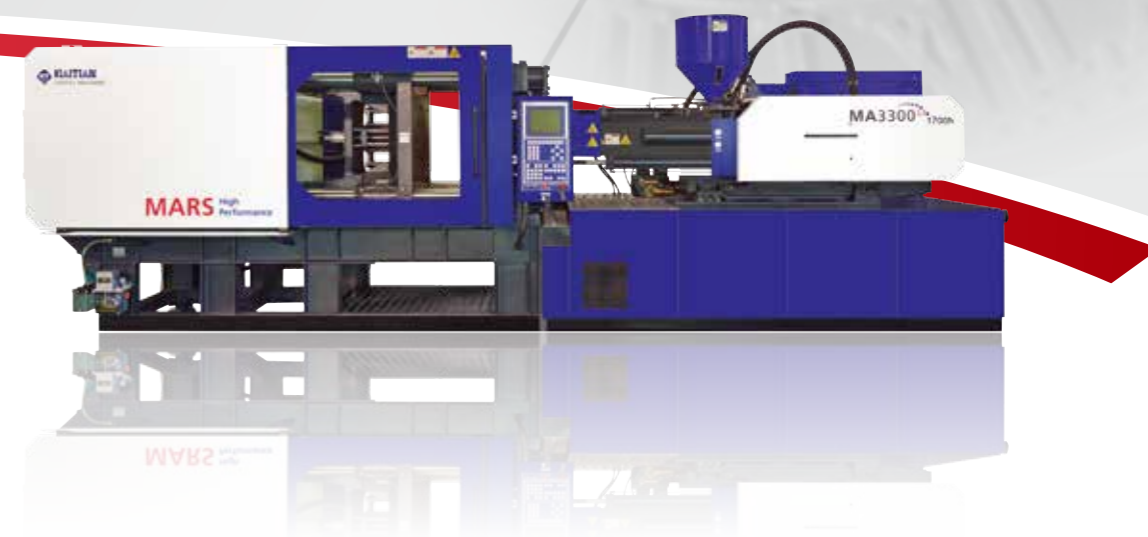


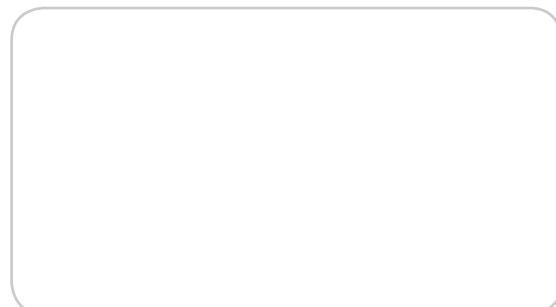
Haitian Plastics Machinery Group Co., LTD.

No.1688 Haitian Road, Xiaogang, Beilun,
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Zipcode: 315821
Tel.: + 86 (0) 574 86177005 86177242
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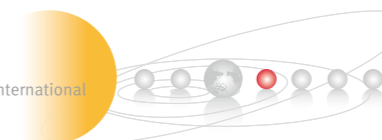
Haitian **Mars²** Series
Specifications / high
1700-4800KN



Haitian Partner:



HT 20150409-IV



Haitian Mars II /h Series

High-Performance Injection Molding Machine

Haitian will consistently and persistently introduce advanced plastic injection molding technology to the market. In close cooperation with our customers, we are always seeking for new solutions in machine engineering and molding processing.

Our MA II/h series high-performance injection molding machines come with an overall improved design. We have carried out great improvements regarding issues that occur during short cycle high-speed molding processes such as oil leakage or machine lifetime. Using modern processing technologies and advanced injection control, we can guarantee a short response time as well as high efficiency, performance and stability.

The MA II/h series with its advanced performance is widely used in the plastic processing industry. Especially for thin-wall products and multi-cavity products, but also in the traditional industry, it remarkably increases the product efficiency.



We Create Advantage

Multifarious: Broader Process Window

Thanks to an immense increase of the injection speed compared to common machines and a substantially shortening of the response time, a broader variety of products can be manufactured.

Solid: Stronger Mechanical Structure

Optimization and strengthening of the clamping and injection unit as well as the machine base; an increased machine weight by 30% compared to common machines guarantees the reliability required for high-speed production.

Fast: Increased Productivity

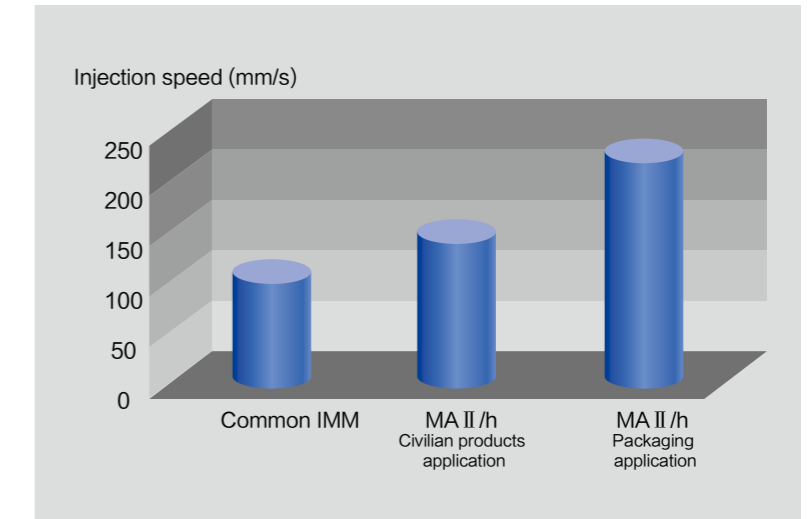
In order to meet the process characteristics of injection molding manufacturing, an optimized and combinational design, including mechanical parts, hydraulics and controls, greatly shorten the cycle time of the injection molding production.

Economical: Lower Cost

A high performance servo system meets high precision and energy saving requirements, a dynamical system with an optimized torque allows the frequent start and stop of the motor as required for short cycle products.

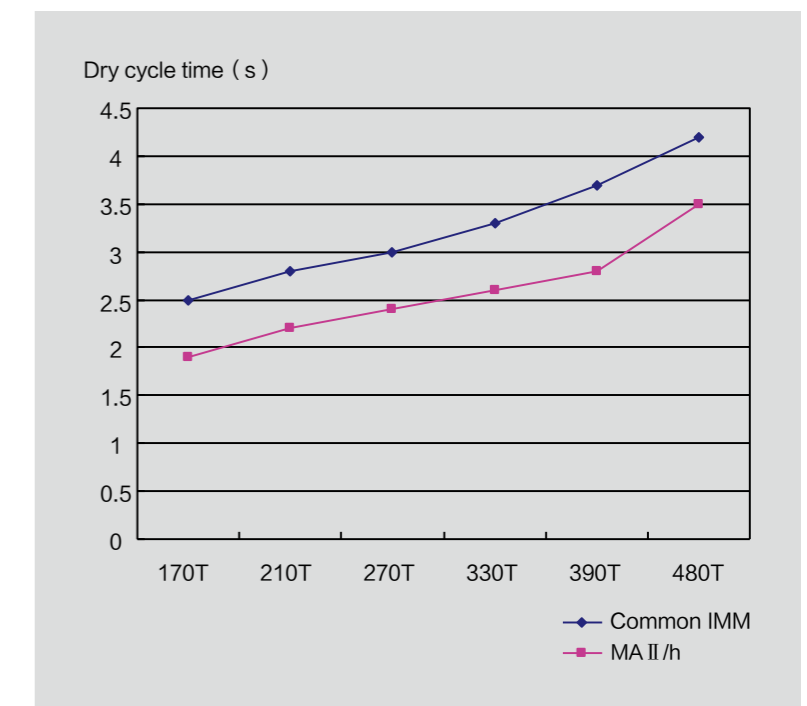
High injection speed

High-speed filling leads to a relatively lower interior stress of the product, which reduces the risk of deformation and the weight of the end product.



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

Shorter Dry Cycle Time



Clamping efficiency increased by 20% compared to common IMM.

Haitian Mars II /h Series

High-Performance Injection Molding Machine

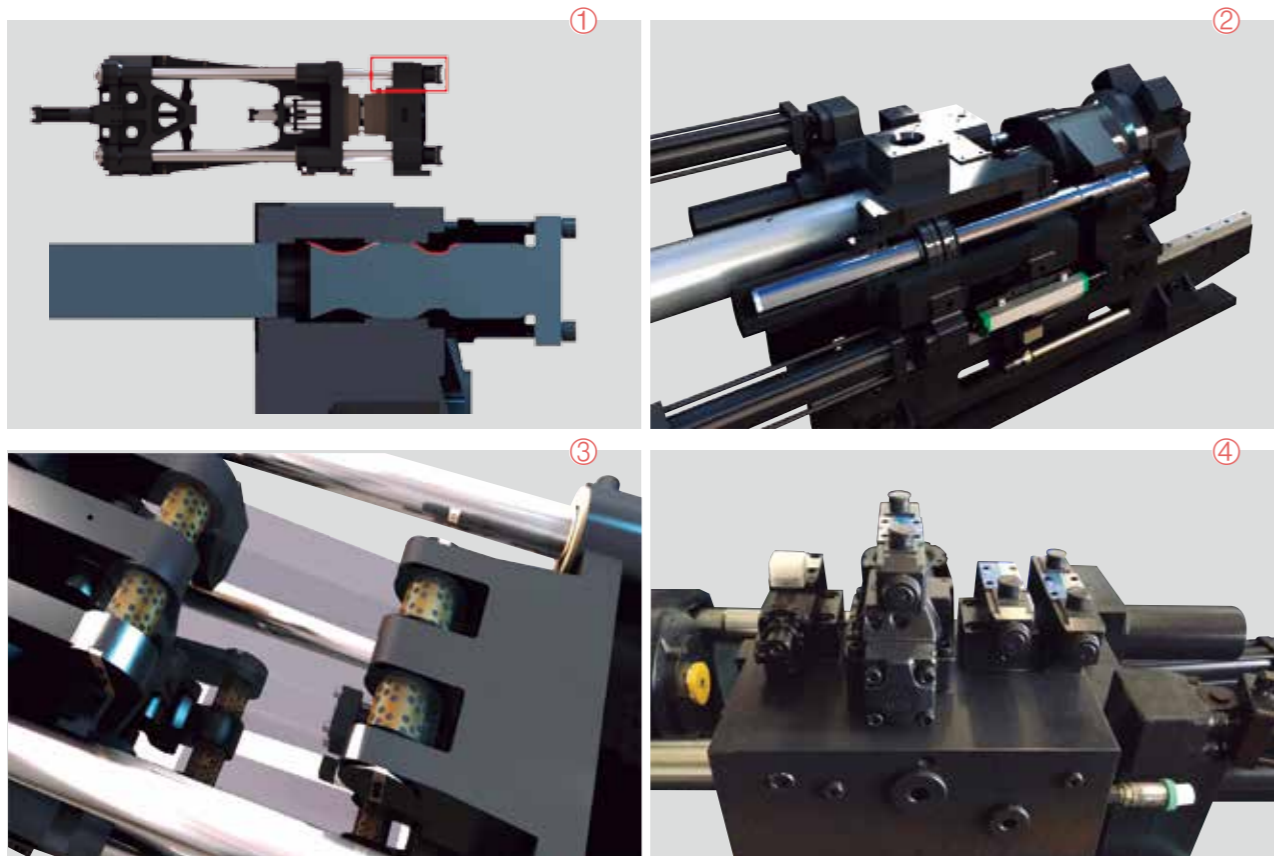


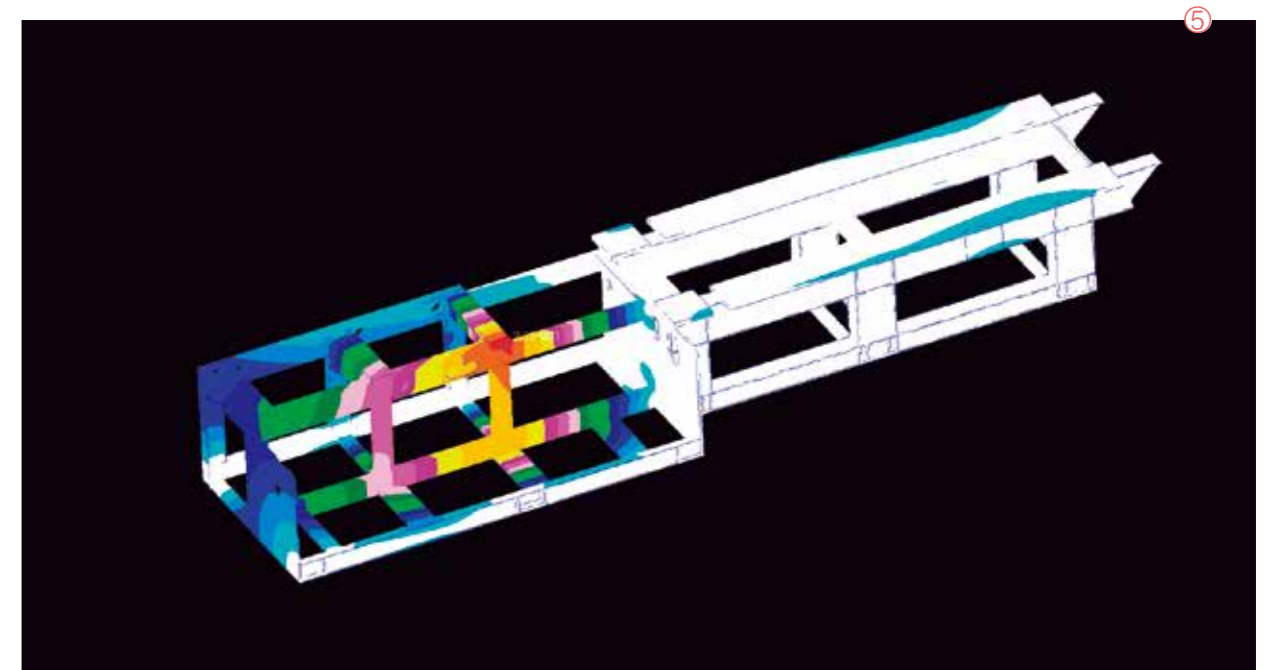
Figure ①
Machine structure design for a long lifetime:
 A double relief notch structure is used for the tie bars to more evenly distribute the stress on tie bars and screw thread, which leads to a longer lifetime.

Figure ②
High precision double linear guide rail:
 Minimal friction factor, injection and plasticizing process resistance low, and well distributed

Figure ③
High load, self-lubricating shaft bearing:
 Machine wear and tear reduced, lower maintenance cost and less oil staining.

Figure④
High response oil-channel design:
 Rapid injection speed acceleration, response time increased by 100% compared to common machines, guarantees the perfect filling of products with a high flow length ratio.

Figure ⑤
Highly rigid machine body:
 Finite element analysis applied on initial machine body; compared to machine bodies with similar load, deformation reduced by more than 30%, thus the stability of the whole machine significantly increased.



Our Service:

Professional All-round Service

Rest assured that our senior pre- and after-sales service engineers always provide you with excellent injection molding guidance as well as efficient solutions in the unlikely event of any issues occurring.

Comprehensive Package Service

Besides our plastic injection molding equipment, we also offer comprehensive sets of equipment such as in-mold labeling (IML) systems (incl. injection molding machine, mold, labels, labeling machine, conveyor, as well as corresponding training and guidance for operation and key technology).

Professional Mold Testing Service

We offer professional mold testing areas with complete equipment to meet various mold testing requirements for all kind of end products.

Customized Service

No matter what kind of special requirements you might have, whether the program has to be amended, extra functions have to be added or special specifications are requested - we will always meet all your requirements, because we do not only provide satisfying products, but also products that meet your needs.

Haitian Mars II /h Series

High-Performance Injection Molding Machine

Application for Civilian and Household Industry

Description: Simple clothes hanger
 Material: PP
 Weight: 35g
 Mold cavity: 4 out of 1
 Used machine model:
 MA 2700 II/1100h (Cycle time: 18 sec)
 Formerly used machine model:
 MA 2800 II/1350 (Cycle time: 22 sec)



Application for Civilian and Household Industry

Description: Middle sized rectangular food storage box
 Material: highly transparent PP
 Weight: 75g
 Mold cavity: 4 out of 1
 Used machine model: MA 3300 II/1700h (Cycle time: 22 sec)
 Formerly used machine model: MA 3200 II/1700 (Cycle time: 26 sec)



Remark: Different machine configurations are required for different applications.

Application for Thin-wall Packaging

Description: Disposable aviation cup
 Material: PS
 Weight: 10.3g
 Mold cavity: 8 out of 1
 Used machine model:
 MA 3300 II/h (Cycle time: 8.5 sec)
 Formerly used machine model:
 320 T machine (Cycle time: 12.2 sec)



Description: Food take-away box
 Material: PP
 Weight: 15.5g
 Mold cavity: 4 out of 1
 Used machine model:
 MA 3300 II/h (Cycle time: 5.8 sec)
 Formerly used machine model:
 320 T machine (Cycle time: 8.1 sec)



Application for Medical Industry

Description: Needle guard
 Material: PP
 Weight: 0.57g
 Mold cavity: 228 out of 1
 Used machine model:
 MA 2700h (Cycle time: 11.4 sec)
 Formerly used machine model:
 280 T machine (Cycle time: 15.2 sec, high rate of spoiled products)



Description: 5ml Syringe
 Material: PP
 Weight: 2.5g
 Mold cavity: 48 out of 1
 Used machine model:
 MA 2700h (Cycle time: 10.2 sec)
 Formerly used machine model:
 250 T machine (Cycle time: 14.9 sec)



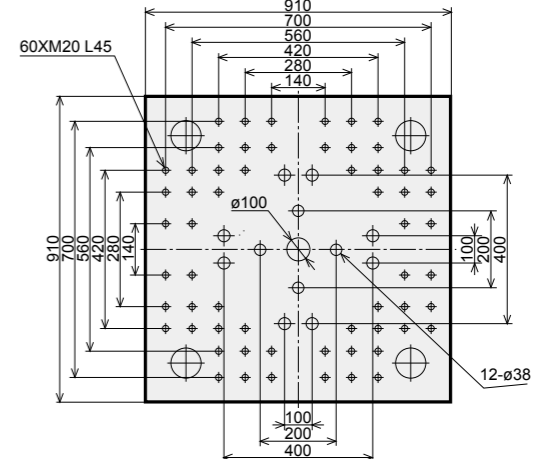
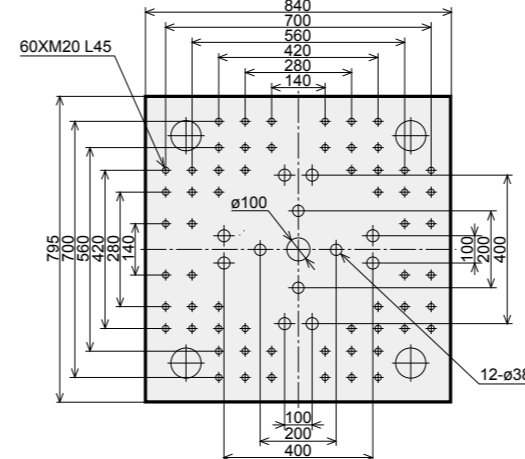
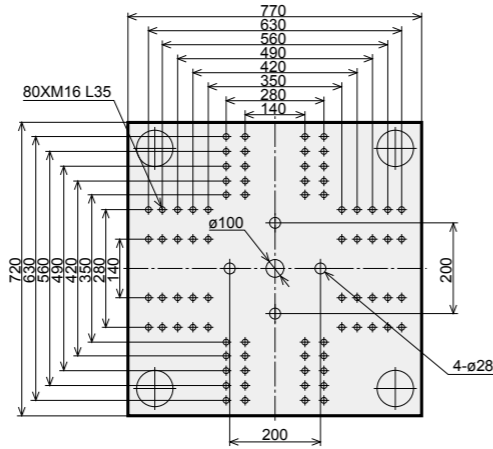
Remark: Different machine configurations are required for different applications.

Specification

		MA1700 II				MA2100 II				MA2700 II			
		580h		580p		750h		580p		1100h		750p	
		A	B	A	B	A	B	A	B	A	B	A	B
INJECTION UNIT													
Screw diameter	mm	40	45	40	45	45	50	40	45	50	55	45	50
Screw L/D ratio	L/D	25	23	25	23	25	23	25	23	25	23	25	23
Shot size (theoretical)	cm ³	251	318	251	318	334	412	251	318	471	570	334	412
Injection weight (PS)	g/s	228	289	228	289	304	375	229	289	429	519	304	375
Injection rate (PS)	g/s	156	197	250	316	230	284	255	322	257	311	353	436
Injection Speed	mm/s	136		218		159		223		144		244	
Injection pressure	MPa	200	158	178	141	193	157	200	158	197	163	193	157
Plasticizing rate (PS)	g/s	28	36	28	36	32	40	28	36	48	56	32	40
Screw speed	rpm	300		300		300		300		300		300	
CLAMPING UNIT													
Clamp tonnage	kN	1700				2100				2700			
Toggle stroke	mm	430				490				540			
Space between tie bars	mm	520X470				570X520				620X620			
Max. mold height	mm	520				550				600			
Min. mold height	mm	180				200				220			
Ejector stroke	mm	140				140				150			
Ejector force	kN	33				62				62			
OTHERS													
Max. pump pressure	MPa	14				14				14			
Pump motor power	kW	22		30		30		42		42		13+42	
Heater power	kW	15.8		20.5		17.3		20.5		20		21.8	
Machine dimension (l x w x h)	m	5.53x1.56x2.18		5.53x1.56x2.18		5.93x1.63x2.28		5.93x1.63x2.28		6.54x1.72x2.28		6.54x1.72x2.28	
Machine weight	t	8.2		8.2		9.8		9.5		12.1		12	
Hopper capacity	kg	50		50		50		50		50		50	
Oil tank capacity	l	455				550				635			

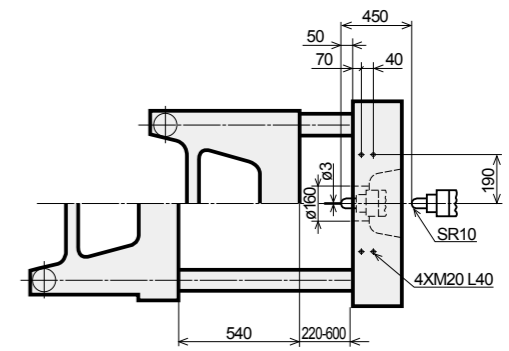
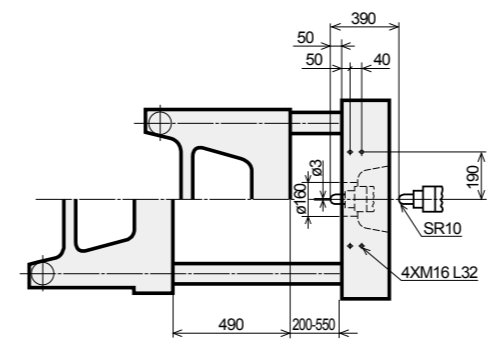
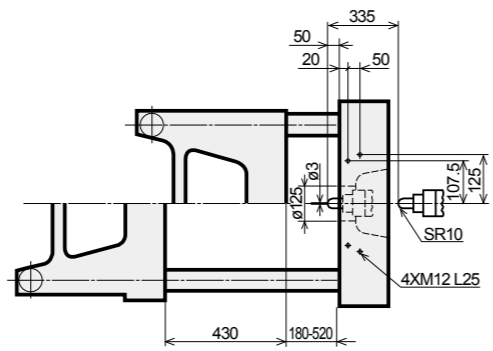
Platen dimensions

Moving platen



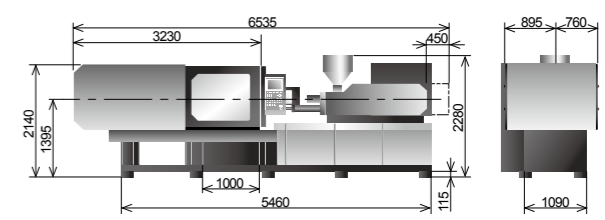
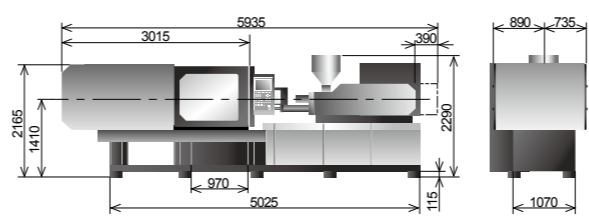
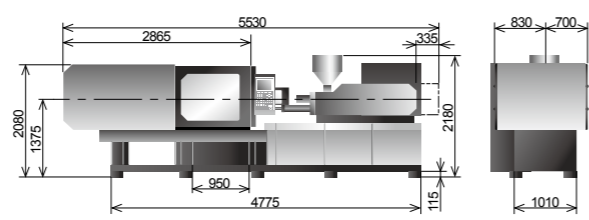
Platen dimensions

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.

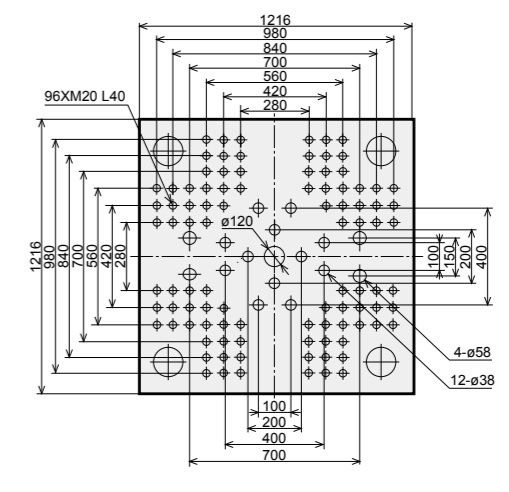
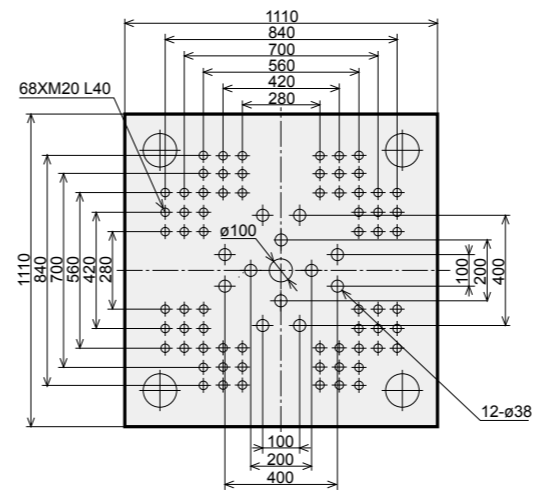
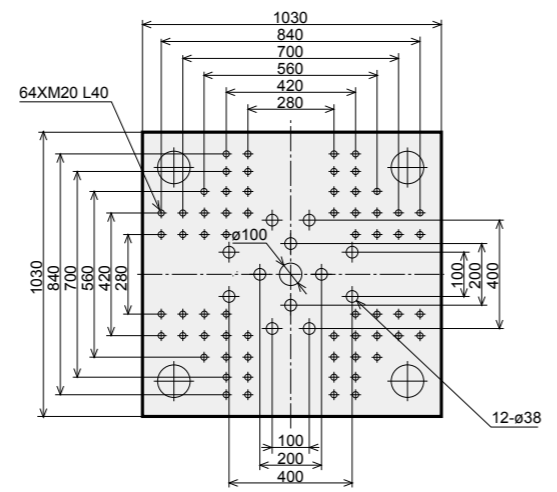


Specification

		MA3300 II				MA3900 II				MA4800 II			
		1700h		1100p		2250h		1700p		3150h		2250p	
		A	B	A	B	A	B	A	B	A	B	A	B
INJECTION UNIT													
Screw diameter	mm	60	65	50	55	65	70	60	65	70	80	65	70
Screw L/D ratio	L/D	25	23	25	23	25	23	25	23	25	23	25	23
Shot size (theoretical)	cm ³	735	862	471	570	1061	1231	735	862	1423	1859	1061	1231
Injection weight (PS)	g	669	785	429	519	966	1120	669	785	1295	1692	966	1120
Injection rate (PS)	g/s	361	423	375	454	399	463	470	552	470	614	547	634
Injection Speed	mm/s	140		210		132		183		134		181	
Injection pressure	MPa	189	161	197	163	186	160	189	161	195	149	186	160
Plasticizing rate (PS)	g/s	61	70	48	56	76	88	61	70	82	101	76	88
Screw speed	rpm	250		300		250		250		200		250	
CLAMPING UNIT													
Clamp tonnage	kN	3300				3900				4800			
Toggle stroke	mm	640				730				780			
Space between tie bars	mm	720X720				760X760				830X830			
Max. mold height	mm	650				820				850			
Min. mold height	mm	240				300				320			
Ejector stroke	mm	160				180				200			
Ejector force	kN	85				110				110			
OTHERS													
Max. pump pressure	MPa	14				14				14			
Pump motor power	kW	13+42		22+42		22+42		30+42		30+42		42+42	
Heater power	kW	27.3		25.1		30		39.5		33		46.5	
Machine dimension (l x w x h)	m	7.22x1.95x2.63		7.22x1.95x2.63		7.83x2.02x2.67		7.83x2.02x2.67		8.49x2.14x2.75		8.49x2.14x2.75	
Machine weight	t	16.7		16.5		19.2		19		21.8		21.5	
Hopper capacity	kg	50		50		100		50		100		100	
Oil tank capacity	l	805				855				965			

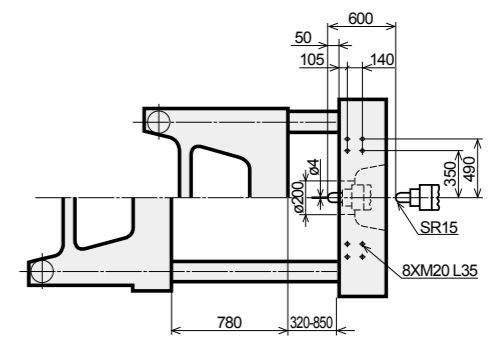
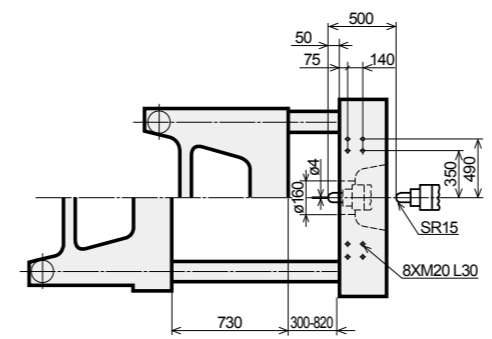
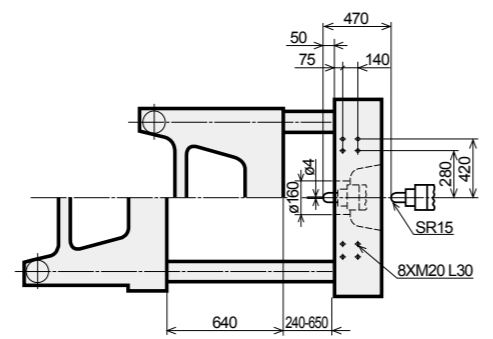
Platen dimensions

Moving platen



Platen dimensions

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



Machine dimensions

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