	L/min	bar	bar							
UN700D1-IU2695	SR15	Φ4	7833	1757	2622	2198	1063	1135	70	176.74	7.5	(8+8)×11	100	3~4	5~6
UN700D1-IU3330	SR15	Φ4	7833	1635	2500	2198	1063	1135	70	186.89	7.5	(8+8)×11	100	3~4	5~6
UN700D1-IU4800	SR15	Φ4.5	8957	1645	2510	2333	1113	1220	70	215.49	7.5	(8+8)×11	100	3~4	5~6
UN700D1-IU6800	SR15	Φ4.5	8957	1645	2510	2711	1352	1359	75	259.84	7.5	(8+8)×11	100	3~4	5~6

UN900D1 Specifications

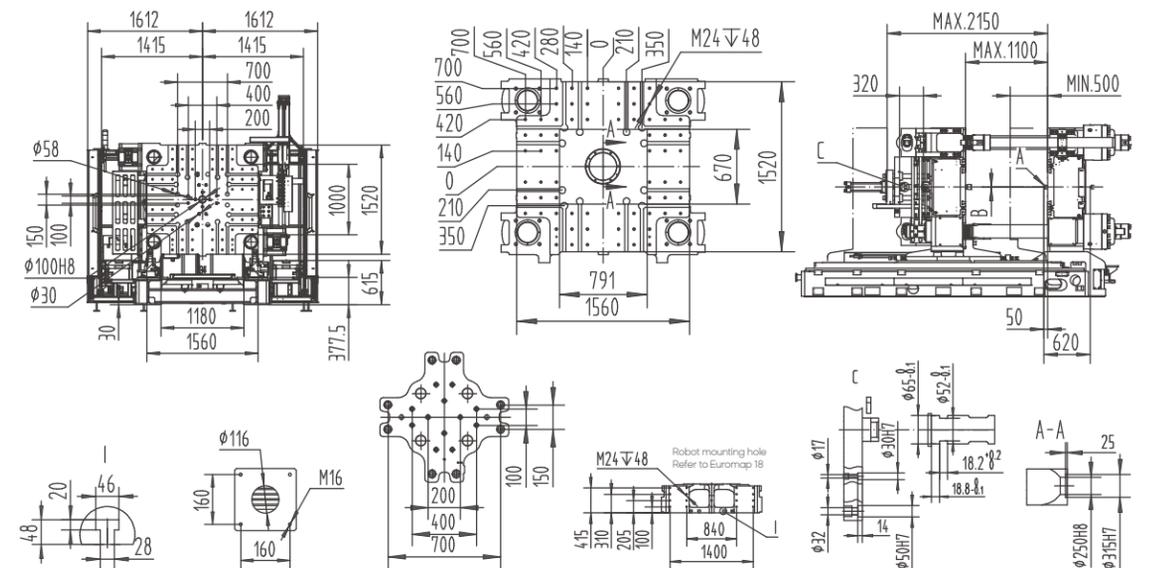
INJECTION UNIT												
Model	IU4800				IU6800				IU9000			
Screw diameter (mm)	84	92	100	108	92	100	108	116	100	108	116	125
Shot volume (cm ³)	2217	2659	3142	3664	3191	3770	4397	5073	4320	5038	5813	6748
Shot weight (g)	2039	2446	2890	3371	2936	3468	4045	4667	3974	4636	5348	6208
Injection pressure (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 ³ /s)	520	624	737	860	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+5.5				89+7.5				110+7.5			
Total power (kW)	108.6	108.6	118.5	118.5	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			

- 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 [cm³] × 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



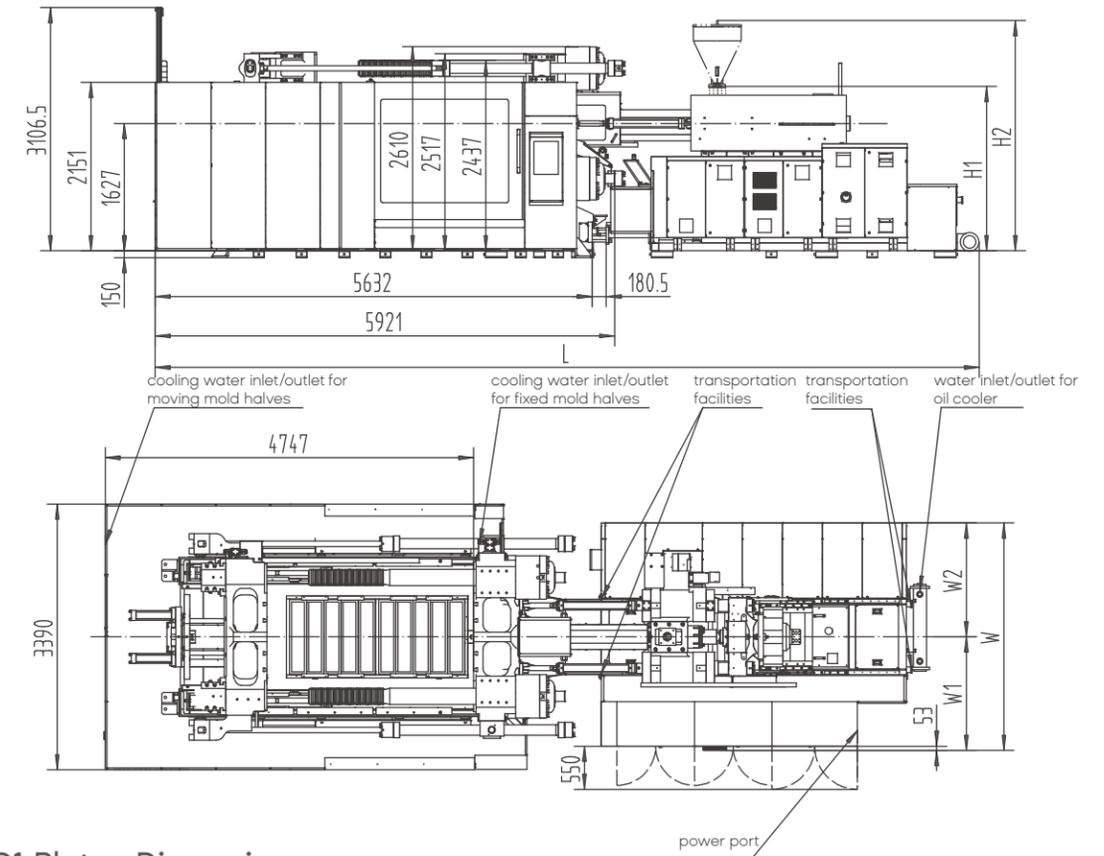
UN900D1 Platen Dimensions



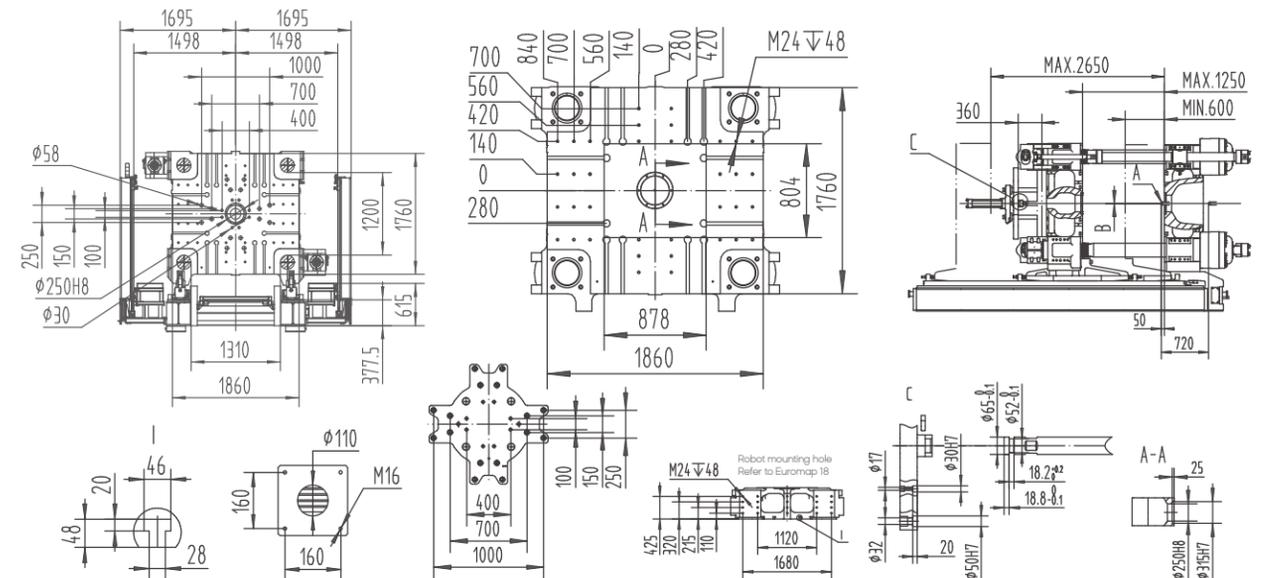
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm ²	A	t/m ²	n×L/min	L/min	bar	bar						
UN900D1-IU4800	SR15	Φ4.5	9461	1645	2510	2333	1113	1220	70	215.49	7.5	(8+8)×11	100	3~4	5~6
UN900D1-IU6800	SR15	Φ4.5	9461	1645	2510	2711	1352	1359	75	259.84	7.5	(8+8)×11	100	3~4	5~6
UN900D1-IU9000	SR15	Φ4.5	9591	2029	2871	2906	1450.5	1455.5	95	316.71	7.5	(8+8)×11	100	3~4	5~6

INJECTION UNIT																
Model	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 ³)	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	23.7	22	21.6	20
Injection rate (cm ³ /s)	520	624	737	860	615	726	847	980	766	894	1031	1197	815	940	1092	1273
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+5.5				89+7.5				110+7.5				89+37+7.5			
Total power (kW)	108.6	108.6	118.5	118.5	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			

- 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 [cm³] × 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.



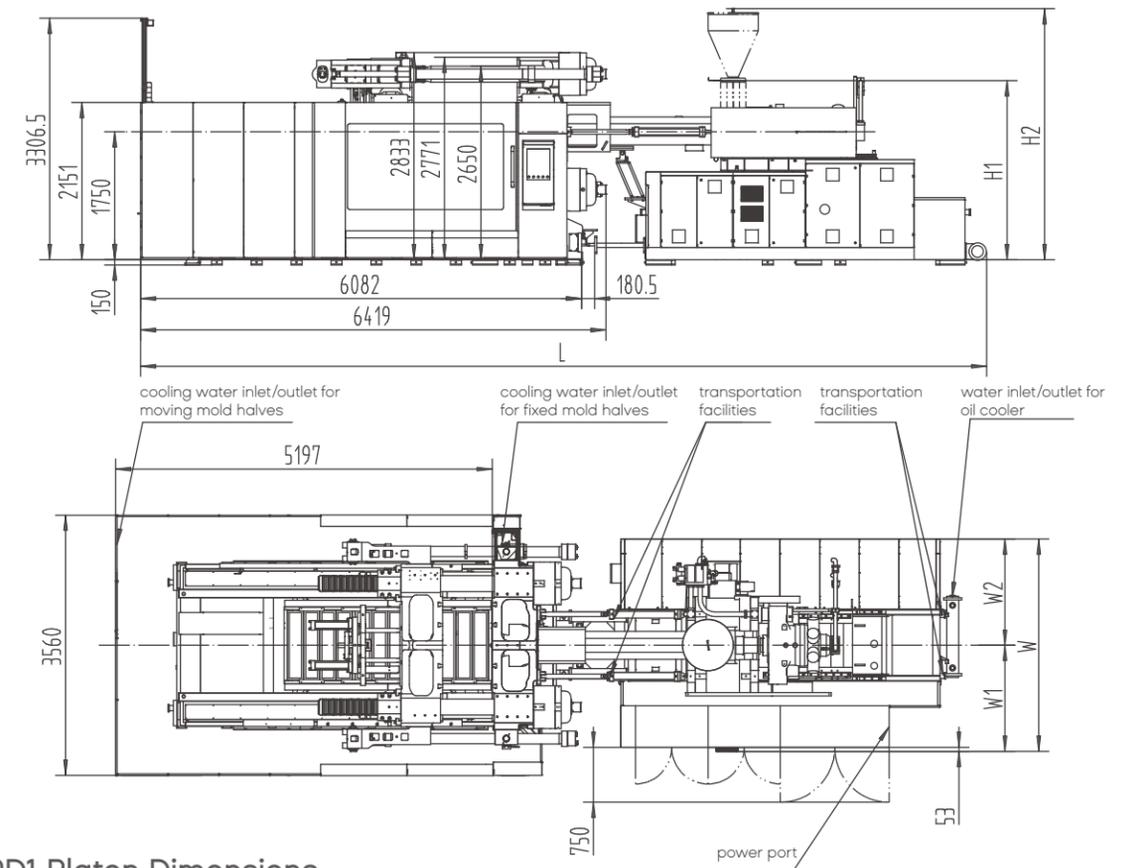
UN1200D1 Platen Dimensions



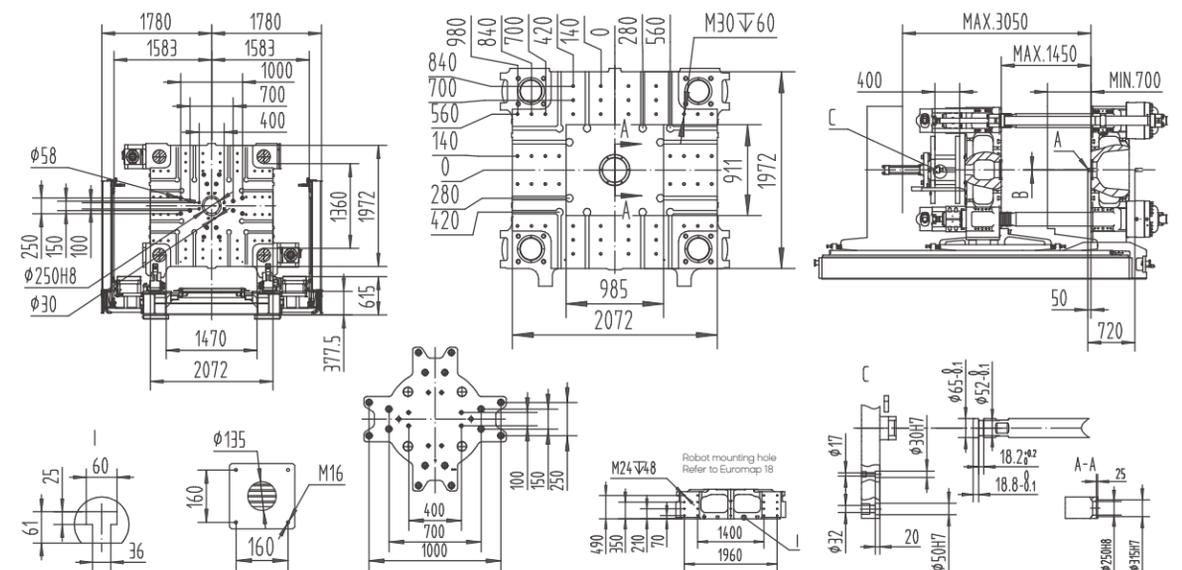
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm ²	A	t/m ²	n×L/min	L/min	bar	bar
UN1200D1-IU4800	SR15	Φ4.5	10491	1812	2677	2333	1113	1220	70	215.49	8	(8+8)×11	100	3~4	5~6
UN1200D1-IU6800	SR15	Φ4.5	10491	1812	2677	2711	1352	1359	75	259.84	8	(8+8)×11	100	3~4	5~6
UN1200D1-IU9000	SR15	Φ4.5	10621	2196	3038	2906	1450.5	1455.5	95	316.71	8	(8+8)×11	100	3~4	5~6
UN1200D1-IU10900	SR20	Φ6	11091	2231	3073	2906	1450.5	1455.5	120	370.88	8	(8+8)×11	100	3~4	5~6

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 (cm³)	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	23.7	22	21.6	20	23.6	22	20
Injection rate (cm³/s)	615	726	847	980	766	894	1031	1197	815	940	1092	1273	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		
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		
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 [cm³] × 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 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	mm²	A	t/m²	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	100	3~4	5~6
UN1400D1-IU9000	SR15	φ4.5	11202	2319	3161	2906	1450.5	1455.5	95	316.71	8	(8+8)×11	100	3~4	5~6
UN1400D1-IU10900	SR20	φ6	11672	2354	3196	2906	1450.5	1455.5	120	370.88	8	(8+8)×11	100	3~4	5~6
UN1400D1-IU14500	SR20	φ8	11997	2473	3460	3146	1548	1598	150	470.42	8	(8+8)×11	250	3~4	5~6

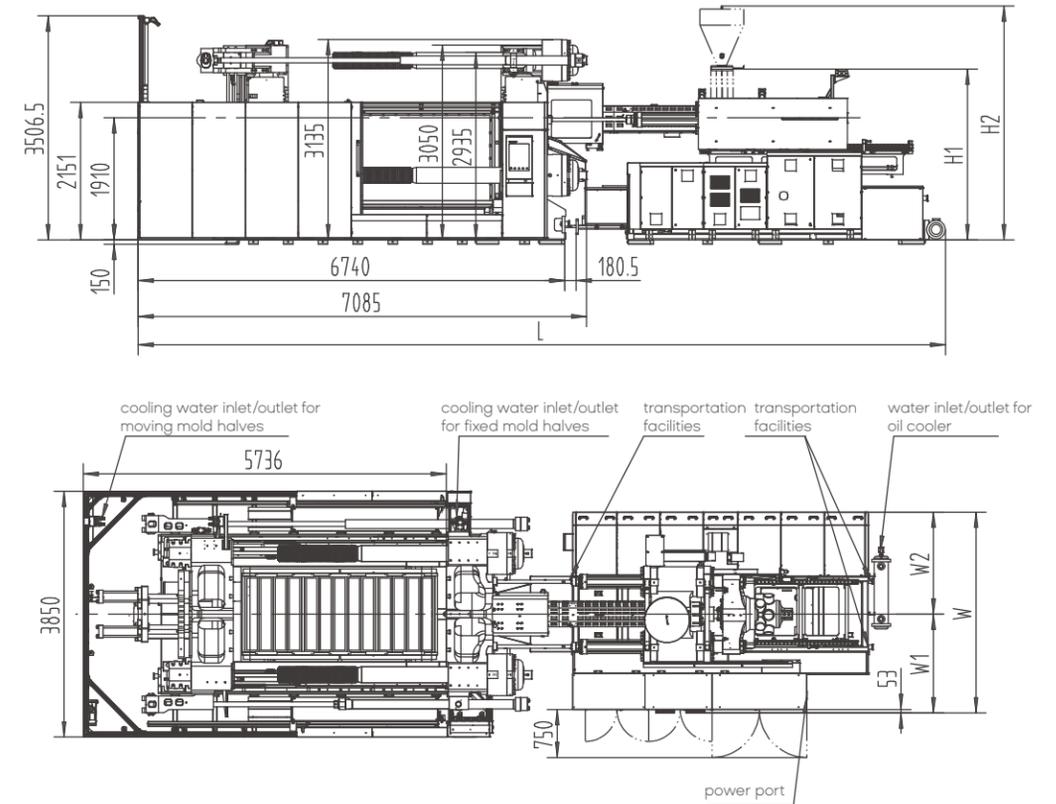
INJECTION UNIT															
Model	IU9000				IU10900				IU14500			IU18500			
Screw diameter (mm)	100	108	116	125	108	116	125	135	125	135	145	135	145	155	165
Shot volume (cm ³)	4320	5038	5813	6748	5222	6024	6995	8159	7977	9304	10733	10020	11559	13208	14968
Shot weight (g)	3974	4636	5348	6208	4804	5542	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	23.7	22	21.6	20	23.6	22	20	23.6	22	22	20
Injection rate (cm ³ /s)	766	894	1031	1197	815	940	1092	1273	1316	1536	1772	1301	1502	1717	1946
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

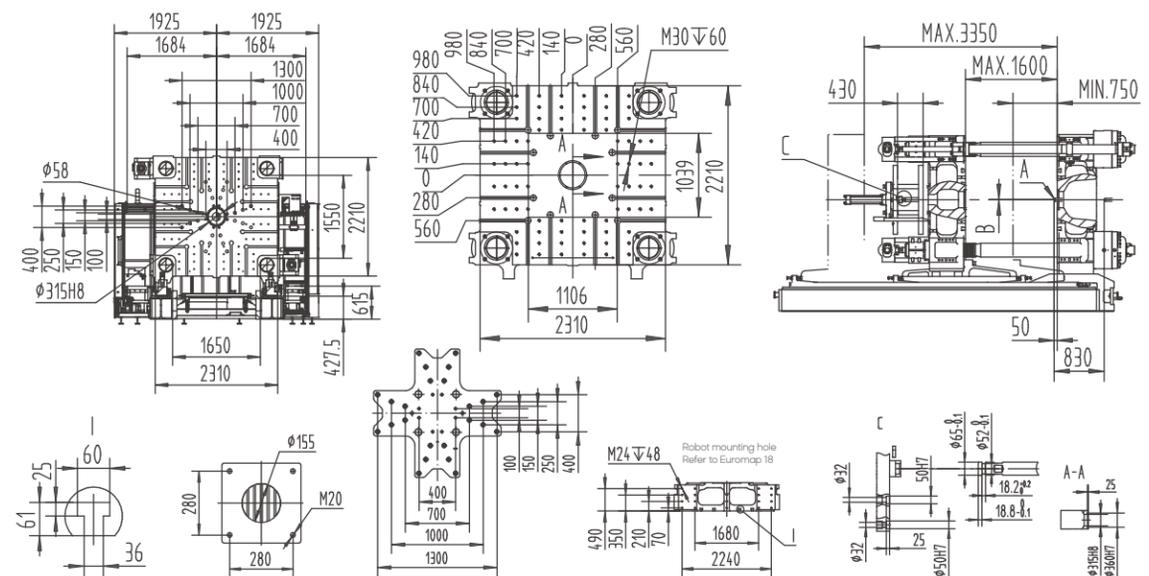
POWER UNIT				
System pressure (MPa)	17.5/30		17.5/30	
Pump motor (kW)	110+7.5		89+37+7.5	
Total power (kW)	169.3	169.3	178.4	178.4
Heater power (kW)	51.76	51.76	60.9	60.9

GENERAL				
Oil tank capacity (L)	1400		1600	
Machine dimensions (m)	12×3.9×3.5		12.4×3.9×3.5	
Max. mold weight (T)	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 [cm³] × 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.



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 ²	A	t/m ²	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	100	3~4	5~6
UN1850D1-IU10900	SR20	φ6	12430	2514	3356	2906	1450.5	1455.5	120	370.88	10.5	(8+8)×11	100	3~4	5~6
UN1850D1-IU14500	SR20	φ8	12756	2633	3620	3146	1548	1598	150	470.42	10.5	(8+8)×11	250	3~4	5~6
UN1850D1-IU18500	SR20	φ8	12756	2649	3636	3146	1548	1598	150	491.15	10.5	(8+8)×11	250	3~4	5~6

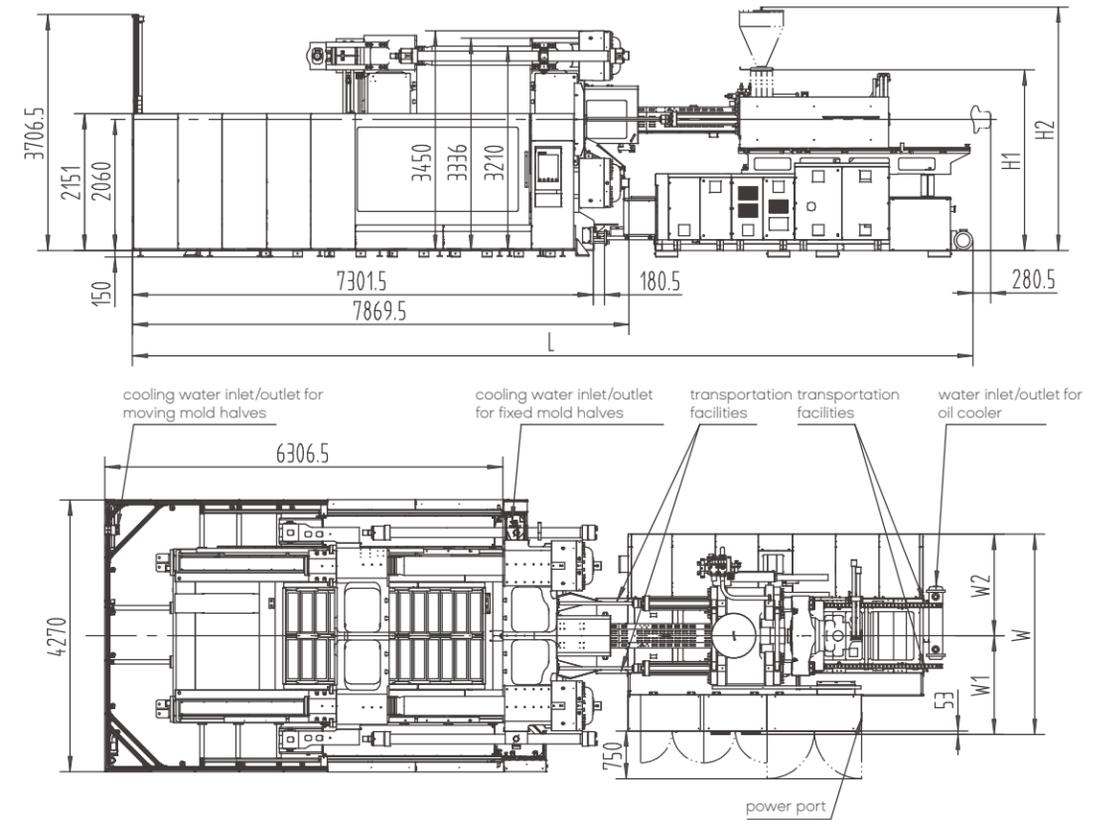
INJECTION UNIT												
Model	IU14500			IU18500				IU23750			IU37500	IU50000
Screw diameter (mm)	125	135	145	135	145	155	165	145	155	165	185	200
Shot volume (cm ³)	7977	9304	10733	10020	11559	13208	14968	12385	14152	16037	26343	35186
Shot weight (g)	7339	8560	9875	9218	10634	12152	13770	11394	13020	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 ³ /s)	1316	1536	1772	1301	1502	1717	1946	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			10	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

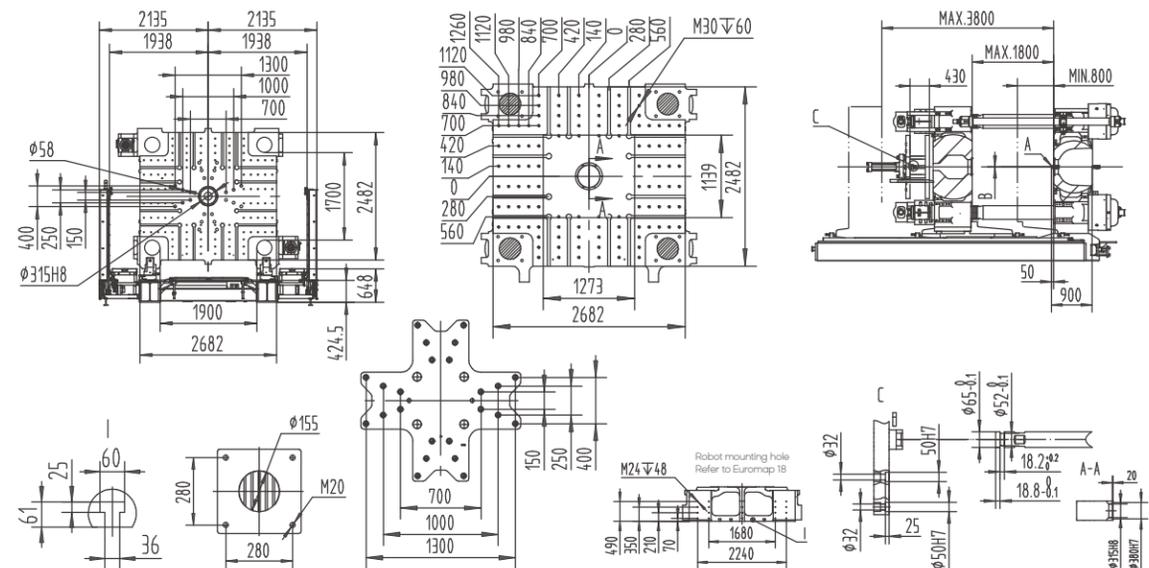
POWER UNIT					
System pressure (MPa)	17.5/30	17.5/30	17.5/30	17.5/30	17.5/30
Pump motor (kW)	89+66+11	89+66+11	110+89+11	110+89+11	110+89+11
Total power (kW)	253.7	263.8	322.4	357.5	403
Heater power (kW)	87.7	97.8	112.4	147.5	193

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 [cm³] × 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 Platen Dimensions

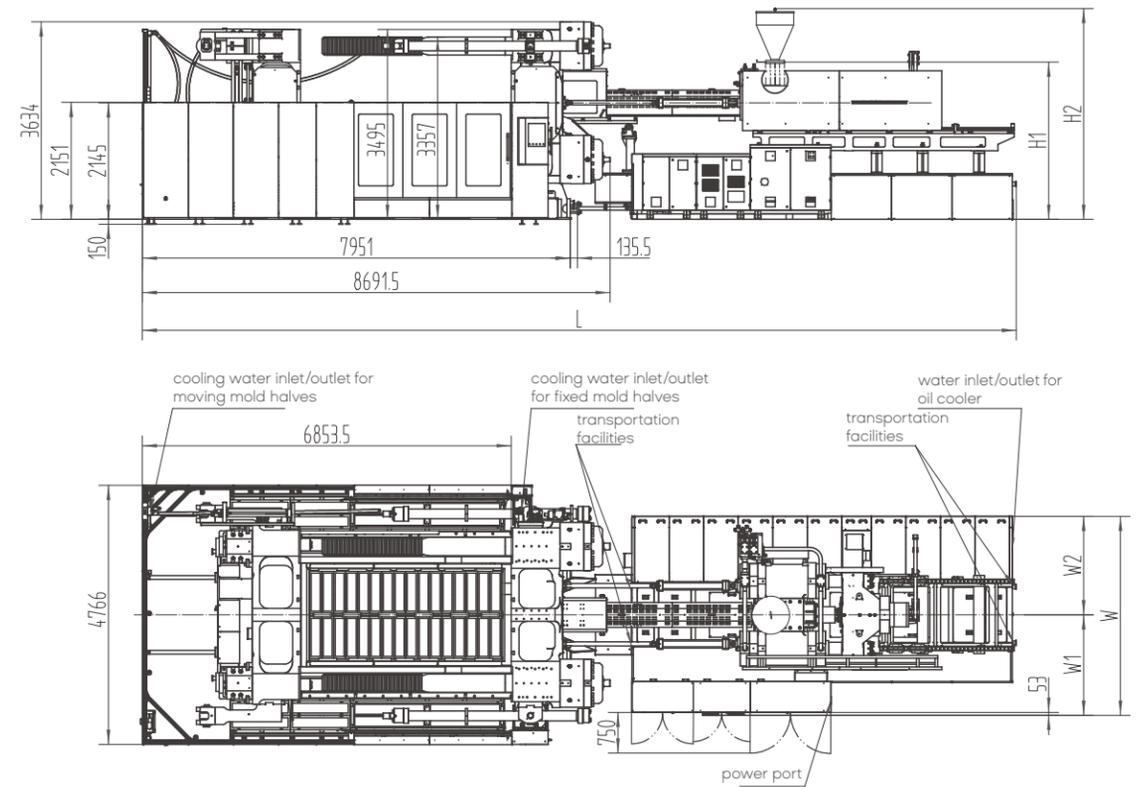


Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm ²	A	t/m ²	n×L/min	L/min	bar	bar
UN2400D1-IU14500	SR20	Ø8	13318	2783	3770	3146	1548	1598	150	470.42	12.5	(8+8)×11	250	3~4	5~6
UN2400D1-IU18500	SR20	Ø8	13318	2799	3786	3146	1548	1598	150	491.15	12.5	(8+8)×11	250	3~4	5~6
UN2400D1-IU23750	SR25	Ø8	15772	2809	3815	3660.5	1847.5	1813	185	652.49	12.5	(8+8)×11	350	3~4	5~6
UN2400D1-IU37500	SR25	Ø8	15772	2885	3872	3660.5	1847.5	1813	185	806.34	12.5	(8+8)×11	350	3~4	5~6
UN2400D1-IU50000	SR28	Ø12	16472	2880	3867	3660.5	1847.5	1813	185	780.83	12.5	(8+8)×11	350	3~3	5~6

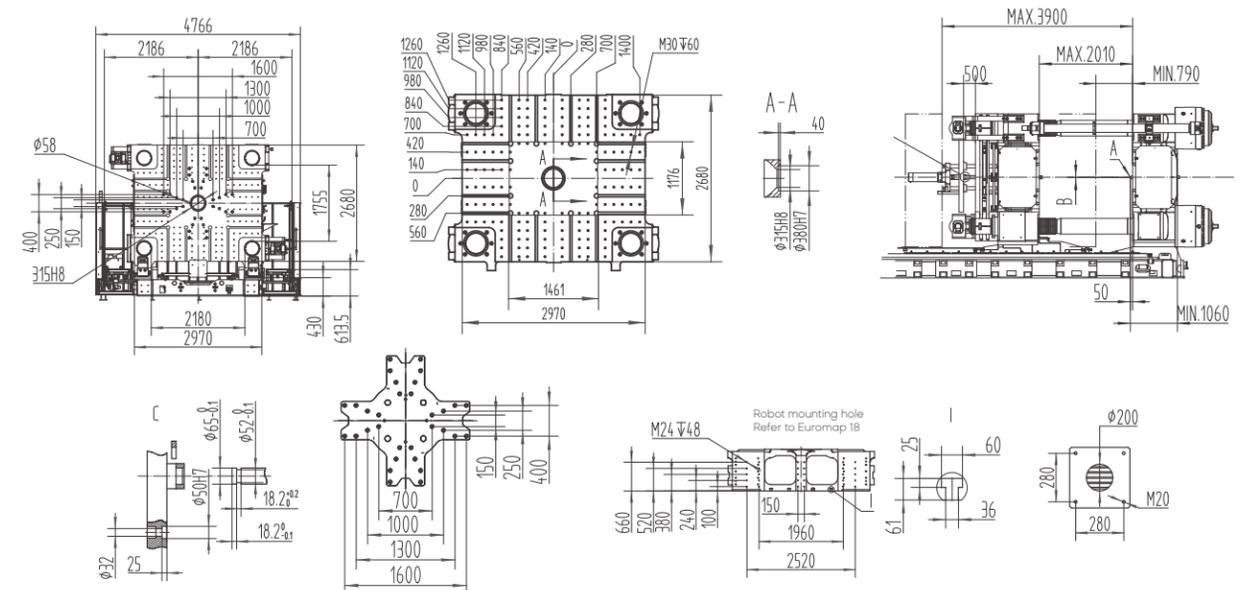
INJECTION UNIT									
Model	IU18500				IU23750			IU37500	IU50000
Screw diameter (mm)	135	145	155	165	145	155	165	185	200
Shot volume (cm ³)	10020	11559	13208	14968	12385	14152	16037	26343	35186
Shot weight (g)	9218	10634	12152	13770	11394	13020	14756	24235	32371
Injection pressure (MPa)	184	160	140	123	190	167	147	151	158
L/D ratio	23.6	22	22	20	23.5	22	20.1	22	22
Injection rate (cm ³ /s)	1301	1502	1717	1946	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			10	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)	13.8×4.8×3.6				16.2×4.8×3.6			16.2×4.8×3.6	16.6×4.8×3.6
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 [cm³] × 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



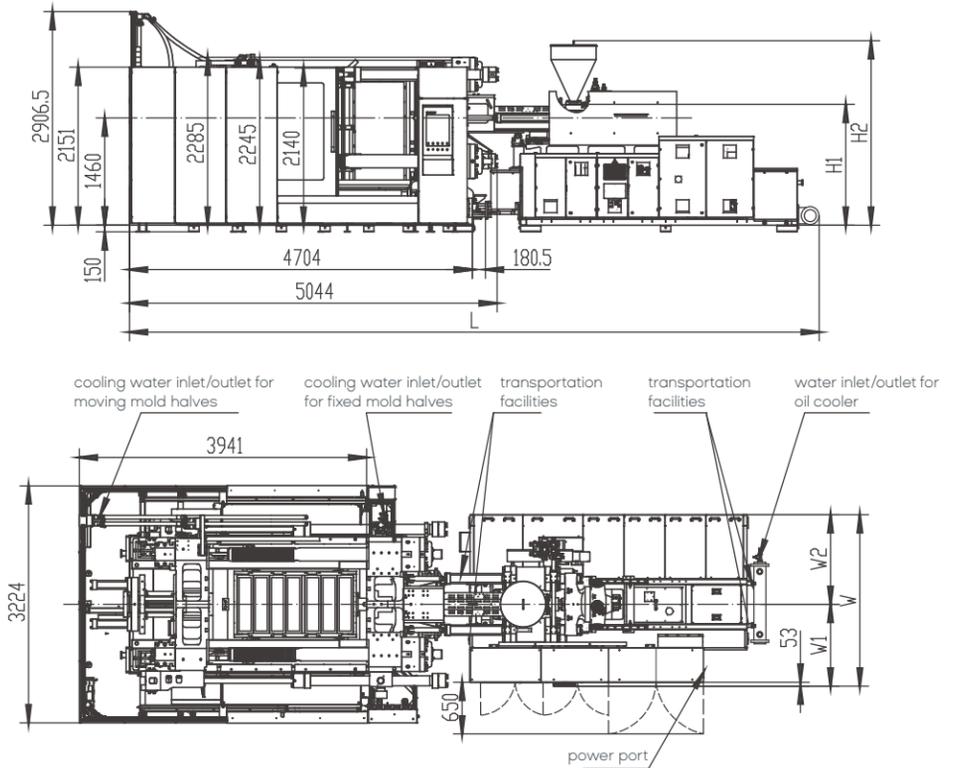
UN2850D1 Platen Dimensions



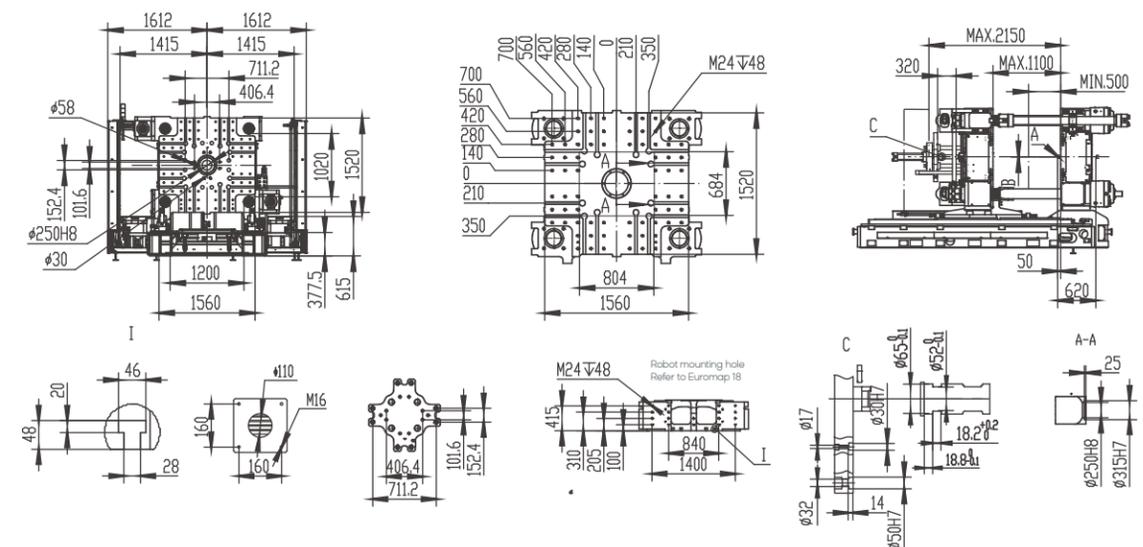
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm ²	A	t/m ²	n×L/min	L/min	bar	bar
UN2850D1-IU18500	SR20	Ø8	13787.5	2945	3926	3146	1548	1598	150	491.15	14.5	(8+8)×11	250	3~4	5~6
UN2850D1-IU23750	SR25	Ø8	16241.5	2955	3942	3660.5	1847.5	1813	185	652.49	14.5	(8+8)×11	350	3~4	5~6
UN2850D1-IU37500	SR25	Ø8	16241.5	2965	3971	3660.5	1847.5	1813	185	806.34	14.5	(8+8)×11	350	3~4	5~6
UN2850D1-IU50000	SR28	Ø12	16631.5	3041	4028	3660.5	1847.5	1813	185	780.83	14.5	(8+8)×11	350	3~4	5~6

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 ³)	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 ³ /s)	383	478	584	430	526	632	520	624	737	860	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)	1560×1520													
Space between tie bars (mm)	1200×1020													
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)	17													
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)	9.4×3.3×2.9			9.4×3.3×2.9			9.4×3.3×2.9				9.5×3.3×2.9			
Max. mold weight (T)	13			13			13				13			

- 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 [cm³] × 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.
- ※The Data above were acquired by testing in the factory, only for your reference. The specific data please accord to the actual equipment.



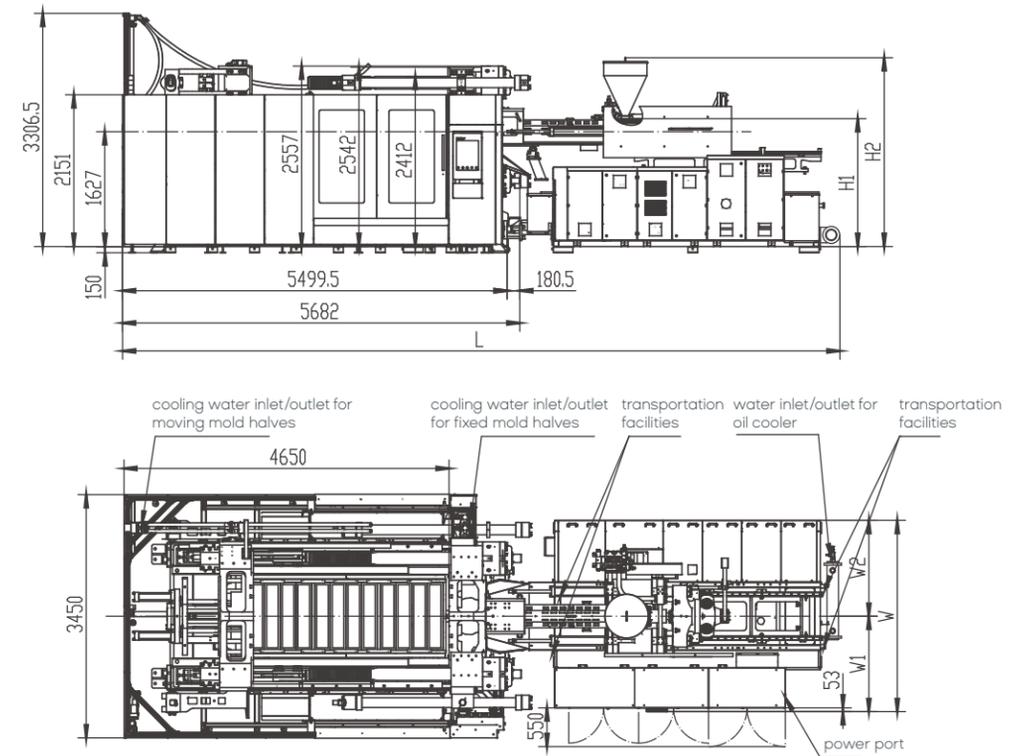
UN700WD1 Platen Dimensions



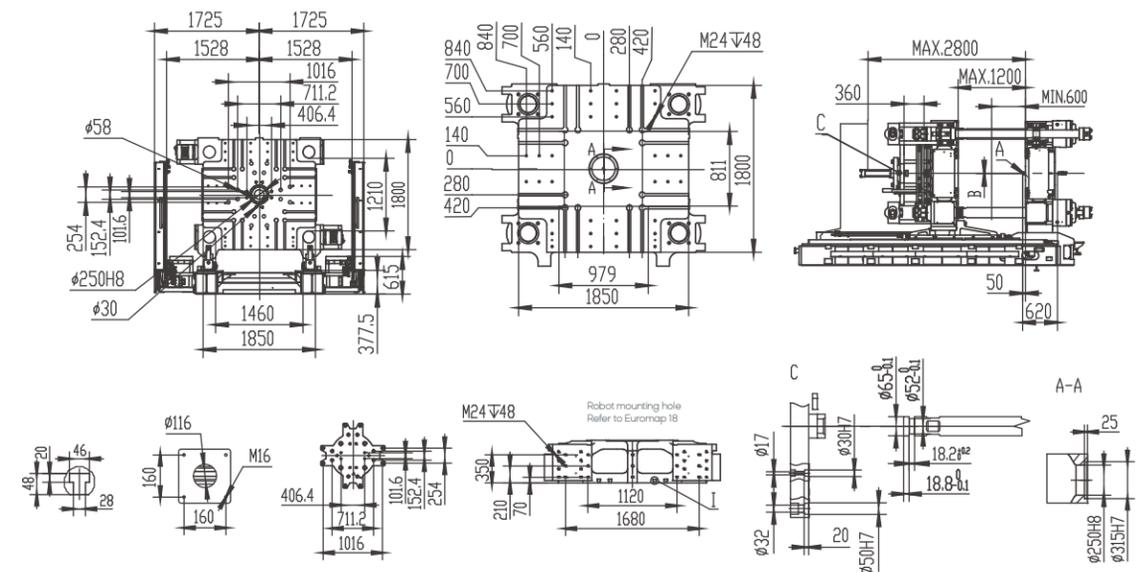
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm ²	A	t/m ²	n×L/min	L/min	bar	bar							
UN700WD1-IU2695	SR15	∅4	8281	1757	2622	2198	1063	1135	70	176.74	7.5	(8+8)×11	100	3~4	5~6
UN700WD1-IU3330	SR15	∅4	8281	1757	2630	2198	1063	1135	70	186.89	7.5	(8+8)×11	100	3~4	5~6
UN700WD1-IU4800	SR15	∅4.5	9463	1645	2510	2333	1113	1220	70	215.49	7.5	(8+8)×11	100	3~4	5~6
UN700WD1-IU6800	SR15	∅4.5	9463	1645	2510	2711	1352	1359	75	259.84	7.5	(8+8)×11	100	3~4	5~6

INJECTION UNIT												
Model	IU4800				IU6800				IU9000			
Screw diameter (mm)	84	92	100	108	92	100	108	116	100	108	116	125
Shot volume (cm ³)	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 ³ /s)	520	624	737	860	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)	1850×1800											
Space between tie bars (mm)	1460×1210											
Max. mold thickness (mm)	1200											
Min. mold thickness (mm)	600											
Opening stroke (mm)	2200/1600											
Max. daylight (mm)	2800											
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			
Pump motor (kW)	66+5.5				89+7.5				110+7.5			
Total power (kW)	108.6	108.6	118.5	118.5	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)	10.2×3.5×3.3				10.3×3.5×3.3				10.5×3.5×3.3			
Max. mold weight (T)	21				21				21			

- 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 [cm³] × 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.
- ※The Data above were acquired by testing in the factory, only for your reference. The specific data please accord to the actual equipment.



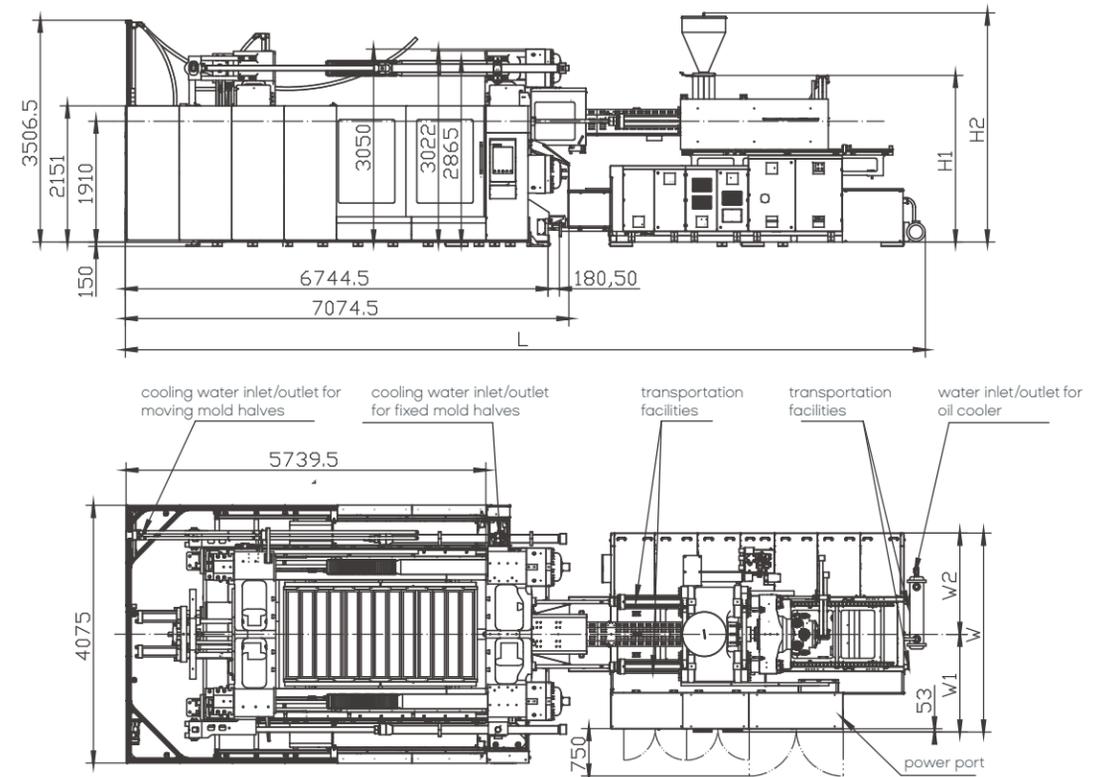
UN900WD1 Platen Dimensions



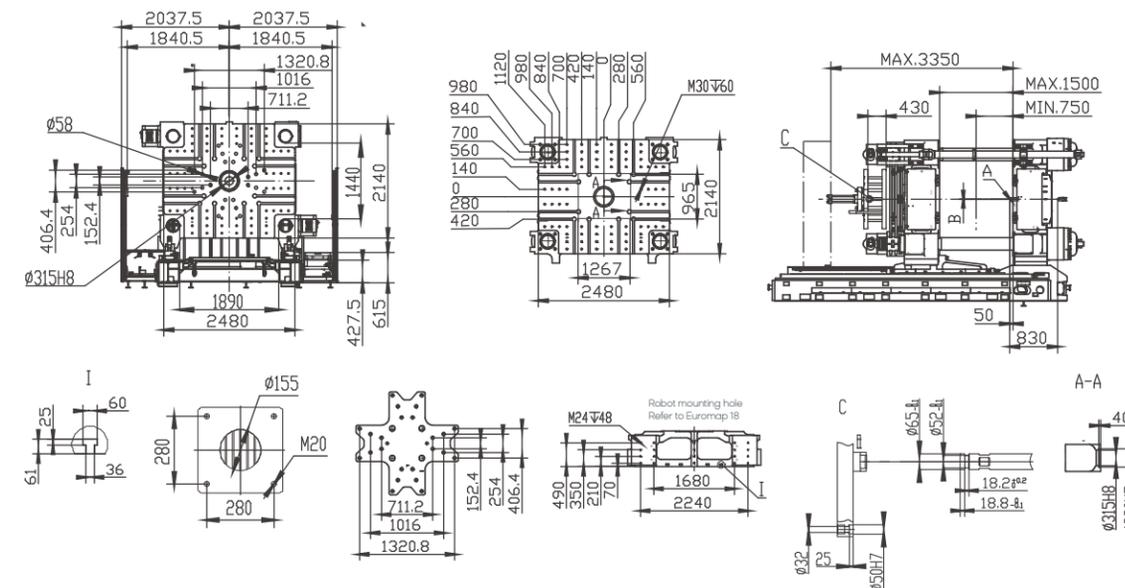
Model	A	B	L	H1	H2	W	W1	W2	Main power cord size	Full-load current	Bearing capacity of foundation	Mold cooling water ports	Cooling water flow (mold excluded)	Cooling water pressure	Compressed air pressure
	mm	mm	mm	mm	mm	mm	mm	mm	mm ²	A	t/m ²	n×L/min	L/min	bar	bar
UN900WD1-IU4800	SR15	Ø4.5	10259	1645	2510	2333	1113	1220	70	215.49	8	(8+8)×11	100	3~4	5~6
UN900WD1-IU6800	SR15	Ø4.5	10259	1812	2677	2711	1352	1359	75	259.84	8	(8+8)×11	100	3~4	5~6
UN900WD1-IU9000	SR15	Ø4.5	10389	2013	2855	2906	1451	1456	95	316.71	8	(8+8)×11	100	3~4	5~6

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 (cm³)	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	23.7	22	21.6	20	23.6	22	20	23.6	22	22	20
Injection rate (cm³/s)	766	894	1031	1197	815	940	1092	1273	1316	1536	1772	1301	1502	1717	1946
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)	2480×2140														
Space between tie bars (mm)	1890×1440														
Max. mold thickness (mm)	1500														
Min. mold thickness (mm)	750														
Opening stroke (mm)	2600/1850														
Max. daylight (mm)	3350														
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			
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	263.8					
Heater power (kW)	51.76	51.76	60.9	60.9	66.37	66.37	70.63	70.63	87.7	97.8					
GENERAL															
Oil tank capacity (L)	1400				1600				2100			2100			
Machine dimensions (m)	12.1×4.2×3.6				12.4×4.2×3.6				12.8×4.2×3.6			12.8×4.2×3.6			
Max. mold weight (T)	45				45				45			45			

- 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 [cm³] × injection pressure (MPa)/100
- The green figures are standard specifications of clamping unit and injection unit.
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UN1600WD1 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	mm²	A	t/m²	n×L/min	L/min	bar	bar
UN1600WD1-IU9000	SR15	Ø4.5	12414	2296	3138	2906	1451	1456	95	316.71	10.5	(8+8)×11	100	3~4	5~6
UN1600WD1-IU10900	SR20	Ø6	12434	2414	3256	2906	1451	1456	120	370.88	10.5	(8+8)×11	100	3~4	5~6
UN1600WD1-IU14500	SR20	Ø8	12756	2633	3620	3146	1548	1598	150	470.42	10.5	(8+8)×11	250	3~4	5~6
UN1600WD1-IU18500	SR20	Ø8	12756	2684	3761	3146	1548	1598	150	491.15	10.5	(8+8)×11	250	3~4	5~6

UN1850WD1 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 (cm³)	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	23.7	22	21.6	20	23.6	22	20	23.6	22	22	20
Injection rate (cm³/s)	766	894	1031	1197	815	940	1092	1273	1316	1536	1772	1301	1502	1717	1946
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			

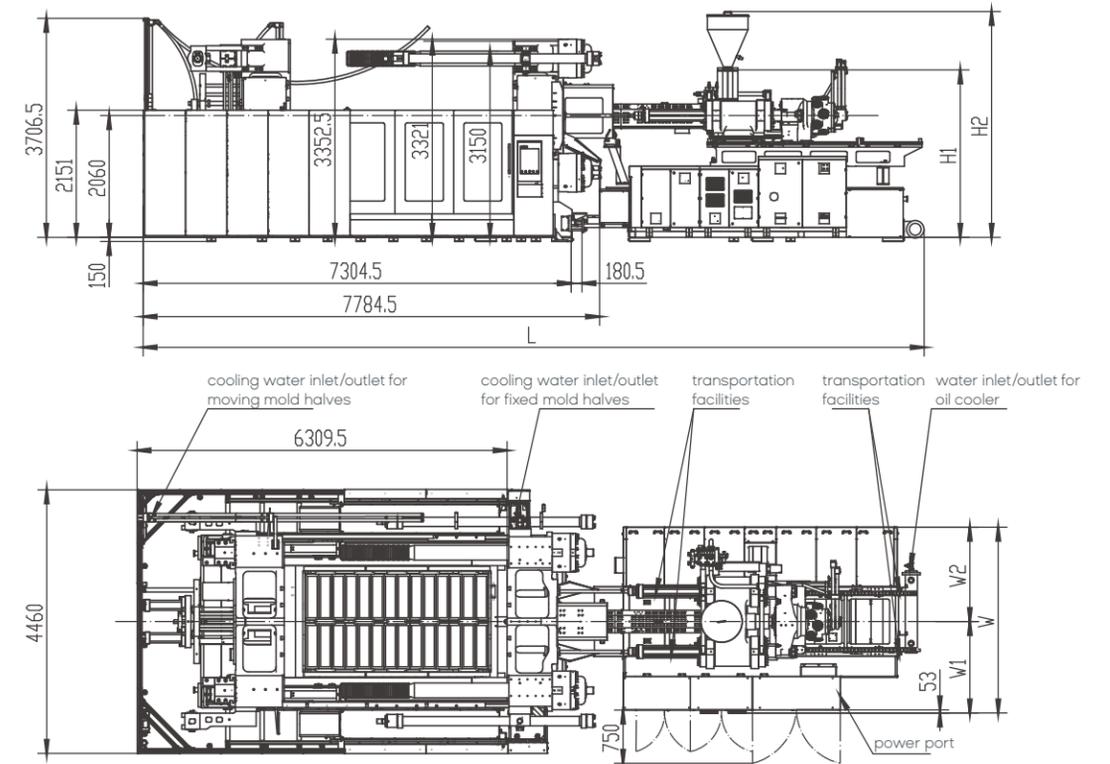
CLAMPING UNIT	
Clamping force (kN)	18500
Opening force (kN)	1230
Platen size (mm)	2682×2452
Space between tie bars (mm)	2080×1680
Max. mold thickness (mm)	1600
Min. mold thickness (mm)	800
Opening stroke (mm)	3000/2200
Max. daylight (mm)	3800
Ejector force (kN)	460
Ejector stroke (mm)	430
Ejector number (PCS)	25

POWER UNIT										
System pressure (MPa)	17.5/30		17.5/30		17.5/30		17.5/30			
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	263.8
Heater power (kW)	51.76	51.76	60.9	60.9	66.37	66.37	70.63	70.63	87.7	97.8

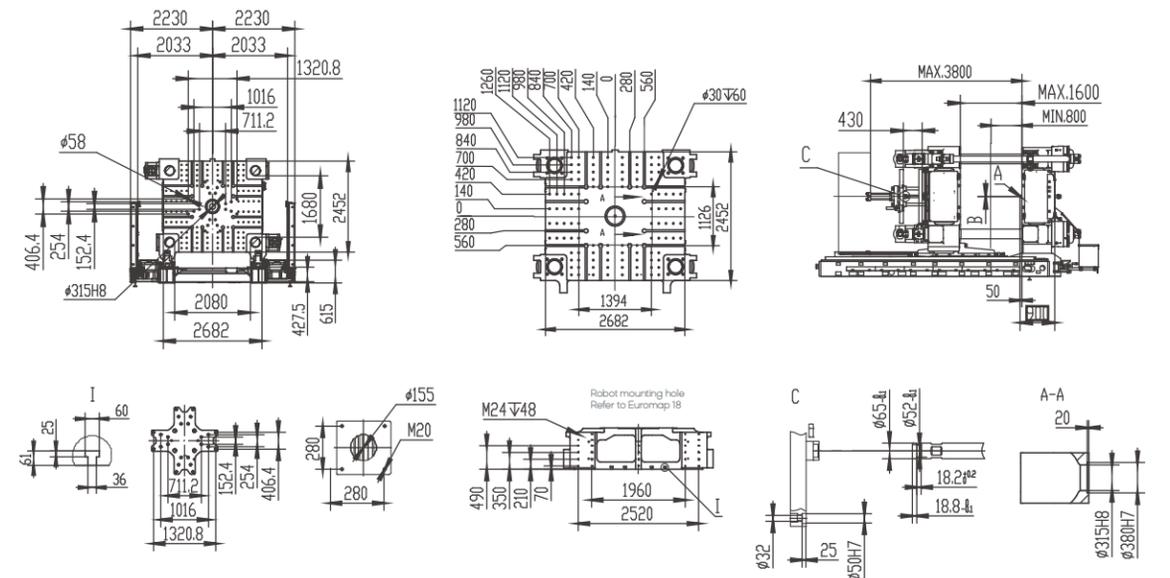
GENERAL								
Oil tank capacity (L)	1400		1600		2100		2100	
Machine dimensions (m)	12.6×4.5×3.7		13×4.5×3.7		13.3×4.5×3.8		13.3×4.5×3.8	
Max. mold weight (T)	62		62		62		62	

- 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 [cm³] × injection pressure (MPa)/100
 - The green figures are standard specifications of clamping unit and injection unit.
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UN1850WD1 Machine Dimensions



UN1850WD1 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
UN1850WD1-IU9000	SR15	∅4.5	12517	2446	3288	2906	1451	1456	95	316.71	12.5	(8+8)×11	100	3~4	5~6
UN1850WD1-IU10900	SR20	∅6	12994	2564	3406	2906	1451	1456	120	370.88	12.5	(8+8)×11	100	3~4	5~6
UN1850WD1-IU14500	SR20	∅8	13316	2783	3770	3146	1548	1598	150	470.42	12.5	(8+8)×11	250	3~4	5~6
UN1850WD1-IU18500	SR20	∅8	13316	2834	3821	3146	1548	1598	150	491.15	12.5	(8+8)×11	250	3~4	5~6

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 UN500D1 or UN700D1)	●	
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 UN500D1 or UN700D1)	●	
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		○

● Standard ○ Optional

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(standard for IU14500 and above model)		○
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 UN2100/2400D1, 6 sets for UN2850/3400/4000D1)	●	
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 for IU6800 and below model)		○
Hydraulic oil (standard for UN1400D1/UN1300WD1 and below model)		○
Loading platform		○
Mold temperature controller		○
Automatic loader		○
Dehumidification dryer		○

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