FANUC ROBOSHOT α-S450iB

Mechanical specifications

Item			Unit	Data			
Clamping unit	Clamping mechanism		---	Double toggle			
	Tonnage		kN	Standard 4500 (450tonf) / Increased 5000 (500tonf) [Option]			
	Maximum and minimum die height		mm	Double platen 1000 - 350			
	Clamping stroke		mm	900			
	Locating ring diameter		mm	φ150			
	Tie bar spacing (H×V)		mm	920 × 920			
	Platen size (H×V)		mm	1300 × 1300			
	Minimum mold size (H×V) *1		mm	535 × 535			
	Maximum mold weight (Moving-Stationary) *2		kg	Double platen 4500 - 4500			
	Ejector stroke		mm	250			
	Maximum ejector force		kN	150 (15tonf)			
Injection unit	Screw diameter		mm	64	68	72	80 *11
	Injection stroke		mm	280	300	320	320
	Maximum injection volume *3		cm³	901	1090	1303	1608
	Inj.speed 160mm/s	Max. inj. prs.(W/C) *4 *6	MPa	220	200	185	150
		Max. inj. prs.(General Purpose) *4 *7	MPa	220	200	185	150
		Maximum injection rate *5	cm³/s	514	581	651	804
		Maximum injection speed *5	mm/s	160			
		Maximum screw rotation speed	min⁻¹	400		300	200
	Nozzle touch force / Increased *8		kN	30 (3tonf) / 50 (5tonf) [Option]			
	Screw & Barrel	Number of pyrometers	Barrel	Nozzle adaptor 1 + Barrel 4			
			Nozzle	1			
		Total heater wattage	kW	28.9	29.5	30.9	30.9
Machine Weight *9			t	Inj.speed 160mm/s Approx. 25.9			

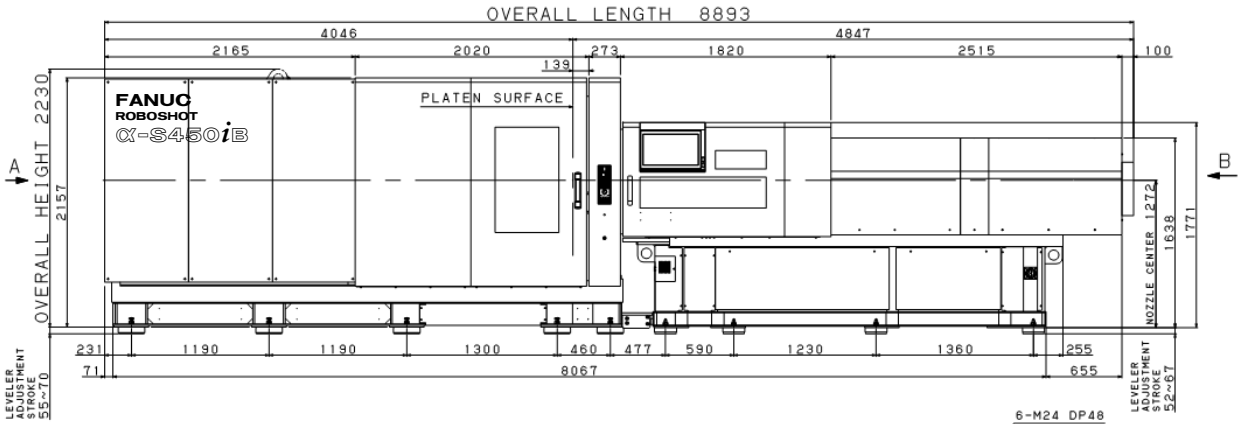
*1 Smaller mold than this size may limit clamp force.
*2 If the weight of a mold exceeds maximum mold weight, the molding condition may be limited.
*3 The maximum injection volume is a calculated value. (Cross-sectional area x injection stroke)
*4 Maximum pack pressure is equal to maximum injection pressure. Maximum injection pressure and maximum pack pressure are the output of the injection unit, not the resin pressure. Maximum injection pressure and maximum pack pressure are the maximum values
*5 Maximum injection rate and maximum injection speed is a theoretical value. Maximum injection rate and maximum injection speed can not be guaranteed when the injection pressure is maximum.
*6 Maximum injection pressure(W/C) are the values when the wear-resistant and anti-corrosion Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.
*7 Maximum injection pressure (General Purpose) are the values when the general purpose Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.
*8 Sprue break cannot be used with increased nozzle touch force option.
*9 The machine weight is the value when the option is not installed. Total weight may vary depending on equipment.
*10 The pressure conversion is 1MPa=10kgf/cm².
*11 The molding condition might be limited by the resin.(Contact sales for detail)
*12 In case of the replacement to different screw diameter after shipment, some covers may be needed to replace. (Contact sales for detail)

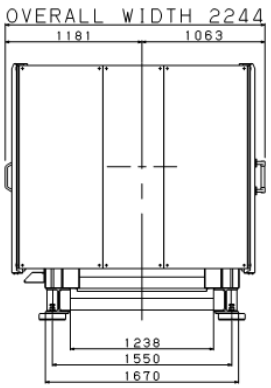
Installation conditions

Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker *13	Inj.speed 160mm/s	250A (With peripheral devices) *14 150A (With no peripheral device) *14
Ground		Follow relevant laws and standards of the country where the machine is installed when performing grounding.
Installing environment	Temperature	0～40℃ (20～25℃ recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

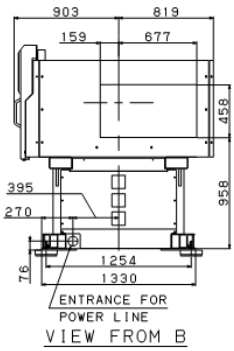
*13 Connect power cable to the machine's main breaker directly. The breaker is ground fault type with 100mA of sensitivity.
*14 With peripheral devices : When the molding machine equiped "External outlet", "Mold heater controller" or "Integrated hotrunner controller". ("Mold heater controller" and "Intefrated hotrunner controller" cannot be selected simultaneously.)
With no peripheral device : When only the molding machine is used.
*15 Please contact sales for details about the value of sound generated in this machine.

All specifications are subject to change without notice.

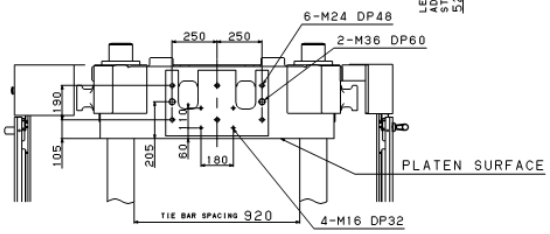




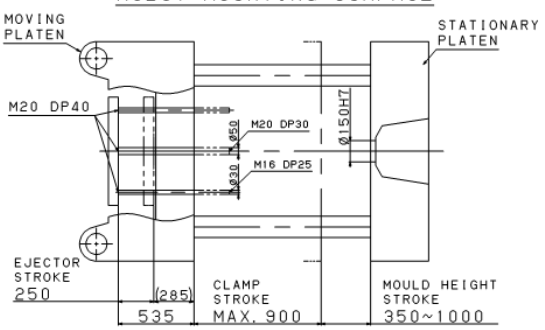
VIEW FROM A



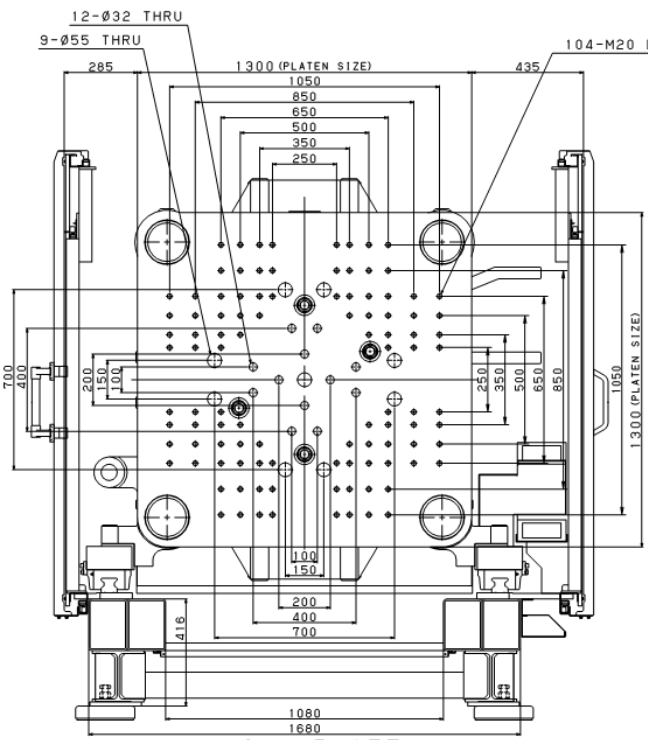
VIEW FROM B



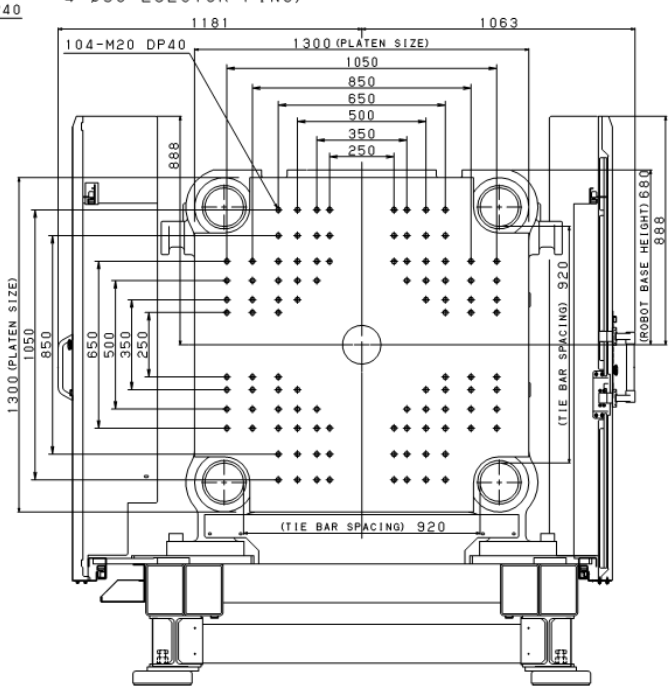
ROBOT MOUNTING SURFACE



(STANDARD ACCESSORY
4-Ø30 EJECTOR PINS AND
4-Ø50 EJECTOR PINS)



MOVING PLATEN



STATIONARY PLATEN

FANUC ROBOSHOT α-S450iB Small capacity injection specification

Mechanical specifications

Item			Unit	Data					
Clamping unit	Clamping mechanism		---	Double toggle					
	Tonnage		kN	Standard 4500 (450tonf) / Increased 5000 (500tonf) [Option]					
	Maximum and minimum die height		mm	Double platen 1000 - 350					
	Clamping stroke		mm	900					
	Locating ring diameter		mm	φ150					
	Tie bar spacing (H×V)		mm	920 × 920					
	Platen size (H×V)		mm	1300 × 1300					
	Minimum mold size (H×V) *1		mm	535 × 535					
	Maximum mold weight (Moving-Stationary) *2		kg	Double platen 4500 - 4500					
	Ejector stroke		mm	250					
	Maximum ejector force		kN	150 (15tonf)					
Injection unit	Screw diameter		mm	48	52	56	64	68	72 *11
	Injection stroke		mm	176	208	260	260	260	260
	Maximum injection volume *3		cm³	318	442	640	836	944	1059
	Inj.speed 240mm/s (High duty)	Max. inj. prs.(W/C) *4 *6	MPa	270	240	225	175	155	135
		Max. inj. prs.(General Purpose) *4 *7	MPa	270	240	225	175	155	135
		Maximum injection rate *5	cm³/s	434	509	591	772	871	977
		Maximum injection speed *5	mm/s	240					
		Maximum screw rotation speed	min⁻¹	400					300
	Inj.speed 270mm/s	Max. inj. prs.(W/C) *4 *6	MPa	270	240	225	175	155	135
		Max. inj. prs.(General Purpose) *4 *7	MPa	270	240	225	175	155	135
		Maximum injection rate *5	cm³/s	488	573	665	868	980	1099
		Maximum injection speed *5	mm/s	270					
		Maximum screw rotation speed	min⁻¹	400					300
	Nozzle touch force / Increased *8		kN	30 (3tonf) / 50 (5tonf) [Option]					
	Screw & Barrel	Number of pyrometers	Barrel	3		4			
			Nozzle	1					
		Total heater wattage	kW	19.7	21.2	23.9	27.2	27.2	26.6
Machine Weight *9			t	Inj.speed 240mm/s (High duty) Approx. 25.2 Inj.speed 270mm/s Approx. 25.2					

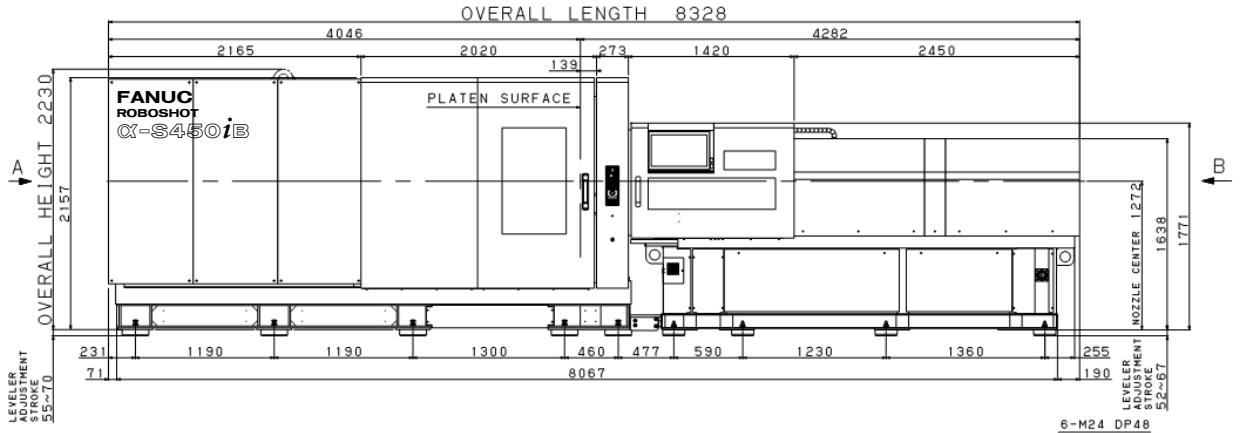
*1 Smaller mold than this size may limit clamp force.
*2 If the weight of a mold exceeds maximum mold weight, the molding condition may be limited.
*3 The maximum injection volume is a calculated value. (Cross-sectional area x injection stroke)
*4 Maximum pack pressure is equal to maximum injection pressure. Maximum injection pressure and maximum pack pressure are the output of the injection unit, not the resin pressure. Maximum injection pressure and maximum pack pressure are the maximum values that can be set.
*5 Maximum injection rate and maximum injection speed is a theoretical value. Maximum injection rate and maximum injection speed can not be guaranteed when the injection pressure is maximum.
*6 Maximum injection pressure(W/C) are the values when the wear-resistant and anti-corrosion Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.
*7 Maximum injection pressure (General Purpose) are the values when the general purpose Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.
*8 Sprue break cannot be used with increased nozzle touch force option.
*9 The machine weight is the value when the option is not installed. Total weight may vary depending on equipment.
*10 The pressure conversion is 1MPa=10kgf/cm².
*11 The molding condition might be limited by the resin.(Contact sales for detail)
*12 240mm/s specification (High duty) is recommended for high viscosity resin molding or longer injection/pack process molding. (Please contact sales for details.)
*13 In case of the replacement to different screw diameter after shipment, some covers may be needed to replace. (Contact sales for detail)

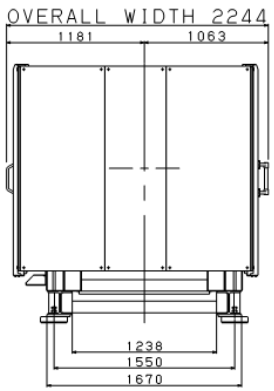
Installation conditions

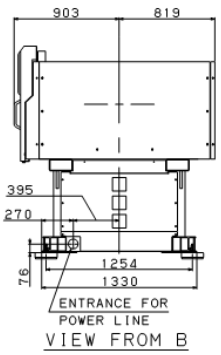
Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker *14	Inj.speed 240mm/s (High duty)	250A (With peripheral devices) *15 150A (With no peripheral device) *15
	Inj.speed 270mm/s	250A (With peripheral devices) *15 150A (With no peripheral device) *15
Ground		Follow relevant laws and standards of the country where the machine is installed when performing grounding.
Installing environment	Temperature	0～40℃ (20～25℃ recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

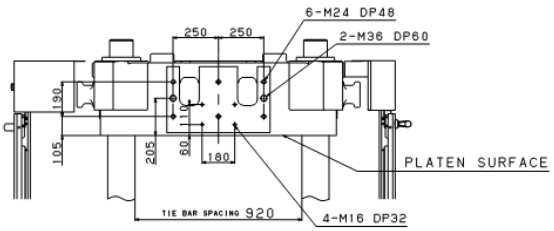
*14 Connect power cable to the machine's main breaker directly. The breaker is ground fault type with 100mA of sensitivity.
*15 With peripheral devices : When the molding machine equiped "External outlet", "Mold heater controller" or "Integrated hotrunner controller". ("Mold heater controller" and "Intefrated hotrunner controller" cannot be selected simultaneously.)
With no peripheral device : When only the molding machine is used.
*16 Please contact sales for details about the value of sound generated in this machine.

All specifications are subject to change without notice.

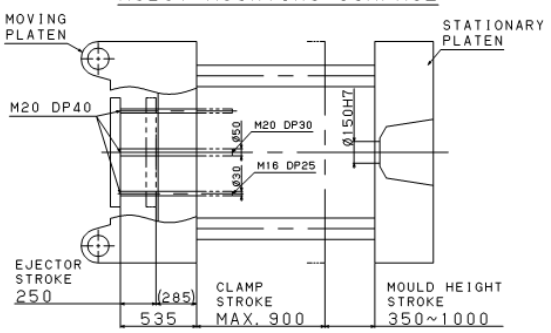




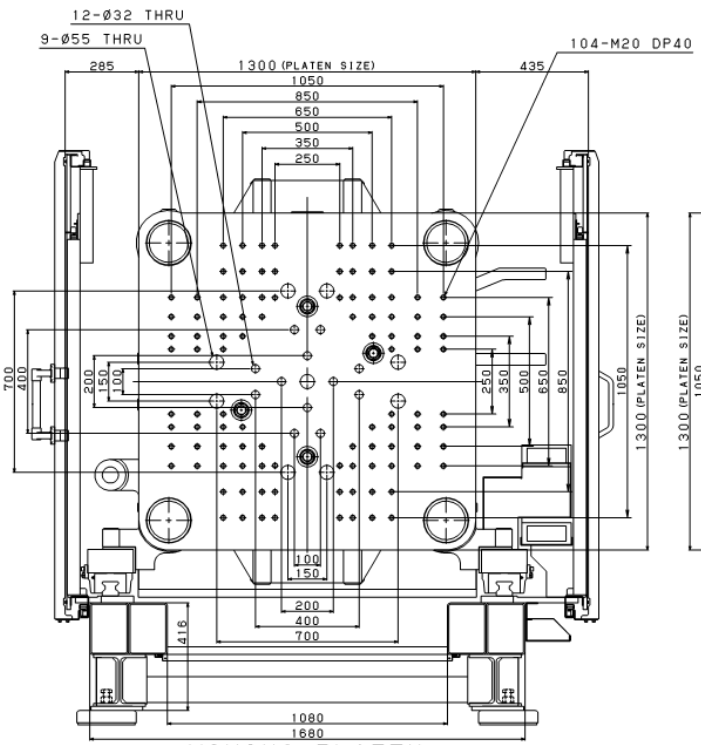




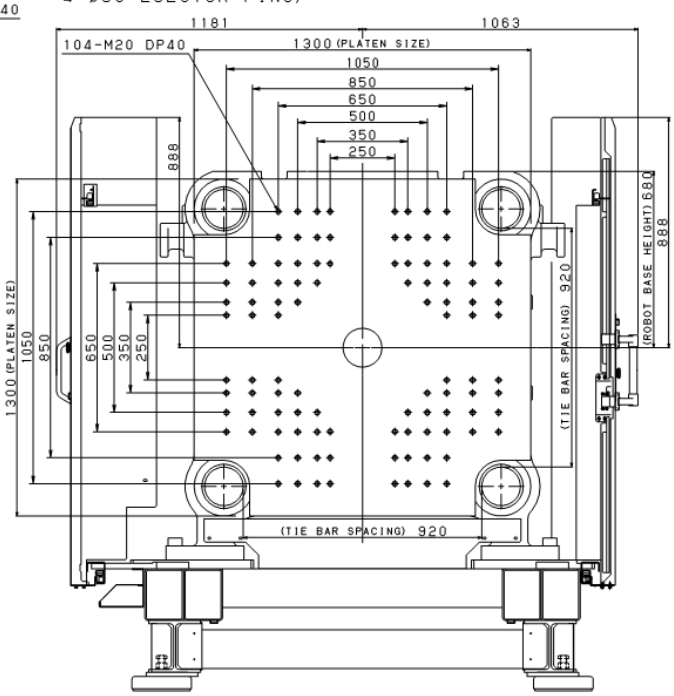
ROBOT MOUNTING SURFACE



(STANDARD ACCESSORY
4-Ø30 EJECTOR PINS AND
4-Ø50 EJECTOR PINS)



MOVING PLATEN



STATIONARY PLATEN

FANUC ROBOSHOT α-S450iB Ultra small capacity injection specification

Mechanical specifications

	Item		Unit	Data				
Clamping unit	Clamping mechanism		---	Double toggle				
	Tonnage		kN	Standard 4500 (450tonf) / Increased 5000 (500tonf) [Option]				
	Maximum and minimum die height		mm	Double platen 1000 - 350				
	Clamping stroke		mm	900				
	Locating ring diameter		mm	φ150				
	Tie bar spacing (H×V)		mm	920 × 920				
	Platen size (H×V)		mm	1300 × 1300				
	Minimum mold size (H×V) *1		mm	535 × 535				
	Maximum mold weight (Moving-Stationary) *2		kg	Double platen 4500 - 4500				
	Ejector stroke		mm	250				
	Maximum ejector force		kN	150 (15tonf)				
Injection unit	Screw diameter		mm	40	44	48	52 *11	56 *11
	Injection stroke		mm	150	176	176	208	260
	Maximum injection volume *3		cm³	188	268	318	442	640
	Inj.speed 280mm/s (High duty)	Max. inj. prs.(High prs.mode)	MPa	320	280	---	---	---
		Max. inj. prs.(W/C) *4 *6	MPa	280	260	230	200	172
		Max. inj. prs.(General Purpose) *4 *7	MPa	280	260	230	200	172
		Maximum injection rate *5	cm³/s	351	425	506	594	689
		Maximum injection speed *5	mm/s	280				
		Maximum screw rotation speed	min⁻¹	400				
	Inj.speed 350mm/s	Max. inj. prs.(High prs.mode)	MPa	---	---	---	---	---
		Max. inj. prs.(W/C) *4 *6	MPa	280	240	190	160	140
		Max. inj. prs.(General Purpose) *4 *7	MPa	260	220	190	160	140
		Maximum injection rate *5	cm³/s	439	532	633	743	862
		Maximum injection speed *5	mm/s	350				
		Maximum screw rotation speed	min⁻¹	400				
	Nozzle touch force / Increased *8		kN	30 (3tonf) / 50 (5tonf) [Option]				
	Screw & Barrel	Number of pyrometers	Barrel	3				4
			Nozzle	1				
		Total heater wattage	kW	14.9	15.9	17.9	20.2	23.5
Machine Weight *9			t	Inj.speed 280mm/s (High duty) Approx. 24.8 Inj.speed 350mm/s Approx. 24.8				

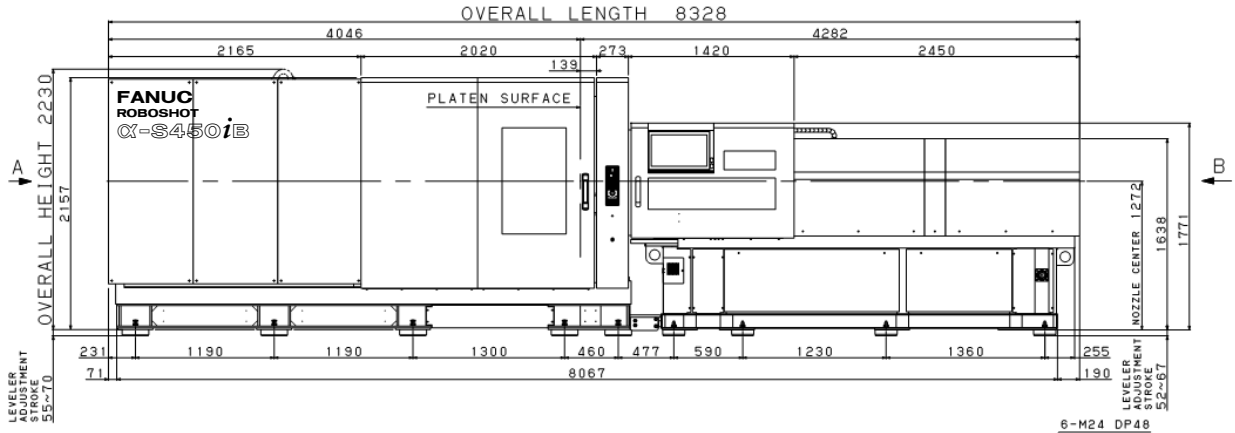
*1 Smaller mold than this size may limit clamp force.
*2 If the weight of a mold exceeds maximum mold weight, the molding condition may be limited.
*3 The maximum injection volume is a calculated value. (Cross-sectional area x injection stroke)
*4 Maximum pack pressure is equal to maximum injection pressure. Maximum injection pressure and maximum pack pressure are the output of the injection unit, not the resin pressure. Maximum injection pressure and maximum pack pressure are the maximum values that can be set.
*5 Maximum injection rate and maximum injection speed is a theoretical value. Maximum injection rate and maximum injection speed can not be guaranteed when the injection pressure is maximum.
*6 Maximum injection pressure(W/C) are the values when the wear-resistant and anti-corrosion Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.
*7 Maximum injection pressure (General Purpose) are the values when the general purpose Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.
*8 Sprue break cannot be used with increased nozzle touch force option.
*9 The machine weight is the value when the option is not installed. Total weight may vary depending on equipment.
*10 The pressure conversion is 1MPa=10kgf/cm².
*11 The molding condition might be limited by the resin.(Contact sales for detail)
*12 In case of the replacement to different screw diameter after shipment, some covers may be needed to replace. (Contact sales for detail)

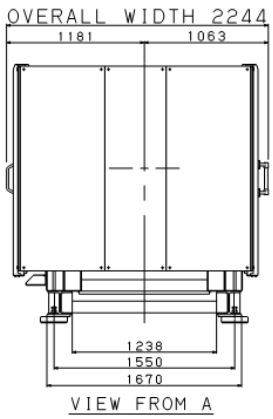
Installation conditions

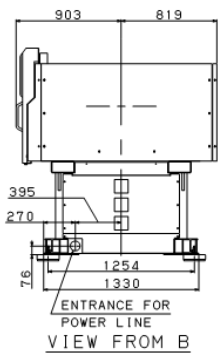
Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker *13	Inj.speed 280mm/s (High duty)	250A (With peripheral devices) *14 150A (With no peripheral device) *14
	Inj.speed 350mm/s	250A (With peripheral devices) *14 150A (With no peripheral device) *14
Ground		Follow relevant laws and standards of the country where the machine is installed when performing grounding.
Installing environment	Temperature	0～40℃ (20～25℃ recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

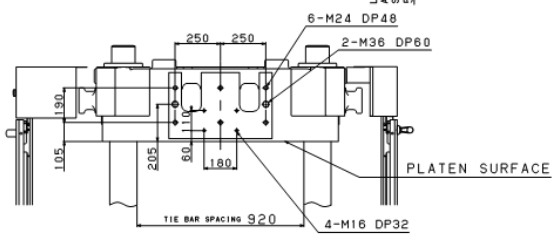
*13 Connect power cable to the machine's main breaker directly. The breaker is ground fault type with 100mA of sensitivity.
*14 With peripheral devices : When the molding machine equiped "External outlet", "Mold heater controller" or "Integrated hotrunner controller". ("Mold heater controller" and "Intefrated hotrunner controller" cannot be selected simultaneously.)
With no peripheral device : When only the molding machine is used.
*15 Please contact sales for details about the value of sound generated in this machine.

All specifications are subject to change without notice.

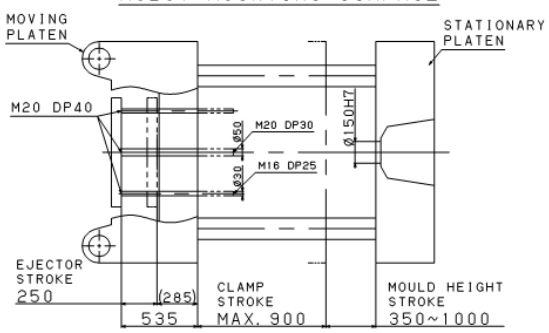




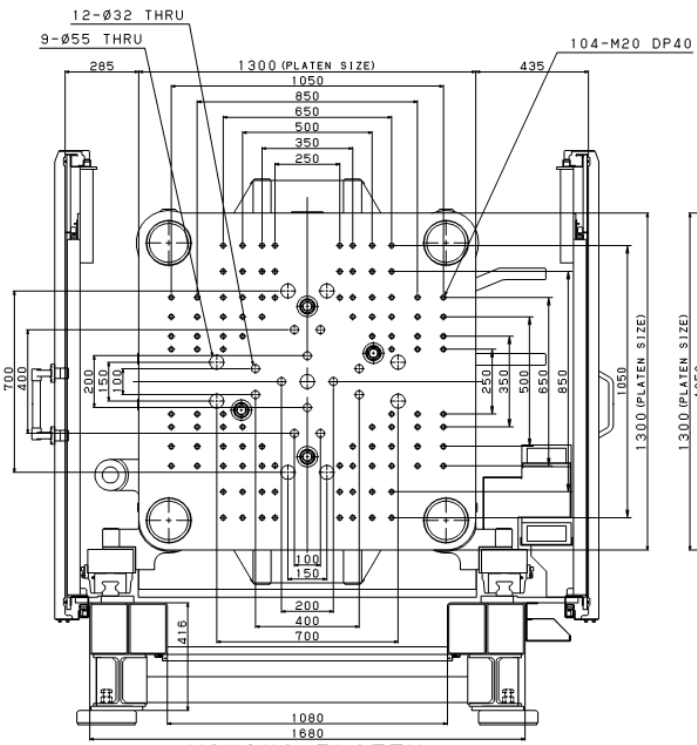




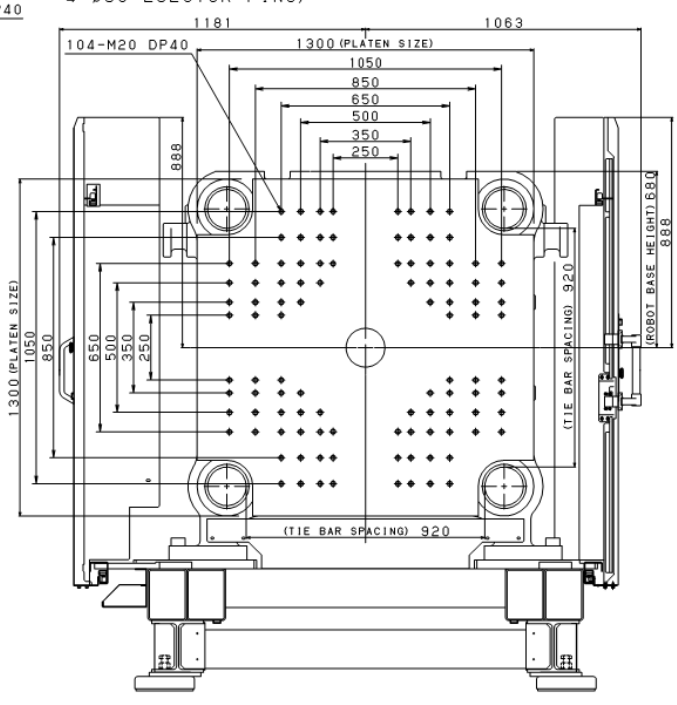
ROBOT MOUNTING SURFACE



(STANDARD ACCESSORY
4-Ø30 EJECTOR PINS AND
4-Ø50 EJECTOR PINS)



MOVING PLATEN



STATIONARY PLATEN

Mechanical specifications

	Item			Unit	Data				
Clamping unit	Clamping mechanism			---	Double toggle				
	Tonnage			kN	Standard 4500 (450tonf) / Increased 5000 (500tonf) [Option]				
	Maximum and minimum die height			mm	Double platen 1000 - 350				
	Clamping stroke			mm	900				
	Locating ring diameter			mm	φ150				
	Tie bar spacing (H×V)			mm	920 × 920				
	Platen size (H×V)			mm	1300 × 1300				
	Minimum mold size (H×V)		*1	mm	535 × 535				
	Maximum mold weight (Moving-Stationary)		*2	kg	Double platen 4500 - 4500				
	Ejector stroke			mm	250				
	Maximum ejector force			kN	150 (15tonf)				
Injection unit	Screw diameter			mm	68	72	80	90	100
	Injection stroke			mm	300	320	360	360	360
	Maximum injection volume		*3	cm³	1090	1303	1810	2290	2827
	Inj.speed 180mm/s	Max. inj. prs.(W/C)	*4 *6	MPa	280	280	250	200	160
		Max. inj. prs.(General Purpose)	*4 *7	MPa	280	280	250	200	160
		Maximum injection rate	*5	cm³/s	653	732	904	1145	1413
		Maximum injection speed	*5	mm/s	180				
		Maximum screw rotation speed		min⁻¹	200				
	Nozzle touch force / Increased		*8	kN	30 (3tonf) / 50 (5tonf) [Option]				
	Screw & Barrel	Number of pyrometers		Barrel	Nozzle adaptor 1 + Barrel 4				
				Nozzle	1				
		Total heater wattage		kW	29.3	31.3	32.1	36.1	39.3
Machine Weight			*9	t	Approx. 29.7				

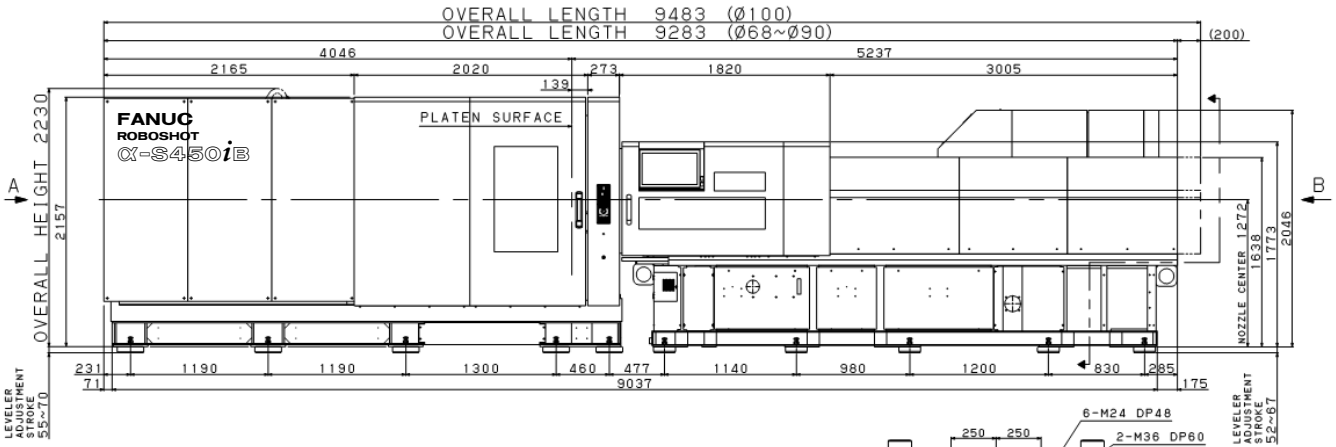
*1 Smaller mold than this size may limit clamp force.
*2 If the weight of a mold exceeds maximum mold weight, the molding condition may be limited.
*3 The maximum injection volume is a calculated value. (Cross-sectional area x injection stroke)
*4 Maximum pack pressure is equal to maximum injection pressure. Maximum injection pressure and maximum pack pressure are the output of the injection unit, not the resin pressure. Maximum injection pressure and maximum pack pressure are the maximum values
*5 Maximum injection rate and maximum injection speed is a theoretical value. Maximum injection rate and maximum injection speed can not be guaranteed when the injection pressure is maximum.
*6 Maximum injection pressure(W/C) are the values when the wear-resistant and anti-corrosion Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.
*7 Maximum injection pressure (General Purpose) are the values when the general purpose Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.
*8 Sprue break cannot be used with increased nozzle touch force option.
*9 The machine weight is the value when the option is not installed. Total weight may vary depending on equipment.
*10 The pressure conversion is 1MPa=10kgf/cm².
*11 The molding condition might be limited by the resin.(Contact sales for detail)
*12 In case of the replacement to different screw diameter after shipment, some covers may be needed to replace. (Contact sales for detail)

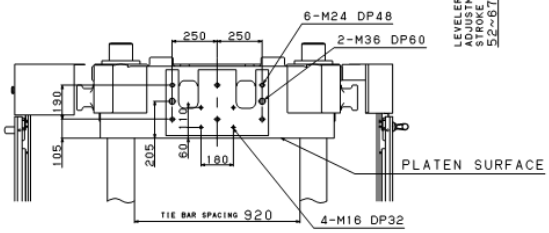
Installation conditions

Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker *13	Inj.speed 180mm/s	500A (With peripheral devices) *14 250A (With no peripheral device) *14
Ground		Follow relevant laws and standards of the country where the machine is installed when performing grounding.
Installing environment	Temperature	0～40℃ (20～25℃ recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

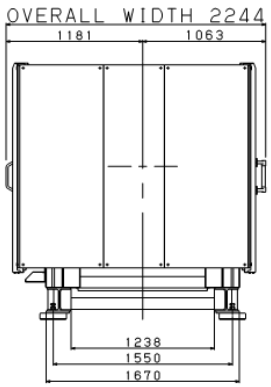
*13 Connect power cable to the machine's main breaker directly. The breaker is ground fault type with 100mA of sensitivity.
*14 With peripheral devices : When the molding machine equiped "External outlet", "Mold heater controller" or "Integrated hotrunner controller". ("Mold heater controller" and "Intefrated hotrunner controller" cannot be selected simultaneously.)
With no peripheral device : When only the molding machine is used.

All specifications are subject to change without notice.

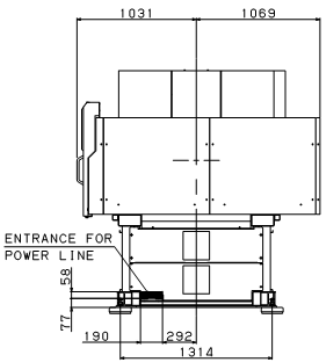




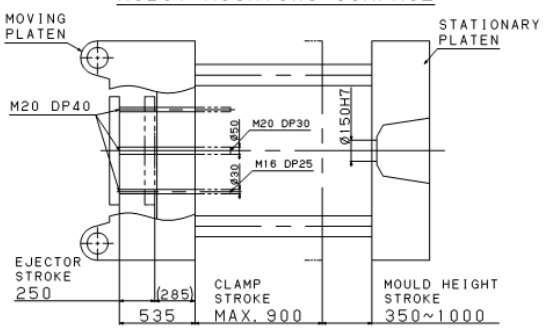
ROBOT MOUNTING SURFACE



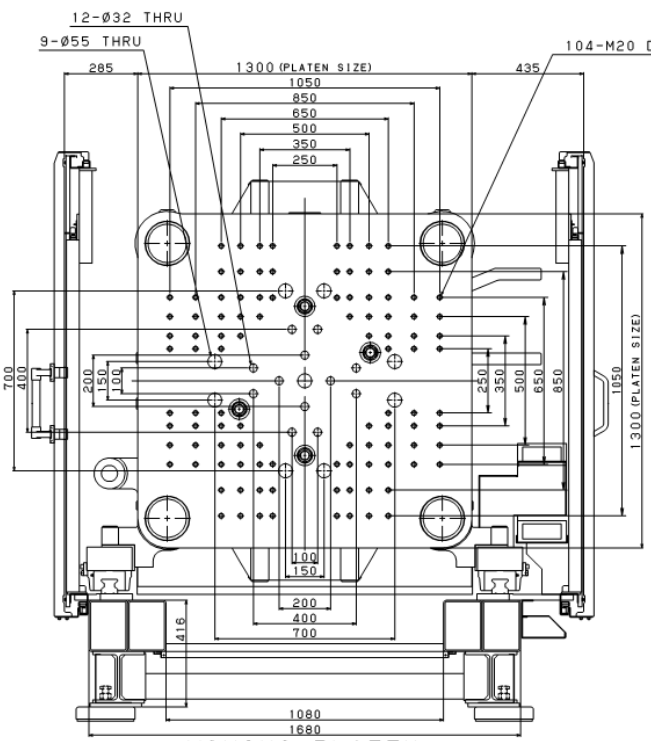
VIEW FROM A



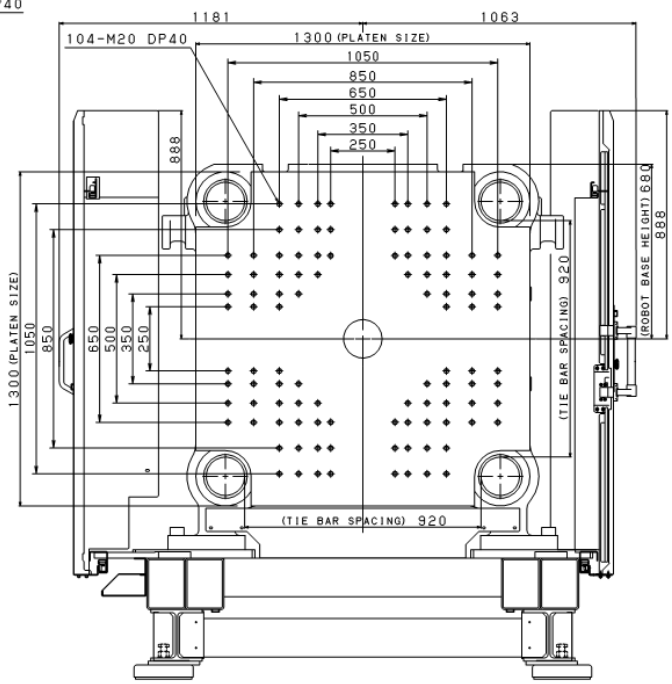
VIEW FROM B



(STANDARD ACCESSORY
4-Ø30 EJECTOR PINS AND
4-Ø50 EJECTOR PINS)



MOVING PLATEN



STATIONARY PLATEN