

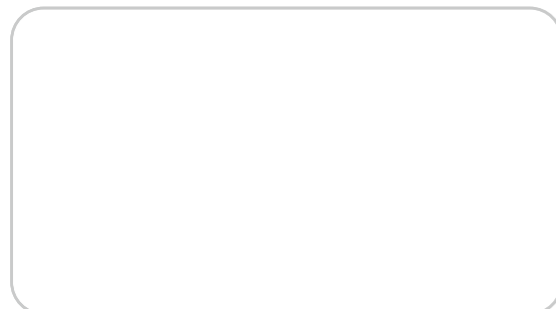
**HAITIAN PLASTICS MACHINERY GROUP CO., LTD**  
No.1688, Haitian Road, Xiaogang, Beilun, Ningbo, Zhejiang, China 315801  
+ 86-574-8617 7005 (China)  
+ 86-574-8617 7242 (International)  
haitian@mail.haitian.com  
www.haitianpm.com

**NINGBO HAITIAN HUAYUAN MACHINERY CO.,LTD.**  
No.1, Nanhuan Road, Export Processing Zone, Beilun, Ningbo, Zhejiang, 315806 P.R. China  
+86-574-8617 7242  
+86-574-8622 1864  
haitian@mail.haitian.com  
www.haitianpm.com

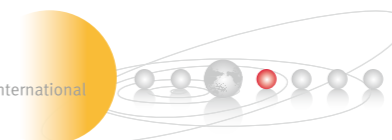
Haitian **Mars<sup>2</sup>** Series  
**Specifications / high**  
1700-4800kN



Haitian Partner:



HT 2020-0701-IV



# Haitian Mars II /p Series

## Higher Performance Injection Molding Machine

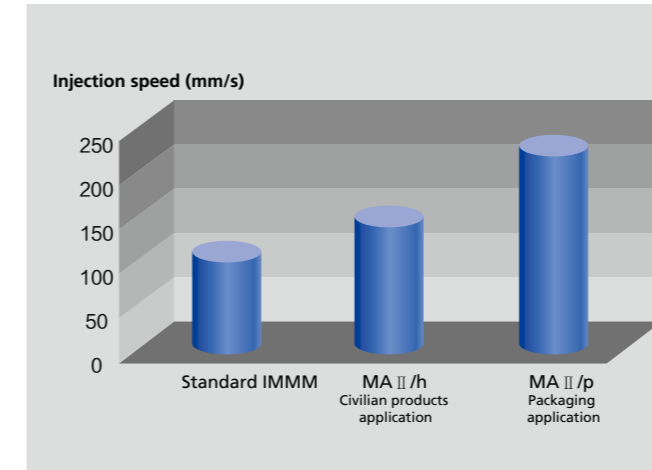
Haitian is dedicated in providing customers with new technology to improve the production of their plastic parts. Our close cooperation with customers provide a better understanding for the challenges the injection molding industry has to face.

Designed to provide a faster injection speed and reduced cycle times, the MA II/p series machines give a wider processing window for the production of parts requiring additional molding performance.

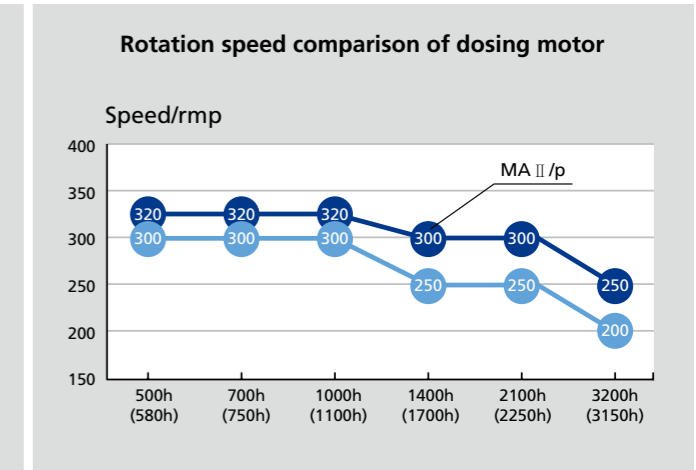


### High injection speed

Higher injection speeds provide a faster filling speed for thin-walled products, reducing internal stress on the molded part.



### High screw rotation speed (increased plasticizing capacity)



The injection speed chosen for an application depends on the product.



#### Higher Process Control: Broader Process Window

With a higher injection speed and faster control response time, the molding process window is increased for parts requiring a higher level of molding performance.

#### Stronger Mechanical Structure

The total structure of the machine is 30% stronger in comparison to traditional injection molding machines, designed to ensure that the MA II/p meets the demands towards a high performance machine.

#### Increased Productivity

The higher performance of the MA II/p series machine brings additional production benefit due to the reduced cycle time and improved injection process control.

#### Extremely Economical : Lower Cost

The MA II/p series machine utilizes our patented servo hydraulic drive technology. Compared to traditional hydraulic systems using fixed speed motors and accumulators to achieve a higher machine performance, the MA II/p machine provides significant energy saving.

# Haitian Mars II /p Series

## Higher Performance Injection Molding Machine

### High Rigidity Clamping Unit

The high rigidity clamping structure is optimized to ensure the best force transfer and uniform distribution of clamping force in the center of the mold installation area

### Precise Clamping Unit

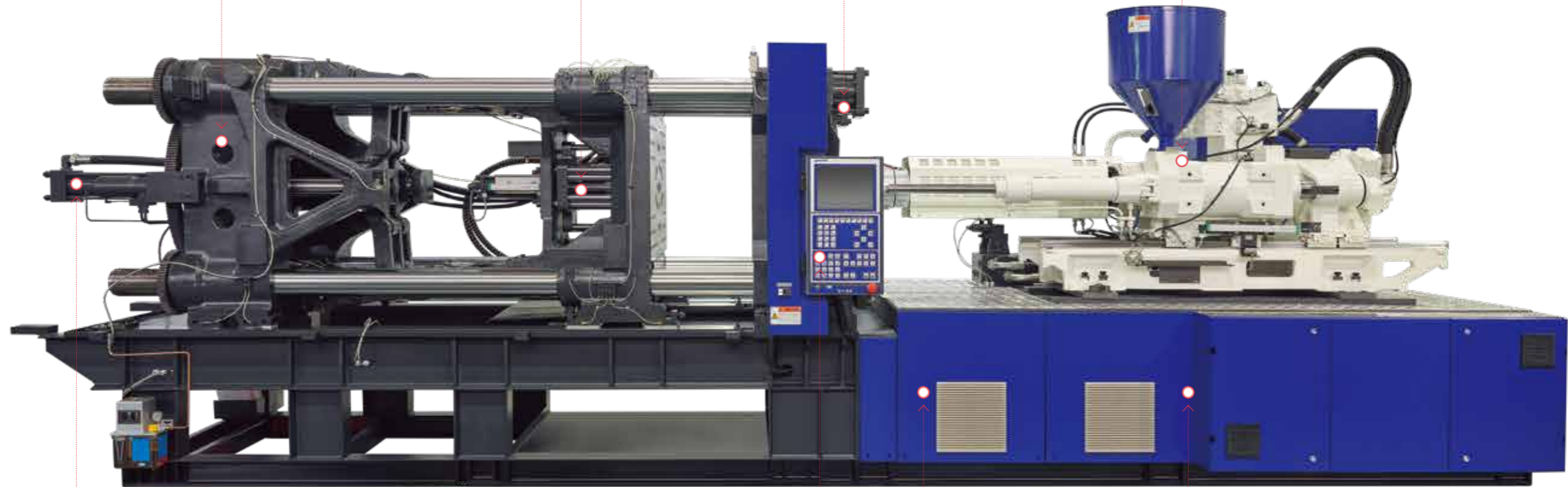
Standard with 5-phase intelligent mold opening program, mold opening position accuracy increased to +/- 0.5mm, which is conducive to automatic production of customer manipulator parts

### Tailor-made Tie Bar

The special processing of the tie-bar thread can greatly reduce the risk of the tie-bar breaking

### Modular Design of Injection Unit

Multi-stage injection unit is optional to meet the different customized needs.



### High Speed Mold Opening and Close Mode

Differential clamping oil circuit, fast clamping speed, more energy-saving

### High Speed mould opening-close Mode

12-inch Haitian exclusive controller, more comprehensive information display

### High Response Power System

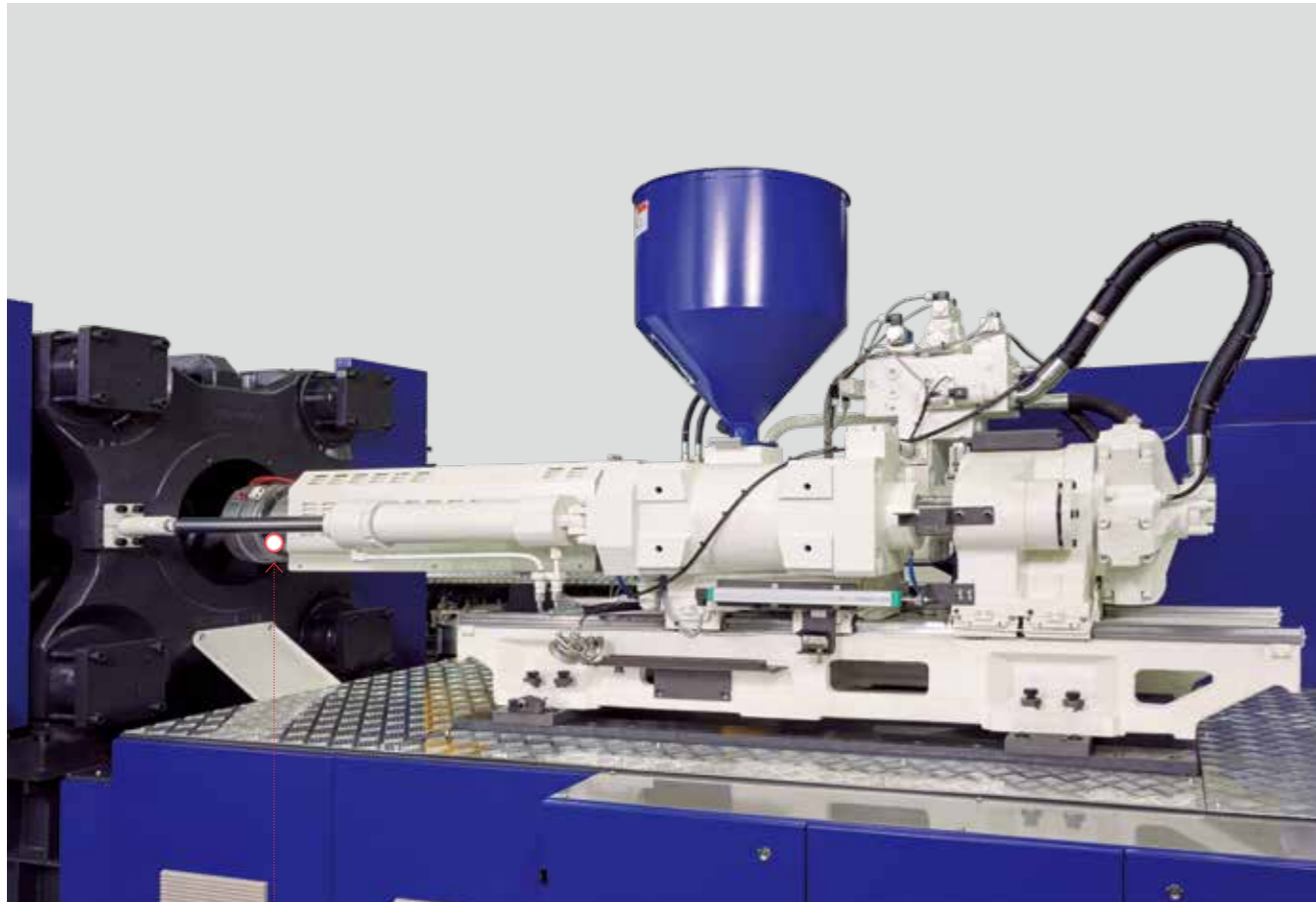
The system pressure is increased to 21 MPa and the motor response speed is increased to 40 ms.

### Extensible power allocation

Space reserved on the machine bed and the distribution box for linkage configuration upgrade, which can be quickly customized according to customer needs for fast delivery

# Haitian Mars II /p Series

## Higher Performance Injection Molding Machine

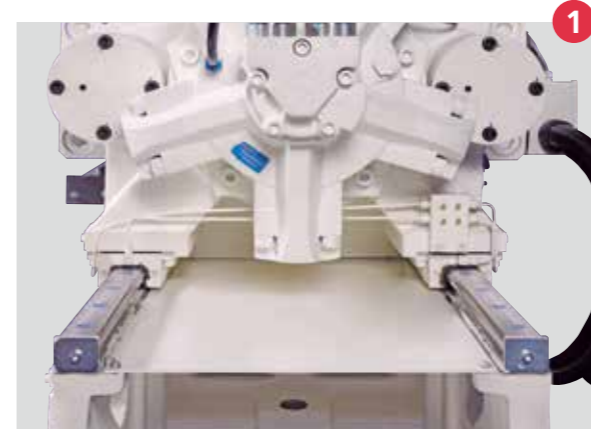


### Modular Combination Design of Injection Unit

Based on the modular design, one clamping unit can be combined with a multiple choice of the injection unit and power combination, to meet different product requirements.



Increased power of the heating ring with optional nanometre energy-saving ring



### Figure ①

The friction coefficient is low, and the resistance of injection and plasticization process is small and well-distributed

### Figure ②

Non-welding technology for the pipelines to eliminate the risk of oil leakage under high pressure and high speed

### Figure ③

New type of mold-adjusting drive structure, more balanced control of thread gap, improved wear resistance for easy maintenance

### Figure ④

The self-locking mould adjusting system can prevent looseness of mould adjusting for high speed machine and greatly improve the stability and reliability of injection molding machine

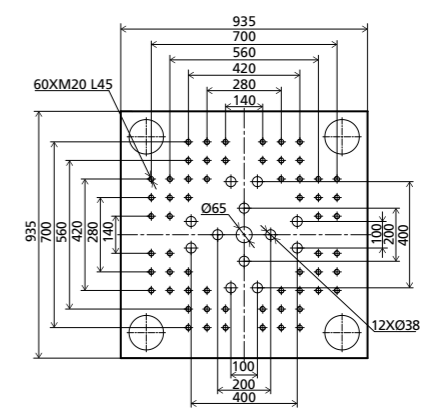
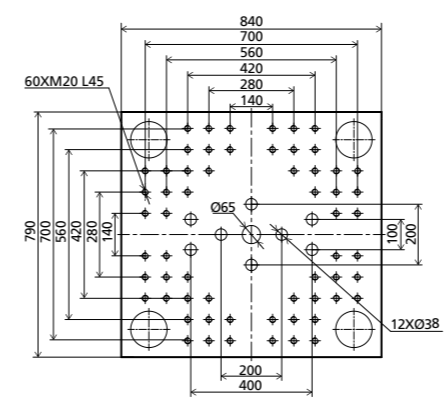
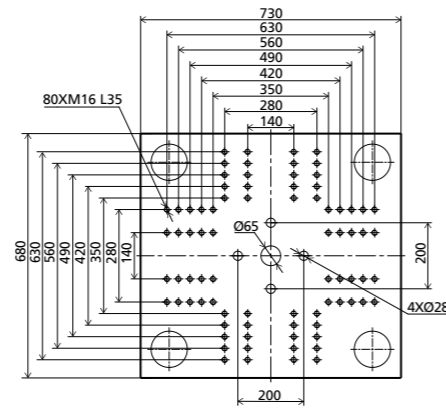
### Figure ⑤

Optimized design of high rigidity clamping structure ensures the optimal force transfer and uniform distribution of clamping force in the center of the mould installation area.

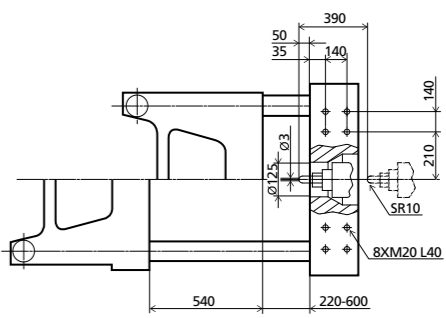
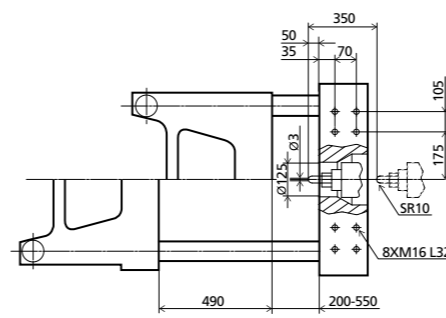
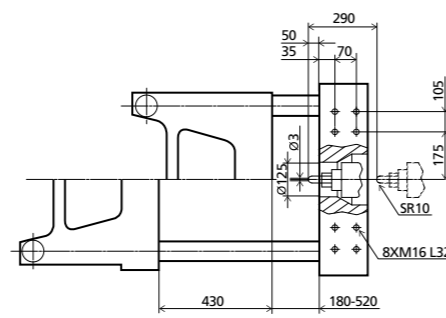
# Specification

	MA1700 II		MA2100 II		MA2700 II		
	520p		700p		1000p		
	A	B	A	B	A	B	
<b>INJECTION UNIT</b>							
Screw diameter	mm	40	45	50	50	55	
Screw L/D ratio		22.5	20	22.2	22	20	
Injection volume (theoretical)	cm <sup>3</sup>	251	318	334	471	570	
Injection weight (PS)	g	229	289	304	429	519	
Injection rate (PS)	g/s	229	289	289	357	432	
Injection speed (max)	mm/s	200		200		200	
Injection pressure	MPa	207	163	211	171	212	175
Plasticizing rate	g/s	28	36	32	40	45	52
Screw speed	rpm	0-320		0-320		0-300	
<b>CLAMPING UNIT</b>							
Clamping force	kN	1700		2100		2700	
Mold movement stroke	mm	430		490		540	
Dist. between tie bars (HxV)	mm	520x470		570x520		620x620	
Mold height max.	mm	520		550		600	
Mold height min.	mm	180		200		220	
Ejection stroke	mm	140		150		150	
Ejector tonnage	kN	34		67		67	
<b>OTHERS</b>							
System pressure	MPa	21		21		21	
Pump motor power	kW	31		36		48	
Heater power	kW	15.96		20.63		22.3	
Machine dimension (LxWxH)	m	5.48x1.61x2.26		5.82x1.65x2.29		6.52x1.90x2.23	
Machine weight	t	7		8		12	
Hopper capacity	kg	50		50		50	
Oil tank	l	330		380		440	

**Platen dimensions**  
Moving platen

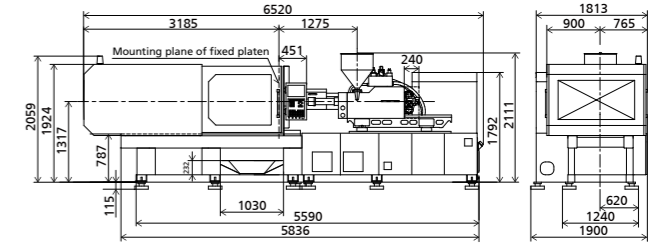
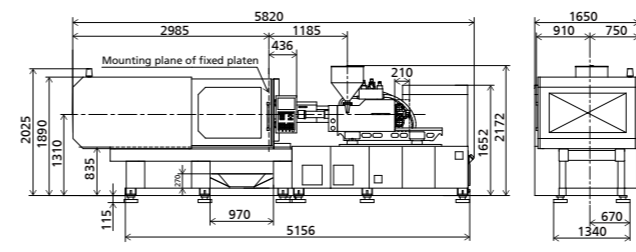
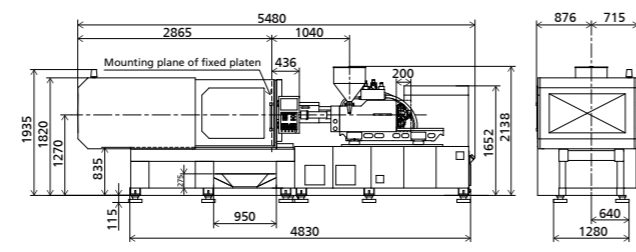


**Platen dimensions**  
Mounting hole for robot/sprue picker top view from fixed platen



**Machine dimensions**

We reserve the right to make changes as a result of further technical advantages.

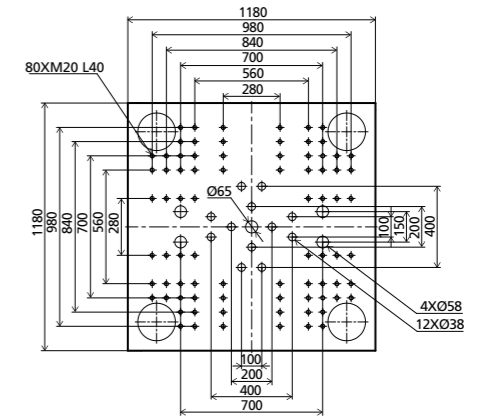
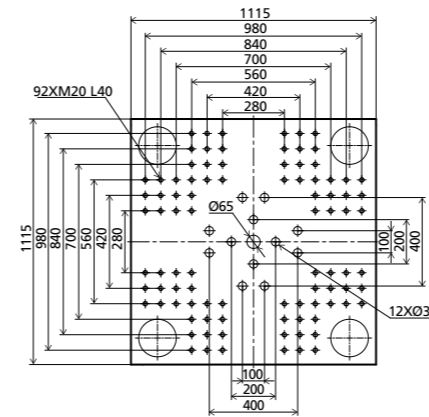
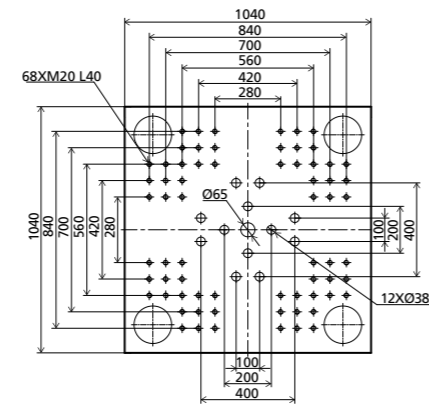


# Specification

		MA3300 II		MA3900 II		MA4800 II	
		1400p		2100p		3200p	
		A	B	A	B	A	B
<b>INJECTION UNIT</b>							
Screw diameter	mm	60	65	65	70	70	80
Screw L/D ratio		21.7	20	21.5	20	22.9	20
Injection volume (theoretical)	cm <sup>3</sup>	735	862	1061	1231	1423	1859
Injection weight (PS)	g	669	785	966	1120	1295	1692
Injection rate (PS)	g/s	515	605	605	700	700	914
Injection speed (max)	mm/s		200		200		200
Injection pressure	MPa	193	165	198	170	224	171
Plasticizing rate	g/s	68	78	84	98	98	117
Screw speed	rpm		0-300		0-300		0-250
<b>CLAMPING UNIT</b>							
Clamping force	kN		3300		3900		4800
Mold movement stroke	mm		640		700		780
Dist. between tie bars (HxV)	mm		720x720		755x755		830x830
Mold height max.	mm		650		730		780
Mold height min.	mm		240		280		320
Ejection stroke	mm		160		180		200
Ejector tonnage	kN		67		110		110
<b>OTHERS</b>							
System pressure	MPa		21		21		21
Pump motor power	kW		60		72		48+48
Heater power	kW		30.5		39.5		46.5
Machine dimension (LxWxH)	m		7.03x2.06x2.47		7.53x2.12x2.45		8.24x2.25x2.54
Machine weight	t		14		17.5		23
Hopper capacity	kg		50		100		100
Oil tank	l		560		660		780

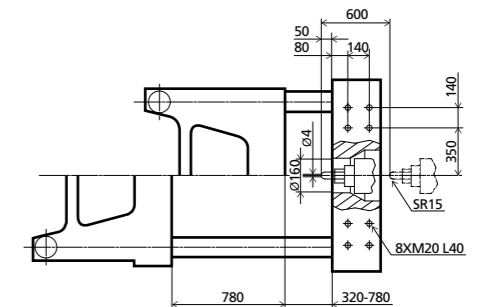
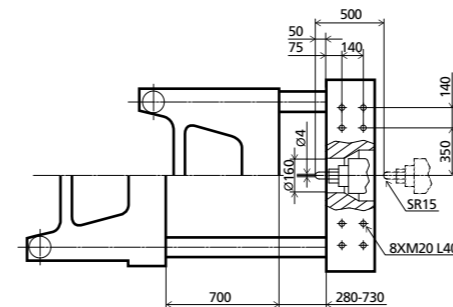
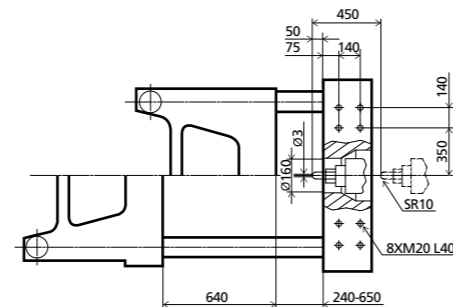
## Platen dimensions

Moving platen



## Platen dimensions

Mounting hole for robot/sprue picker top view from fixed platen



## Machine dimensions

We reserve the right to make changes as a result of further technical advantages.

