

**Customers' Value Up**

*TOYO'S High Performance Model Pursuing Multi-Functionality, Inheriting The Features Of The Si Series, And Equipped The Latest IoT And Control Technology.*

# **SI-7** *series*

**TOYO**  
MACHINERY & METAL

USA Version

# Versatile Molding Machine

## Versatile, multi-purpose molding on a single injection molding machine

TOYO's high performance model pursuing multi-functionality, inheriting the features of the Si series, and equipped the latest IoT and control technology.



### Series lineup

- Si-55-7
- Si-90-7
- Si-110-7
- Si-150-7
- Si-200-7
- Si-250-7
- Si-300-7
- Si-400-7
- Si-500-7
- Si-610-7
- Si-750-7
- Si-940-7
- Si-1050-7
- Si-1430-7

01

### Improved Basic Performance

(Enhanced mold clamping performance)

Linear guide equipped

Increased mold clamping accuracy

Expanded daylight

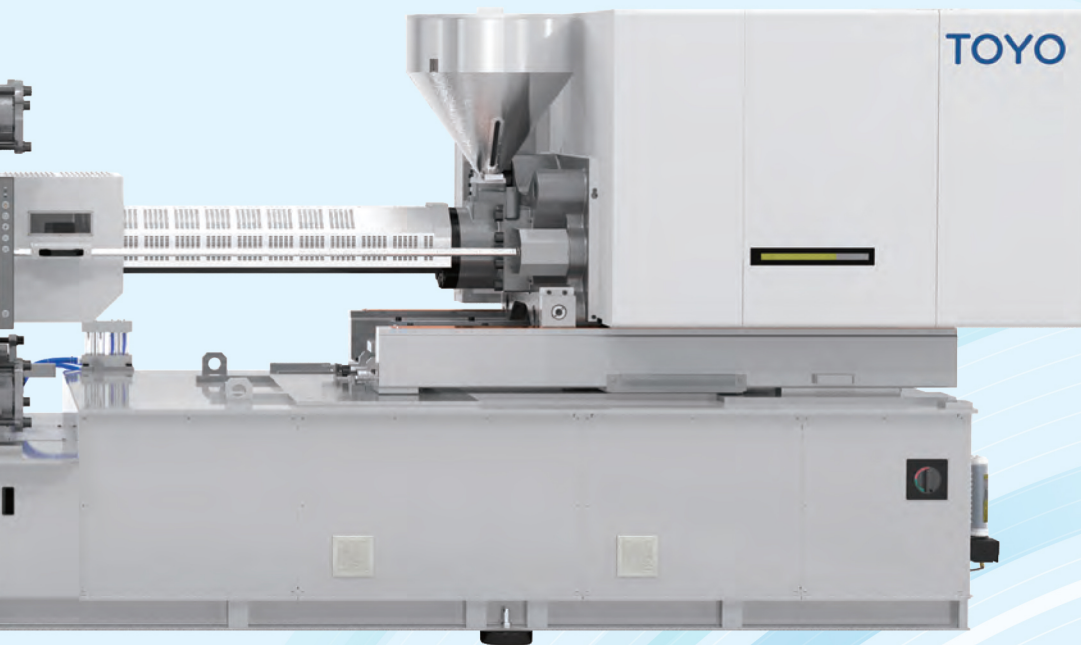
For large-sized mold

Optimum mold clamping force

Continuous monitoring system equipped



# SI-7 series



## 02 Improved operability

### New control system

SYSTEM800 SE equipped



## 03 SDGs

### Environmentally friendly

Using PLASTAR GREASE,  
90% reduction in grease consumption<sup>※</sup>

<sup>※</sup> Compared to our products

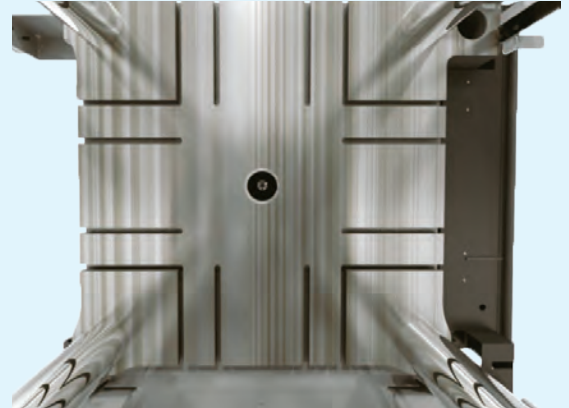
## Mold Clamping Mechanism

### High accuracy, high rigidity mold clamping mechanism

To accommodate one-size larger mold

#### High accuracy, high rigidity mold clamping mechanism

	Si-55-7	Si-90-7	Si-110-7
Maximum mold thickness	14.96 ▶ 18.50	16.14 ▶ 20.07	20.08 ▶ 21.65
Tie-bar spacing	—	—	—
	Si-250-7	Si-610-7	
Maximum mold thickness	26.77 ▶ 27.55	35.43	
Tie-bar spacing	24.02 ▶ 25.98	38.18	

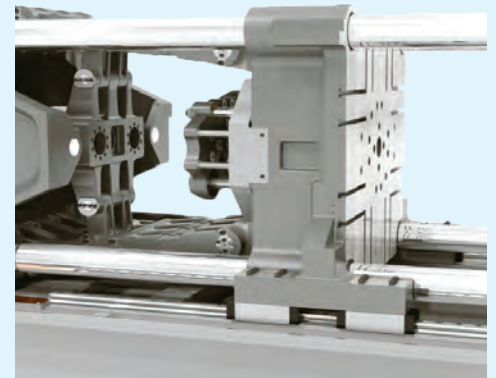
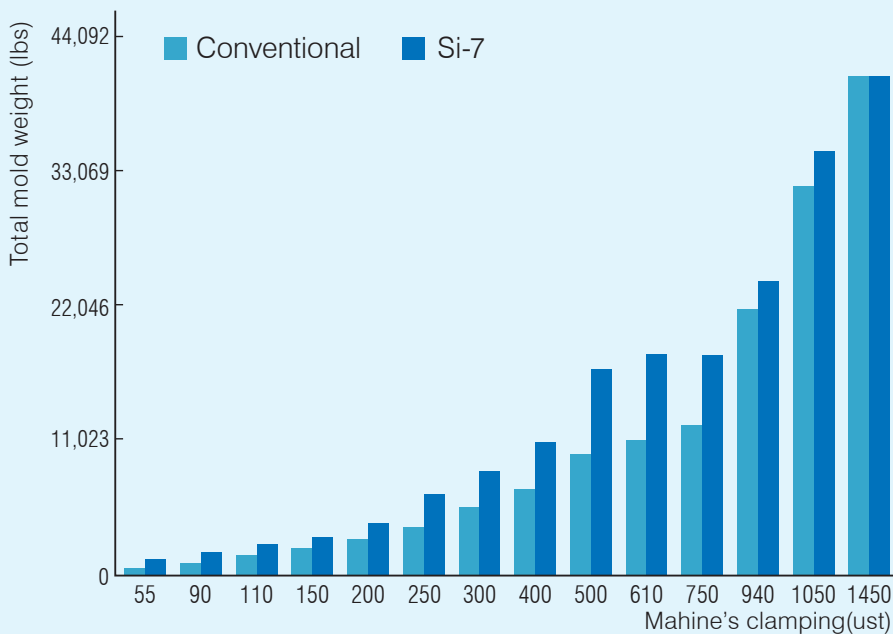


The expansion of the daylight and the widening of the tie-bar spacing have increased the flexibility of mold installation. The increased space also allows for more flexibility in considering mold setup devices, contributing to the improvement of customer production efficiency.

### Linear guides provided at the feet of movable components

Optimized shapes of stationary and movable die platens

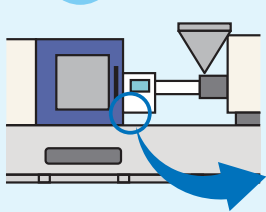
#### Comparison of installable total mold weight



Linear guides are now standard equipment for mold clamping devices up to Si-500-7. Enhanced rigidity of the mold running surface assures maintaining long-term accuracy and has increased the weight of the installable movable mold platen by an average of 50%.

# Basic Performance

## Mold clamping force sensor provided as standard



**Maintain and improve productivity**

- Management of molding stability
- Prevent overload
- Prevent molding defects

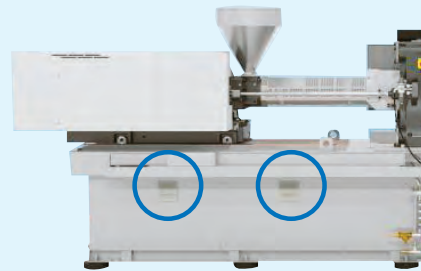
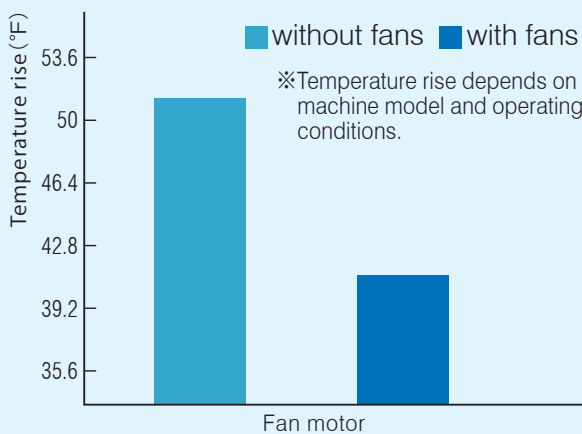
CLAMP POS.	0.000	in
MOLD HEIGHT	5.907	in
NOZZLE	0.000	in
CLAMP FORCE	110	s.t
CLAMP FORCE	0	s.t
RANGE	6	s.t
FORCE ADJUST IN AUTO	OFF	

The mold clamping force sensor is equipped as standard, which can be utilized for monitoring mold clamping force during molding and automatic correction to achieve proper clamping force. It serves as an indicator for managing molding stability, and it contributes to maintaining and improving production efficiency by preventing excessive clamping force that may overload the mold and molding machine, as well as avoiding molding defects due to insufficient clamping force. Furthermore,

by positioning the clamping force sensor on the fixed platen without interference with the movable platen during mold opening and closing, we have alleviated the limitations on the size of molds that can be installed, as traditionally imposed.

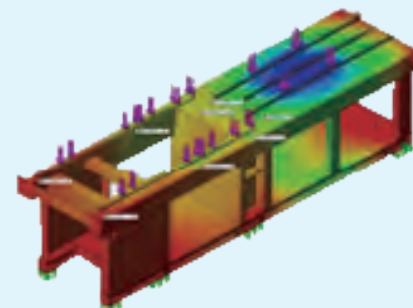
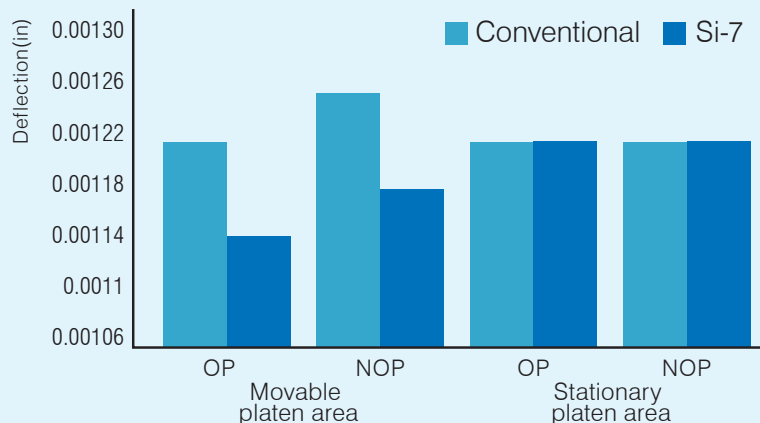
## Increased cooling function in control panel area Standard

### ● Example of servo amplifier ambient temperature comparison



The optimized positioning of the cooling fans in the control panel area suppresses the rise in temperature within the panel. In high-load situations such as high-cycle molding or high temperature environments, it is possible to enhance cooling capacity by adding additional cooling fans (Optional). (We will provide a special option based on the customer's molding conditions and environment.)

## Machine base rigidity further improved



With the increase in the installable mold size, a high-rigidity frame has been adopted to enhance load-bearing performance. This minimizes the deflection of the frame, directly contributing to the precision of molded products.

New control system

## SYSTEM800 SE

The new HMI is a state-of-the-art next generation control system that incorporates four concepts.

Visibility

Functionality

Convenience

Maintainability



## Visibility

### Sophisticated screen design and operability

#### Larger calculator



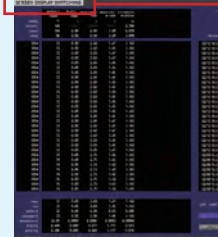
**SYSTEM800**  
Conventional calculator



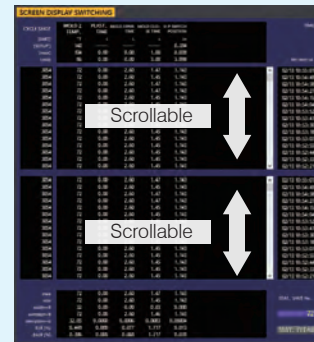
**SYSTEM800 SE**  
Bigger-size calculator

The calculator on the HMI is large and easy to type on, and the monitor display can be divided into two sections, etc., so that operability has been improved.

#### Monitor list split display



Split display is available when you want to compare the past and current values on the monitor display.  
©Scrolling is possible for each of the upper and lower displays.

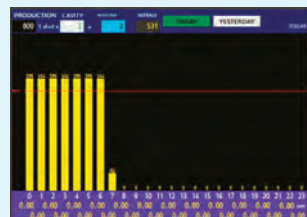


Data section 1  
Data section 2

### Visualization of machine status

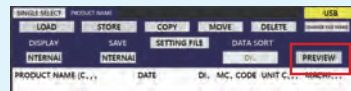
No.	DATE	CYCLE COUNT	ENERGY COUNT
1	2023-11-02 (THU)	0	0.00
2	2023-11-02 (THU)	0	0.00
3	2023-11-06 (MON)	0	0.00
4	2023-11-07 (TUE)	0	0.00
5	2023-11-08 (WED)	0	0.00
6	2023-11-09 (THU)	0	0.00

Displayable operation status for the past 5 years.



Graphical representation of machine operation status for a more visual understanding of the situation.

### Condition review display



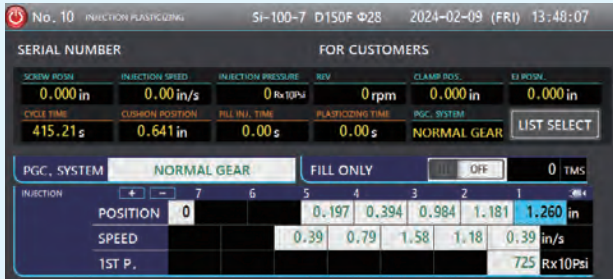
※Differences with the current conditions are identified by highlighting them in green.



During automatic operation, it is possible to display experienced molding conditions for the same product. By comparing the current conditions with those and observing the difference, it provides support in finding suitable condition settings.

# Functionality

## S-TMC system (Molding drive mode)



- ⑤ **5-Molding drive modes available**  
Easily switchable between molding modes.
- ⑤ **Directly changeable motor control characteristics**  
It provides the best condition specialized for various molding categories by directly changing motor control characteristics.
- ⑤ **Classified into commonly used molding categories**  
Capable of molding like hydraulic machines.

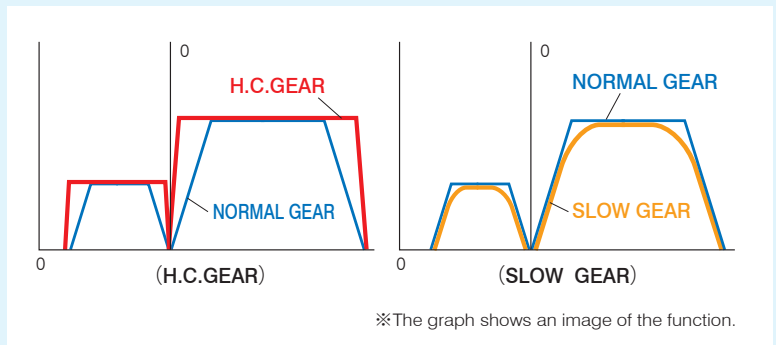
**NORMAL GEAR** Normal mode

**H.C. GEAR** Mode suitable for high cycle molding

**SPEED GEAR** Mode suitable for high cycle molding of thin-wall products, etc.

**L.FIBER GEAR** Mode suitable for long-fiber-contained resin molding

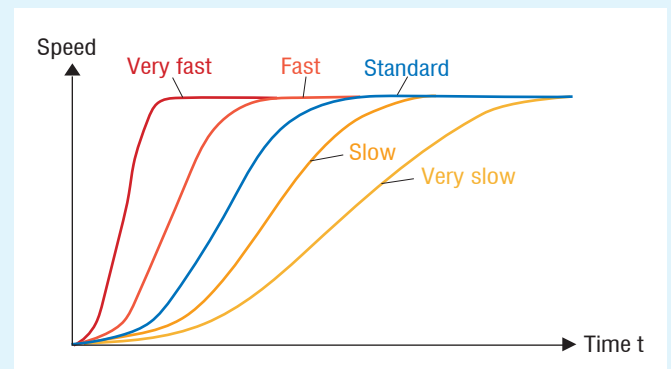
**SLOW GEAR** Mode suitable for low acceleration/low deceleration molding, similar to hydraulic machines



Various molding drive modes, enabling molding similar to dedicated machines, have been incorporated. High-cycle molding, long-fiber resin molding, thin-wall molding, and other drive modes provide appropriate machine characteristics tailored to the molded product. Each mode comes with pre-optimized baseline settings for motor characteristics. This facilitates support for reducing defective products without the need for complex operations.

## V + α mode

- Very fast** Acceleration time is reduced to 1/4 of the standard speed for more agile operation.
- Fast** Acceleration time is reduced to 1/2 of the standard acceleration time for agile operation.
- Standard** Acceleration is made with standard acceleration time.
- Slow** Acceleration time is doubled from the standard and acceleration is slow.
- Very slow** Acceleration time is 4 times longer than standard and acceleration is even slower.



On the acceleration side, the conventional 3-mode system has been stepped up to 5-mode. The approach to the molded product can be selected in detail. In addition, elevated expertise gained from previous machines, further nuanced changes have been incorporated.

(Note: V + α mode is available only in AUTOMATIC and MANUAL operation modes.)

## Convenience

### “meltcon<sup>®</sup>”/automatic resin viscosity adjustment **Standard**

#### The well established meltcon<sup>®</sup> is now standard

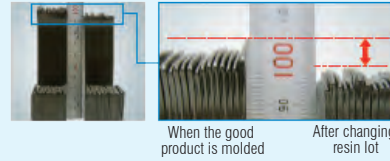
meltcon is a program software designed to manage and adjust the melting state of resin from the perspective of resin viscosity, which varies due to environmental changes such as resin manufacturing batches, drying conditions, the content of crushed material, and the replacement of plasticizing components. This software contributes to improving product yield by addressing fluctuations in the resin's melting state.

#### Features of meltcon<sup>®</sup>

By pre-setting the resin viscosity that serves as the standard for quality, the heat barrel temperature is automatically adjusted to align with the set value. This eliminates the need for manual condition changes by operators on a case-by-case basis.

#### ● Example of meltcon<sup>®</sup> effects

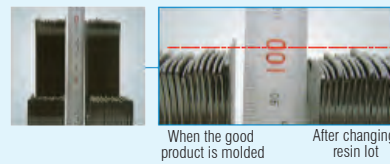
##### Ordinary molding



Differences occurred in flow length

Good molding cannot be done under the same conditions.

##### Molding with meltcon<sup>®</sup>



Good molding can be done under the same conditions.

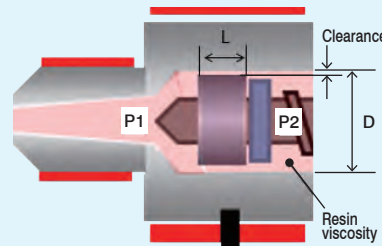
Product : Spiral flow Material: PC

Comparison method : Resume molding with resins from a different manufacturing batch while maintaining the molding conditions used for defect-free molding. Compare the flow length before and after this resin change.

### Check ring wear diagnosis function **New function**

#### ● You can check past diagnostic results.

WEAR CHECK MEASUREMENT RESULT		WEAR CHECK SETTING ITEMS		MEASURE	
ESTIMATED EXCHANGE DATE		UPPER WEAR VALUE 0.0000 in		AMOUNT WEAR in	
LIFETIME EXPECTANCY RESET		WEAR DIAGNOSIS RESULTS			
NO.	DATE / TIME	AMOUNT WEAR			
		Injection measurement position 1	0.000 in		
		Injection measurement position 2	0.000 in		
		LEAK SPEED	0.000 mm/s		
		AMOUNT WEAR	0.00000 in		
		UPPER WEAR VALUE	0.00000 in		



※A separate nozzle block may be required depending on the circumstances.

Using meltcon<sup>®</sup>, the viscosity of the resin is measured and quantified. Utilizing the quantified information, we employ a proprietary analysis process to determine the amount of wear of the check ring. This not only helps understand the timing for maintenance but also proves beneficial for production management.

### Peripheral equipment-linked operation management function **New function**

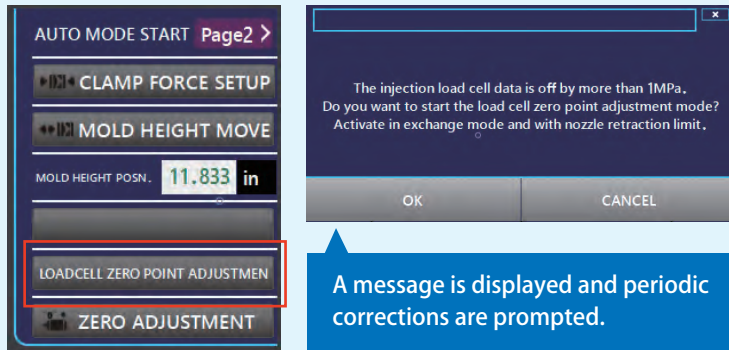
SELECTION OF OPTION					
OUTPUT PORT	USE	SELECT	DELAY	OUTPUT SIGNAL	FORCE OUTPUT
OPTION PORT 1	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 2	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 3	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 4	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 5	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 6	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 7	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 8	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 9	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 10	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 11	N_OPEN	0.00 s	NONE	0 0 0	
OPTION PORT 12	N_OPEN	0.00 s	NONE	0 0 0	

It is possible to regulate the operation of the molding machine based on signal inputs from devices outside the molding machine.

Synchronization with peripheral equipment is achievable, proving beneficial for production and operational management. By utilizing spare input ports and constructing a new interface, linked operation can be made with peripheral devices.

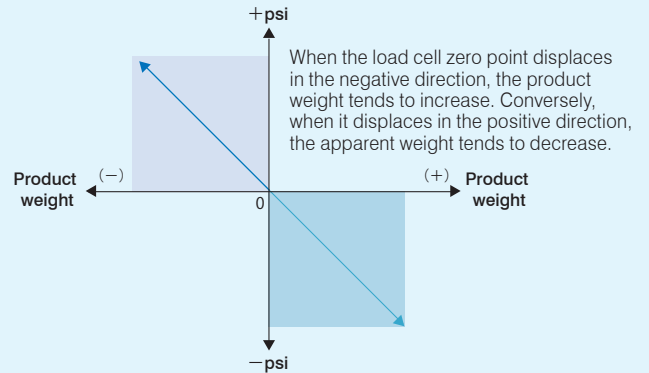


# Zero-point automatic correcting function of injection load cell



A message is displayed and periodic corrections are prompted.

## Image of weight variation



This is a feature to maintain the accuracy of injection pressure and back pressure, which are crucial factors in the molding process. Upon completion of the heat barrel's temperature rise, the system checks the load cell values. If it detects a deviation beyond a certain threshold, it prompts a "Load Cell Zero Adjustment" through a pop-up display. By monitoring injection pressure, which is directly linked to molding defects, it helps reduce the burden during defect analysis.

## User authentication by card reader

*New function*



To make it easy to log in to the molding machine, basic software for card authentication is provided as a standard feature. User and login level information can be written.

※Card readers need to be purchased separately.

## HELP function



A "Retrieve Detailed Information Instantly" button is provided for your convenience. By clicking this button, the relevant page of the Operation Manual will open without the need to switch screens.

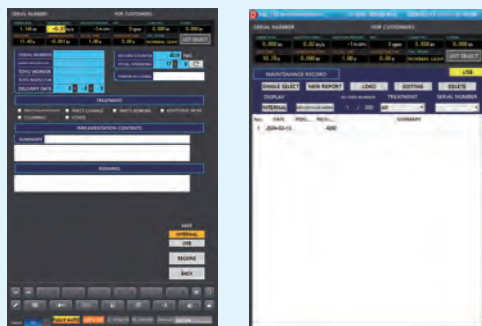
# Maintainability

## Maintenance record function

*New function*



※You can input data while communicating with our technical personnel.



It is possible to record the maintenance history directly on the machine. Without the need to check documents managed in the office, you can promptly access and verify the machine's maintenance information on the spot. This enables swift responses, facilitating smooth communication with service personnel and contributing to the reduction of downtime in resolving issues.

Data can be output to USB for management in the office.

## Environmental Responses

### Improved accuracy of power consumption display

(Total accumulated power consumption display)



You can check the total accumulated power consumption on the HMI.

External watt-hour meter

The control system has been revised to minimize differences between actual power consumption and display. The addition of the lock torque at motor stoppage during pressure holding process, etc. enables a more precise power consumption calculation without using a dedicated external watt-hour meter.

### 90% reduction in grease supply volume with our proprietary PLASTAR GREASE and lubricant-saving design



Mode	Temperature range	Lubrication frequency
A (standard)	up to 77°F	Once in 20,000 cycles
B	77 - 95°F	Once in 14,000 cycles
C	95 - 113°F	Once in 8,000 cycles
D	113°F or higher	Once in 5,000 cycles

※The lubrication frequency varies depending on the mode you choose.

The grease lubrication frequency is automatically adjusted according to the machine's ambient temperature.

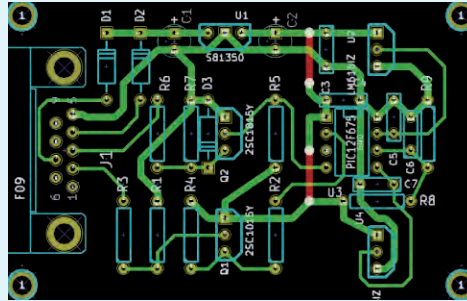
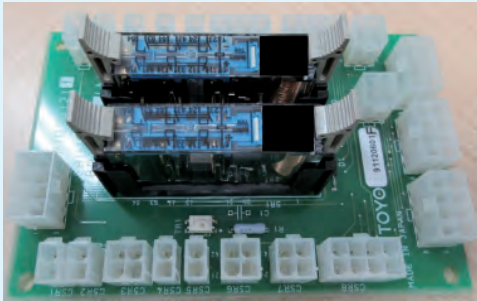
By supplying the appropriate amount of grease, maintenance is reduced.

- Cost reduction by less grease supply volume.
- Decreased labor costs and improved maintainability due to reduced frequency of grease supply.
- Reduction in grease scattering, leading to a decrease in defects.
- Improved factory environment.

Along with a low lubricant design that reduces the required amount of lubricating oil for sliding parts, we have adopted the PLASTAR GREASE B3 No.2, which excels in heat resistance, adhesiveness, durability, and wear resistance, optimized for injection molding machines. As a result, the grease supply volume can be reduced to approximately 1/10 of the conventional amount.

# – Safety/SDGs/Consideration for environment –

## Adoption of SRU-I/F board



This circuit has been developed with the goal of ensuring operator safety. We have developed a high-quality, stable safety circuit by consolidating the wiring of each part and optimizing the system. The reduction of wiring, components, and size is an environmentally friendly new approach.

## Environmental responsiveness (Adoption of biomass plastic parts)

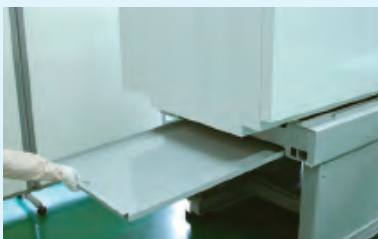


The machine base accessory compartment has a handle made of bio-plastic. We have developed an environmentally friendly machine.

Com position: PP/49%, starch/51%  
Total CO<sub>2</sub> reduction rate: 34.5% compared to 100% PP

## Easy disposal of waste grease

● Waste grease pan (Mold clamping unit)



● Below mold clamping unit (Injection unit)



Removable waste grease pans are provided below injection unit and mold clamping unit respectively to keep the working environment clean and to simplify waste grease disposal.

# ***Si-7*** series

## **Specifications**



# PLASTAR Si-55-7 Specifications

Injection	Screw diameter	in (mm)	0.62 (16)	0.70 (18)	0.78 (20)	0.78 (20)	0.94 (24)	1.10 (28)	0.78 (20)	0.94 (24)	1.10 (28)	0.94 (24)	1.10 (28)	1.25 (32)	
	Injection stroke	in	2.51	2.83	2.83	2.83	3.77	3.77	2.83	3.77	4.40	3.77	4.40	4.40	
	Theoretical injection capacity	in <sup>3</sup>	0.78	1.11	1.38	1.38	2.65	3.60	1.38	2.65	4.20	2.65	4.20	5.49	
	Injection unit	–	B55FA			–			D75FA			D150FA			
	Max. injection speed	in/s	13.77			–			11.81			13.77			
	Injection rate	in <sup>3</sup> /s	4.29	5.44	6.71	–	–	–	5.75	8.28	11.27	9.66	13.15	17.18	
	Max. injection pressure	psi	34230	34230	29150	–	–	–	39890	34230	26540	39890	34230	26400	
	Max. injection holding pressure	psi	34230	31330	28430	–	–	–	39890	28430	21320	39890	25670	21320	
	Injection unit	–	BH150FA			CH300FA			D150HFA			DH300FA			
	Max. injection speed	in/s	27.55			27.55			19.68			19.68			
	Injection rate	in <sup>3</sup> /s	8.59	10.87	13.42	13.42	19.32	26.30	9.59	13.80	18.79	13.80	18.79	24.54	
	Max. injection pressure	psi	36980	36980	34230	36980	34230	26540	34230	31330	22770	39890	34230	26400	
	Max. injection holding pressure	psi	36980	31330	28430	34230	28430	21320	31330	28430	20740	39890	25670	21320	
	Recovery rate (PS)	oz/s	0.10	0.14	0.17	0.13	0.26	0.40	0.13	0.26	0.40	0.26	0.40	0.58	
	Screw revolution speed	min <sup>-1</sup>	500			350			350			350			
	Heater capacity	kW	1.98	2.28	2.58	2.58	3.45	5.5	2.58	3.45	5.5	3.45	5.5	5.85	
	Nozzle pressing force	U.S ton	1.10			2.20			2.20			2.20			
	Clamping	Clamping system	–	Double toggle											
		Clamping force	U.S ton	55											
Clamping stroke		in	10.62												
Min. mold height		in	5.90												
Max. mold height		in	18.50												
Tie bar clearance (H × V)		in	14.17 x 14.17												
Die plate size (H × V)		in	19.68 x 19.68												
Ejector force		U.S ton	2.15												
Ejector stroke		in	2.75												
Others	Machine dimensions (L) < > : DH300FA	in	136.70	136.70	136.70	140.08	142.88	146.66	136.70	138.55	142.33	138.55 <140.40>	142.33 <144.18>	146.30 <148.15>	
	Machine dimensions (W × H) < > : DH300FA	in	40.71 × 65.75			42.01 × 65.75			40.71 × 65.75			40.71 × 65.75 <42.01 × 65.75>			
	Power source	–	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz												
	Main breaker capacity	A	B55FA: 75 【50】 BH150FA:100 【50】			CH300FA:150 【100】			D75FA: 75 【50】 D150HFA:100 【50】			D150FA:100 【50】 DH300FA:150 【100】			
	Total electric capacity	kVA	B55FA:9 BH150FA:25			CH300FA:45			D75FA:14 D150HFA:24			D150FA:25 DH300FA:45			
	Incoming supply wire size	in <sup>2</sup>	B55FA:0.034 【0.022】 BH150FA:0.059 【0.022】			CH300FA:0.093 【0.059】			D75FA:0.034 【0.022】 D150HFA:0.059 【0.022】			D150FA:0.059 【0.022】 DH300FA:0.093 【0.059】			
	Protective earthing wire size	in <sup>2</sup>	B55FA:0.034 【0.022】 BH150FA:0.034 【0.022】			CH300FA:0.059 【0.034】			D75FA:0.034 【0.022】 D150HFA:0.034 【0.022】			D150FA:0.034 【0.022】 DH300FA:0.059 【0.034】			
	Machine weight	U.S ton	2.8			2.9			2.9			2.9			
	Noise (L <sub>pk</sub> )	dB	69.3 dB												

## Note

- The information in this document is subject to change without any legal obligation on the part of the manufacture.
- Maximum injection and holding pressures are attainable maximum set values.
- Maximum injection and holding pressures may be limited by the molding conditions and the cycle time.
- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-90-7 Specifications

Injection	Screw diameter	in (mm)	0.78 (20)	0.94 (24)	1.10 (28)	0.78 (20)	0.94 (24)	1.10 (28)	0.94 (24)	1.10 (28)	1.25 (32)	1.10 (28)	1.25 (32)	1.41 (36)	1.57 (40)		
	Injection stroke	in	2.83	3.77	3.77	2.83	3.77	4.40	3.77	4.40	4.40	4.4	5.03	5.66	6.29		
	Theoretical injection capacity	in <sup>3</sup>	1.38	2.65	3.60	1.38	2.65	4.20	2.65	4.20	5.49	4.20	6.28	8.94	12.26		
	Injection unit	–	–			D75FA			D150FA			F75FA					
	Max. injection speed	in/s	–			11.81			13.77			5.90					
	Injection rate	in <sup>3</sup> /s	–	–	–	5.75	8.28	11.27	9.66	13.15	17.18	5.64	7.36	9.32	11.50		
	Max. injection pressure	psi	–	–	–	39890	34230	26540	39890	34230	26400	39890	34230	27850	22770		
	Max. injection holding pressure	psi	–	–	–	39890	28430	21320	39890	25670	21320	39890	31330	24950	20020		
	Injection unit	–	–			–			–			F200HFA					
	Max. injection speed	in/s	–			–			–			13.77					
	Injection rate	in <sup>3</sup> /s	–	–	–	–	–	–	–	–	–	13.15	17.18	21.74	26.84		
	Max. injection pressure	psi	–	–	–	–	–	–	–	–	–	39890	36260	28430	23500		
	Max. injection holding pressure	psi	–	–	–	–	–	–	–	–	–	39890	32780	25670	20740		
	Clamping	Injection unit	–	CH300FA			D150HFA			DH300FA			F200FA				
Max. injection speed		in/s	27.55			19.68			19.68			–	8.26				
Injection rate		in <sup>3</sup> /s	13.42	19.32	26.30	9.59	13.80	18.79	13.80	18.79	24.54	–	10.31	13.04	16.10		
Max. injection pressure		psi	36980	34230	26540	34230	31330	22770	39890	34230	26400	–	38290	36260	31330		
Max. injection holding pressure		psi	34230	28430	21320	31330	28430	20740	39890	25670	21320	–	38290	36260	27120		
Recovery rate (PS)		oz/s	0.13	0.26	0.40	0.13	0.26	0.40	0.26	0.40	0.58	0.40	0.58	0.79	0.99		
Screw revolution speed		min <sup>-1</sup>	350			350			350			350					
Heater capacity		kW	2.58	3.45	5.5	2.58	3.45	5.5	3.45	5.5	5.85	5.5	5.85	6.5	7.95		
Nozzle pressing force		U.S ton	2.20			2.20			2.20			2.75					
Clamping system		–	Double toggle														
Clamping force		U.S ton	90														
Clamping stroke		in	12.59														
Min. mold height		in	5.90														
Max. mold height		in	20.07														
Tie bar clearance (H × V)	in	16.14 x 16.14															
Die plate size (H × V)	in	22.83 x 22.83															
Ejector force	U.S ton	2.75															
Ejector stroke	in	3.14															
Others	Machine dimensions (L) < > : DH300FA	in	155.67	155.67	155.79	155.67	155.67	155.67	155.67	155.67	155.67	155.67	155.67	155.67	155.67	155.67	
	Machine dimensions (W × H) < > : DH300FA	in	43.86 × 66.03			43.35 × 66.03			43.35 × 66.03			43.35 × 66.03			47.52 × 66.03		
	Power source	–	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz														
	Main breaker capacity	A	CH300FA:150 【100】			D75FA: 75 【50】 D150HFA:100 【50】			D150FA:100 【50】 DH300FA:150 【100】			F75FA:100 【75】 F200HFA / F200FA:125 【75】					
	Total electric capacity	kVA	CH300FA:45			D75FA:14 D150HFA:24			D150FA:25 DH300FA:45			F75FA:28 F200HFA / F200FA:35					
	Incoming supply wire size	in <sup>2</sup>	CH300FA:0.093 【0.059】			D75FA:0.034 【0.022】 D150HFA:0.059 【0.022】			D150FA:0.059 【0.022】 DH300FA:0.093 【0.059】			F75FA:0.059 【0.034】 F200HFA / F200FA:0.093 【0.034】					
	Protective earthing wire size	in <sup>2</sup>	CH300FA:0.059 【0.034】			D75FA:0.034 【0.022】 D150HFA:0.034 【0.022】			D150FA:0.034 【0.022】 DH300FA:0.059 【0.034】			F75FA:0.034 【0.034】 F200HFA / F200FA:0.059 【0.034】					
	Machine weight	U.S ton	3.6			3.6			3.6			4.2					
Noise (L <sub>pA</sub> )	dB	68.7 dB															

## Note

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- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-110-7 Specifications

Injection	Screw diameter	in (mm)	0.78 (20)	0.94 (24)	1.10 (28)	0.78 (20)	0.94 (24)	1.10 (28)	0.94 (24)	1.10 (28)	1.25 (32)	1.10 (28)	1.25 (32)	1.41 (36)	1.57 (40)	
	Injection stroke	in	2.83	3.77	3.77	2.83	3.77	4.40	3.77	4.40	4.40	4.40	5.03	5.66	6.29	
	Theoretical injection capacity	in <sup>3</sup>	1.38	2.65	3.60	1.38	2.65	4.20	2.65	4.20	5.49	4.20	6.28	8.94	12.26	
	Injection unit	–	–			D75FA			D150FA			F75FA				
	Max. injection speed	in/s	–			11.81			13.77			5.90				
	Injection rate	in <sup>3</sup> /s	–	–	–	5.75	8.28	11.27	9.66	13.15	17.18	5.64	7.36	9.32	11.50	
	Max. injection pressure	psi	–	–	–	39890	34230	26540	39890	34230	26400	39890	34230	27850	22770	
	Max. injection holding pressure	psi	–	–	–	39890	28430	21320	39890	25670	21320	39890	31330	24950	20020	
	Injection unit	–	CH300FA			–			–			F200HFA				
	Max. injection speed	in/s	27.55			–			–			13.77				
	Injection rate	in <sup>3</sup> /s	13.42	19.32	26.30	–	–	–	–	–	–	13.15	17.18	21.74	26.84	
	Max. injection pressure	psi	36980	34230	26540	–	–	–	–	–	–	39890	36260	28430	23500	
	Max. injection holding pressure	psi	34230	28430	21320	–	–	–	–	–	–	39890	32780	25670	20740	
	Injection unit	–	CH450FA			D150HFA			DH300FA			F200FA				
	Max. injection speed	in/s	39.37			19.68			19.68			–	8.26			
	Injection rate	in <sup>3</sup> /s	–	27.61	–	9.59	13.80	18.79	13.80	18.79	24.54	–	10.31	13.04	16.10	
	Max. injection pressure	psi	–	42640	–	34230	31330	22770	39890	34230	26400	–	38290	36260	31330	
	Max. injection holding pressure	psi	–	32780	–	31330	28430	20740	39890	25670	21320	–	38290	36260	27120	
	Recovery rate (PS)	oz/s	0.13	0.26	0.40	0.13	0.26	0.40	0.26	0.40	0.58	0.40	0.58	0.79	0.99	
	Screw revolution speed	min <sup>-1</sup>	350			350			350			350				
Heater capacity	kW	2.58	3.45	5.5	2.58	3.45	5.5	3.45	5.5	5.85	5.5	5.85	6.5	7.95		
Nozzle pressing force	U.S ton	2.20			2.20			2.20			2.75					
Clamping	Clamping system	–	Double toggle													
	Clamping force	U.S ton	110													
	Clamping stroke	in	14.17													
	Min. mold height	in	5.90													
	Max. mold height	in	21.65													
	Tie bar clearance (H × V)	in	18.11 x 18.11													
	Die plate size (H × V)	in	24.80 x 24.80													
	Ejector force	U.S ton	2.73													
	Ejector stroke	in	3.93													
Others	Machine dimensions (L) < > : DH300FA, 《 》 : CH450FA	in	164.18	164.18 《164.26》	165.44	164.18	164.18	164.18	164.18	164.18	165.12 《166.97》	174.02	178.00	181.26	185.91	
	Machine dimensions (W × H) 《 》 : CH450FA	in	44.93 × 65.91 《44.93 × 66.54》			44.93 × 65.91			44.93 × 65.91			48.31 × 65.91				
	Power source	–	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz													
	Main breaker capacity	A	CH300FA:150 【100】 CH450FA:200 【100】			D75FA: 75 【50】 D150HFA:100 【50】			D150FA:100 【50】 DH300FA:150 【100】			F75FA:100 【75】 F200HFA / F200FA:125 【75】				
	Total electric capacity	kVA	CH300FA:45 CH450FA:53			D75FA:14 D150HFA:24			D150FA:25 DH300FA:45			F75FA:28 F200HFA / F200FA:35				
	Incoming supply wire size	in <sup>2</sup>	CH300FA:0.093 【0.059】 CH450FA:0.155【0.059】			D75FA:0.034 【0.022】 D150HFA:0.059 【0.022】			D150FA:0.059 【0.022】 DH300FA:0.093 【0.059】			F75FA:0.059 【0.034】 F200HFA / F200FA:0.093 【0.034】				
	Protective earthing wire size	in <sup>2</sup>	CH300FA:0.059 【0.034】 CH450FA:0.093 【0.034】			D75FA:0.034 【0.022】 D150HFA:0.034 【0.022】			D150FA:0.034 【0.022】 DH300FA:0.059 【0.034】			F75FA:0.034 【0.034】 F200HFA / F200FA:0.059 【0.034】				
	Machine weight	U.S ton	4.5			4.3			4.3			4.9				
	Noise (L <sub>9A</sub> )	dB	72.5 dB													

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- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140F and ambient temperature is 86F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-150-7 Specifications

Injection	Screw diameter	in (mm)	0.94 (24)	1.10 (28)	1.25 (32)	1.10 (28)	1.25 (32)	1.41 (36)	1.57 (40)	1.25 (32)	1.41 (36)	1.57 (40)	1.81 (46)
	Injection stroke	in	3.77	4.40	4.40	4.40	5.03	5.66	6.29	5.03	5.66	6.29	6.29
	Theoretical injection capacity	in <sup>3</sup>	2.65	4.20	5.49	4.20	6.28	8.94	12.26	6.28	8.94	12.26	16.22
	Injection unit	–	D150FA			F75FA				F200FA			
	Max. injection speed	in/s	13.77			5.90				8.26			
	Injection rate	in <sup>3</sup> /s	9.66	13.15	17.18	5.64	7.36	9.32	11.50	10.31	13.04	16.10	21.30
	Max. injection pressure	psi	39890	34230	26400	39890	34230	27850	22770	38290	36260	31330	24220
	Max. injection holding pressure	psi	39890	25670	21320	39890	31330	24950	20020	38290	36260	27130	21320
	Injection unit	–	DH300FA			F200HFA				FH400FA			
	Max. injection speed	in/s	19.68			13.77				19.68			
	Injection rate	in <sup>3</sup> /s	13.8	18.79	24.54	13.15	17.18	21.74	26.84	24.54	31.06	38.34	50.71
	Max. injection pressure	psi	39890	34230	26400	39890	36260	28430	23500	38290	36260	31330	24220
	Max. injection holding pressure	psi	39890	25670	21320	39890	32780	25670	20740	38290	36260	27120	21320
	Recovery rate (PS)	oz/s	0.26	0.40	0.58	0.40	0.58	0.79	0.99	0.58	0.79	0.99	1.50
	Screw revolution speed	min <sup>-1</sup>	350			350				350			
	Heater capacity	kW	3.45	5.5	5.85	5.5	5.85	6.5	7.95	5.85	6.5	7.95	11.20
Nozzle pressing force	U.S ton	2.20			2.75				2.75				
Clamping	Clamping system	–	Double toggle										
	Clamping force	U.S ton	150										
	Clamping stroke	in	15.74										
	Min. mold height	in	5.90										
	Max. mold height	in	21.65										
	Tie bar clearance (H × V)	in	20.07 x 20.07										
	Die plate size (H × V)	in	27.16 x 27.16										
	Ejector force	U.S ton	3.85										
	Ejector stroke	in	3.93										
Others	Machine dimensions (L) < > : FH400FA	in	177.76	177.76	177.76	180.47	184.45	187.72	192.34	184.45 <186.42>	187.72 <189.69>	192.34 <194.31>	199.15 <201.12>
	Machine dimensions (W × H)	in	50.85 × 68.58			50.85 × 68.58				50.85 × 68.58			
	Power source	–	3-phase AC200V±10% 50Hz / AC200V±10% 60Hz / AC230V±10% 60Hz										
	Main breaker capacity	A	D150FA:100 【50】 DH300FA:150 【100】			F75FA:100 【75】 F200HFA:125 【75】				F200FA:125 【75】 FH400FA:200 【125】			
	Total electric capacity	kVA	D150FA:25 DH300FA:45			F75FA:28 F200HFA:35				F200FA:37 FH400FA:58			
	Incoming supply wire size	in <sup>2</sup>	D150FA:0.059 【0.022】 DH300FA:0.093 【0.059】			F75FA:0.059 【0.034】 F200HFA:0.093 【0.034】				F200FA:0.093 【0.034】 FH400FA:0.155 【0.093】			
	Protective earthing wire size	in <sup>2</sup>	D150FA:0.034 【0.022】 DH300FA:0.059 【0.034】			F75FA:0.034 【0.034】 F200HFA:0.059 【0.034】				F200FA:0.059 【0.034】 FH400FA:0.093 【0.059】			
	Machine weight	U.S ton	5.6			6.2				6.2			
Noise (L <sub>pA</sub> )	dB	74.8 dB											

## Note

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- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.



# PLASTAR Si-200-7 Specifications

Injection	Screw diameter	in (mm)	1.10 (28)	1.25 (32)	1.41 (36)	1.57 (40)	1.25 (32)	1.41 (36)	1.57 (40)	1.81 (46)	1.41 (36)	1.57 (40)	1.81 (46)	1.96 (50)	1.57 (40)	1.81 (46)	1.96 (50)	2.16 (55)
	Injection stroke	in	4.40	5.03	5.66	6.29	5.03	5.66	6.29	6.29	5.66	6.29	7.24	7.87	6.29	7.24	7.87	8.66
	Theoretical injection capacity	in <sup>3</sup>	4.20	6.28	8.94	12.26	6.28	8.94	12.26	16.22	8.94	12.26	18.66	23.96	12.26	18.66	23.96	31.89
	Injection unit	–	F75FA				F200FA				G300FA				H300FA			
	Max. injection speed	in/s	5.90				8.26				9.44				8.26			
	Injection rate	in <sup>3</sup> /s	5.64	7.36	9.32	11.50	10.31	13.04	16.10	21.30	14.91	18.40	24.34	28.76	16.10	21.30	25.16	30.45
	Max. injection pressure	psi	39890	34230	27850	22770	38290	36260	31330	24220	36260	35390	27410	23210	35390	31330	27120	22770
	Max. injection holding pressure	psi	39890	31330	24950	20020	38290	36260	27120	21320	36260	32920	24950	21030	35390	28430	24220	20020
	Injection unit	–	F200HFA				–				G370FA				H370FA			
	Max. injection speed	in/s	13.77				–				12.99				7.87			
	Injection rate	in <sup>3</sup> /s	13.15	17.18	21.74	26.84	–	–	–	–	20.5	25.31	33.47	39.54	15.34	20.28	23.96	29
	Max. injection pressure	psi	39890	36260	28430	23500	–	–	–	–	36260	35390	27410	23210	35390	33790	34080	28430
	Max. injection holding pressure	psi	39890	32780	25670	20740	–	–	–	–	36260	32920	24950	21030	35390	33790	31330	25670
	Injection unit	–	–				FH400FA				–				H450FA			
	Max. injection speed	in/s	–	–	–	–	19.68				–	–	–	–	11.81			
	Injection rate	in <sup>3</sup> /s	–	–	–	–	24.54	31.06	38.34	50.71	–	–	–	–	23.01	30.42	35.95	43.49
	Max. injection pressure	psi	–	–	–	–	38290	36260	31330	24220	–	–	–	–	35390	31330	27120	22770
	Max. injection holding pressure	psi	–	–	–	–	38290	36260	27120	21320	–	–	–	–	35390	28430	24220	20020
	Recovery rate (PS)	oz/s	0.40	0.58	0.79	0.99	0.58	0.79	0.99	1.50	0.71	0.89	1.37	1.71	0.89	1.37	1.71	2.16
	Screw revolution speed	min <sup>-1</sup>	350				350				300				300			
Heater capacity	kW	5.5	5.85	6.5	7.95	5.85	6.5	7.95	11.20	5.85	6.5	7.95	11.2	7.95	11.2	13.5	16.7	
Nozzle pressing force	U.S ton	2.75				2.75				2.75				3.30				
Clamping	Clamping system	–	Double toggle															
	Clamping force	U.S ton	200															
	Clamping stroke	in	18.50															
	Min. mold height	in	7.87															
	Max. mold height	in	23.62															
	Tie bar clearance (H × V)	in	22.04 x 22.04															
	Die plate size (H × V)	in	30.70 x 30.70															
	Ejector force	U.S ton	3.85															
Ejector stroke	in	4.72																
Others	Machine dimensions (L) < > : FH400FA	in	205.36	205.36	205.36	205.36	205.36	205.36	205.36	209.41 (211.38)	205.83	210.48	217.25	220.04	219.18	225.99	228.75	235.60
	Machine dimensions (W × H)	in	54.30 × 71.07				54.30 × 71.07				54.30 × 71.07				54.61 × 71.07			
	Power source	–	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz															
	Main breaker capacity	A	F75FA:100 [75] F200HFA:125 [75]				F200FA:125 [75] FH400FA:200 [125]				G300FA:200 [100] G370FA:200 [125]				H300FA:200 [100] H370FA/H450FA:225 [125]			
	Total electric capacity	kVA	F75FA:28 F200HFA:35				F200FA:37 FH400FA:58				G300FA:51 G370FA:60				H300FA:53 H370FA/H450FA:63			
	Incoming supply wire size	in <sup>2</sup>	F75FA:0.059 [0.034] F200HFA:0.093 [0.034]				F200FA:0.093 [0.034] FH400FA:0.155 [0.093]				G300FA:0.155 [0.059] G370FA:0.155 [0.093]				H300FA:0.155 [0.059] H370FA/H450FA:0.233 [0.093]			
	Protective earthing wire size	in <sup>2</sup>	F75FA:0.034 [0.034] F200HFA:0.059 [0.034]				F200FA:0.059 [0.034] FH400FA:0.093 [0.059]				G300FA:0.093 [0.034] G370FA:0.093 [0.059]				H300FA:0.093 [0.034] H370FA/H450FA:0.155 [0.059]			
	Machine weight	U.S ton	7.7				7.7				8.2				8.8			
	Noise (L <sub>pA</sub> )	dB	73.9 dB															

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- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in [ ] are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-250-7 Specifications

Injection	Screw diameter	in (mm)	1.25 (32)	1.41 (36)	1.57 (40)	1.81 (46)	1.41 (36)	1.57 (40)	1.81 (46)	1.96 (50)	1.57 (40)	1.81 (46)	1.96 (50)	2.16 (55)	2.36 (60)
	Injection stroke	in	5.03	5.66	6.29	6.29	5.66	6.29	7.24	7.87	6.29	7.24	7.87	8.66	8.66
	Theoretical injection capacity	in <sup>3</sup>	6.28	8.94	12.26	16.22	8.94	12.26	18.66	23.96	12.26	18.66	23.96	31.89	37.95
	Injection unit	–	F200FA				G300FA				H300FA				–
	Max. injection speed	in/s	8.26				9.44				8.26				–
	Injection rate	in <sup>3</sup> /s	10.31	13.04	16.10	21.30	14.91	18.40	24.34	28.76	16.10	21.30	25.16	30.45	–
	Max. injection pressure	psi	38290	36260	31330	24220	36260	35390	27410	23210	35390	31330	27120	22770	–
	Max. injection holding pressure	psi	38290	36260	27120	21320	36260	32920	24950	21030	35390	28430	24220	20020	–
	Injection unit	–	–				G370FA				H370FA				
	Max. injection speed	in/s	–				12.99				7.87				
	Injection rate	in <sup>3</sup> /s	–	–	–	–	20.5	25.31	33.47	39.54	15.34	20.28	23.96	29.00	34.51
	Max. injection pressure	psi	–	–	–	–	36260	35390	27410	23210	35390	33790	34080	28430	24220
	Max. injection holding pressure	psi	–	–	–	–	36260	32920	24950	21030	35390	33790	31330	25670	21320
	Injection unit	–	FH400FA				–				H450FA				–
	Max. injection speed	in/s	19.68				–	–	–	–	11.81				–
	Injection rate	in <sup>3</sup> /s	24.54	31.06	38.34	50.71	–	–	–	–	23.01	30.42	35.95	43.49	–
	Max. injection pressure	psi	38290	36260	31330	24220	–	–	–	–	35390	31330	27120	22770	–
	Max. injection holding pressure	psi	38290	36260	27120	21320	–	–	–	–	35390	28430	24220	20020	–
	Recovery rate (PS)	oz/s	0.58	0.79	0.99	1.50	0.71	0.89	1.37	1.71	0.89	1.37	1.71	2.16	2.39
	Screw revolution speed	min <sup>-1</sup>	350				300				300				
Heater capacity	kW	5.85	6.5	7.95	11.20	5.85	6.5	7.95	11.2	7.95	11.2	13.5	16.7	19.5	
Nozzle pressing force	U.S ton	2.75				2.75				3.30					
Clamping	Clamping system	–	Double toggle												
	Clamping force	U.S ton	250												
	Clamping stroke	in	21.65												
	Min. mold height	in	9.84												
	Max. mold height	in	27.55												
	Tie bar clearance (H × V)	in	25.98 x 25.98												
	Die plate size (H × V)	in	34.25 x 34.25												
	Ejector force	U.S ton	5.83												
Ejector stroke	in	5.90													
Others	Machine dimensions (L) < > : FH400FA	in	229.85	229.85	229.85	229.85 (230.00)	229.85	229.85	235.87	238.67	237.80	244.61	247.37	254.22	260.99
	Machine dimensions (W × H)	in	61.26 × 74.81				61.26 × 74.81				61.26 × 74.81				
	Power source	–	3-phase AC200V±10% 50Hz / AC200V±10% 60Hz / AC230V±10% 60Hz												
	Main breaker capacity	A	F200FA:125 【75】 FH400FA:200 【125】				G300FA:200 【100】 G370FA:200 【125】				H300FA:200 【100】 H370FA/H450FA:225 【125】				
	Total electric capacity	kVA	F200FA:37 FH400FA:58				G300FA:51 G370FA:60				H300FA:53 H370FA/H450FA:63				
	Incoming supply wire size	in <sup>2</sup>	F200FA:0.093 【0.034】 FH400FA:0.155 【0.093】				G300FA:0.155 【0.059】 G370FA:0.155 【0.093】				H300FA:0.155 【0.059】 H370FA/H450FA:0.233 【0.093】				
	Protective earthing wire size	in <sup>2</sup>	F200FA:0.059 【0.034】 FH400FA:0.093 【0.059】				G300FA:0.093 【0.034】 G370FA:0.093 【0.059】				H300FA:0.093 【0.034】 H370FA/H450FA:0.155 【0.059】				
	Machine weight	U.S ton	10.4				10.9				11.4				
Noise (L <sub>pA</sub> )	dB	75.9 dB													

## Note

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- Maximum injection and holding pressures may be limited by the molding conditions and the cycle time.
- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-300-7 Specifications

Injection	Screw diameter	in (mm)	1.96 (50)	2.16 (55)	2.36 (60)	2.16 (55)	2.36 (60)	2.67 (68)
	Injection stroke	in	7.87	8.66	8.66	8.66	10.62	10.62
	Theoretical injection capacity	in <sup>3</sup>	23.96	31.89	37.95	31.89	46.58	59.83
	Injection unit	—	J370FA			J450HFA		
	Max. injection speed	in/s	7.87			7.87		
	Injection rate	in <sup>3</sup> /s	23.96	29.00	34.51	29.00	34.51	44.32
	Max. injection pressure	psi	34080	29010	24220	34230	29150	22770
	Max. injection holding pressure	psi	31330	25670	21320	29880	25670	20020
	Injection unit	—	—			JH600FA		
	Max. injection speed	in/s	—			11.81		
	Injection rate	in <sup>3</sup> /s	—	—	—	43.49	51.76	66.49
	Max. injection pressure	psi	—	—	—	33500	27850	22050
	Max. injection holding pressure	psi	—	—	—	28430	24220	18560
	Recovery rate (PS)	oz/s	1.71	2.16	2.39	2.16	2.39	3.30
	Screw revolution speed	min <sup>-1</sup>	300			300		
	Heater capacity	kW	13.5	16.7	19.5	16.7	19.5	24.8
Nozzle pressing force	U.S ton	4.38			4.38			
Clamping	Clamping system	—	Double toggle					
	Clamping force	U.S ton	300					
	Clamping stroke	in	23.62					
	Min. mold height	in	11.81					
	Max. mold height	in	29.52					
	Tie bar clearance (H × V)	in	28.74 x 28.74					
	Die plate size (H × V)	in	37.00 x 37.00					
	Ejector force	U.S ton	6.74					
	Ejector stroke	in	5.90					
Others	Machine dimensions (L) < > : JH600FA	in	274.61	281.42	287.09	281.42 <287.72>	287.09 <293.39>	293.71 <300.00>
	Machine dimensions (W × H)	in	66.89 × 81.30			66.89 × 81.30		
	Power source	—	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz					
	Main breaker capacity	A	225 【125】			J450HFA:225 【125】 JH600FA:300 【200】		
	Total electric capacity	kVA	57			J450HFA:61 JH600FA:87		
	Incoming supply wire size	in <sup>2</sup>	0.233 【0.093】			J450HFA:0.233 【0.093】 JH600FA:0.310 【0.155】		
	Protective earthing wire size	in <sup>2</sup>	0.155 【0.059】			J450HFA:0.155 【0.059】 JH600FA:0.155 【0.093】		
	Machine weight	U.S ton	14.9			15.2		
	Noise (L <sub>pA</sub> )	dB	78.8 dB					

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- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-400-7 Specifications

Injection	Screw diameter	in (mm)	2.16 (55)	2.36 (60)	2.67 (68)	2.36 (60)	2.67 (68)	2.95 (75)
	Injection stroke	in	8.66	10.62	10.62	10.62	12.04	12.04
	Theoretical injection capacity	in <sup>3</sup>	31.89	46.58	59.83	46.58	67.81	82.49
	Injection unit	–	J450HFA			J450FA		
	Max. injection speed	in/s	7.87			7.08		
	Injection rate	in <sup>3</sup> /s	29.00	34.51	44.32	31.06	39.89	48.53
	Max. injection pressure	psi	34230	29150	22770	31760	24660	20310
	Max. injection holding pressure	psi	29880	25670	20020	28430	21320	17110
	Injection unit	–	JH600FA			JH750FA		
	Max. injection speed	in/s	11.81			11.81		
	Injection rate	in <sup>3</sup> /s	43.49	51.76	66.49	51.76	66.49	80.88
	Max. injection pressure	psi	33500	27850	22050	31760	24660	20310
	Max. injection holding pressure	psi	28430	24220	18560	28430	21320	17110
	Recovery rate (PS)	oz/s	2.16	2.39	3.30	2.01	2.72	3.78
	Screw revolution speed	min <sup>-1</sup>	300			260		
	Heater capacity	kW	16.7	19.5	24.8	19.5	24.8	31.2
	Nozzle pressing force	U.S ton	4.38			4.38		
	Clamping	Clamping system	–	Double toggle				
Clamping force		U.S ton	400					
Clamping stroke		in	27.55					
Min. mold height		in	11.81					
Max. mold height		in	30.31					
Tie bar clearance (H × V)		in	31.88 x 31.88					
Die plate size (H × V)		in	41.33 x 41.33					
Ejector force		U.S ton	6.74					
Ejector stroke		in	5.90					
Others	Machine dimensions (L) 〈 〉 : JH600FA 《 》 : JH750FA	in	295.24 〈301.54〉	300.91 〈307.21〉	307.52 〈313.82〉	300.91 《307.21》	307.52 《313.82》	319.89 《326.19》
	Machine dimensions (W × H)	in	74.41 × 82.60			74.41 × 82.60		
	Power source	–	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz					
	Main breaker capacity	A	J450HFA:225 【125】 JH600FA:300 【200】			J450FA:225 【125】 JH750FA:400 【200】		
	Total electric capacity	kVA	J450HFA:61 JH600FA:87			J450FA:66 JH750FA:107		
	Incoming supply wire size	in <sup>2</sup>	J450HFA:0.233 【0.093】 JH600FA:0.310 【0.155】			J450FA:0.233 【0.093】 JH750FA:0.504 【0.155】		
	Protective earthing wire size	in <sup>2</sup>	J450HFA:0.155 【0.059】 JH600FA:0.155 【0.093】			J450FA:0.155 【0.059】 JH750FA:0.310 【0.093】		
	Machine weight	U.S ton	18.7			19.0		
	Noise (L <sub>pA</sub> )	dB	78.1 dB					

## Note

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- Maximum injection and holding pressures may be limited by the molding conditions and the cycle time.
- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-500-7 Specifications

Injection	Screw diameter	in (mm)	2.16 (55)	2.36 (60)	2.67 (68)	2.36 (60)	2.67 (68)	2.95 (75)	2.67 (68)	2.95 (75)	3.26 (83)
	Injection stroke	in	8.66	10.62	10.62	10.62	12.04	12.04	12.04	14.76	14.76
	Theoretical injection capacity	in <sup>3</sup>	31.89	46.58	59.83	46.58	67.81	82.49	67.81	101.09	123.81
	Injection unit	—	J450HFA			J450FA			K600FA		
	Max. injection speed	in/s	7.87			7.08			7.08		
	Injection rate	in <sup>3</sup> /s	29.00	34.51	44.32	31.06	39.89	48.53	39.89	48.53	59.43
	Max. injection pressure	psi	34230	29150	22770	31760	24660	20310	32050	26400	21760
	Max. injection holding pressure	psi	29880	25670	20020	28430	21320	17110	28430	22770	18560
	Injection unit	—	JH600FA			JH750FA			K750FA		
	Max. injection speed	in/s	11.81			11.81			9.84		
	Injection rate	in <sup>3</sup> /s	43.49	51.76	66.49	51.76	66.49	80.88	55.4	67.4	82.54
	Max. injection pressure	psi	33500	27850	22050	31760	24660	20310	32050	26400	21760
	Max. injection holding pressure	psi	28430	24220	18560	28430	21320	17110	28430	22770	18560
	Recovery rate (PS)	oz/s	2.16	2.39	3.30	2.01	2.72	3.78	2.20	2.91	3.89
	Screw revolution speed	min <sup>-1</sup>	300			260			200		
	Heater capacity	kW	16.7	19.5	24.8	19.5	24.8	31.2	24.8	31.2	38.8
Nozzle pressing force	U.S ton	4.38			4.38			4.38			
Clamping	Clamping system	—	Double toggle								
	Clamping force	U.S ton	500								
	Clamping stroke	in	31.49								
	Min. mold height	in	13.77								
	Max. mold height	in	35.43								
	Tie bar clearance (H × V)	in	36.02 x 36.02								
	Die plate size (H × V)	in	48.03 x 48.03								
	Ejector force	U.S ton	11.02								
	Ejector stroke	in	7.08								
Others	Machine dimensions (L) < > : JH600FA 《 》 : JH750FA	in	319.41 <325.71>	325.08 <331.38>	331.70 <338.00>	325.08 <331.38>	331.70 <338.00>	344.06 <350.36>	323.00	332.09	338.94
	Machine dimensions (W × H)	in	79.30 × 85.28			79.30 × 85.28			79.30 × 90.28		
	Power source	—	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz								
	Main breaker capacity	A	J450HF:225 【125】 JH600F:300 【200】			J450F:225 【125】 JH750F:400 【200】			K600F:400 【200】 K750F:400 【225】		
	Total electric capacity	kVA	J450HFA:61 JH600FA:87			J450FA:66 JH750FA:107			K600FA:98 K750FA:113		
	Incoming supply wire size	in <sup>2</sup>	J450HFA:0.233 【0.093】 JH600FA:0.310 【0.155】			J450FA:0.233 【0.093】 JH750FA:0.504 【0.155】			K600FA:0.504 【0.155】 K750FA:0.504 【0.233】		
	Protective earthing wire size	in <sup>2</sup>	J450HFA:0.155 【0.059】 JH600FA:0.155 【0.093】			J450FA:0.155 【0.059】 JH750FA:0.310 【0.093】			K600FA:0.310 【0.093】 K750FA:0.310 【0.155】		
	Machine weight	U.S ton	25.9			25.9			27.6		
	Noise (L <sub>pA</sub> )	dB	73.2 dB								

## Note

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- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-610-7 Specifications

Injection	Screw diameter	in (mm)	2.67(68)	2.95(75)	3.26(83)	3.26(83)	3.54(90)	3.93(100)	3.93(100)	4.33(110)
	Injection stroke	in	12.04	14.76	14.76	16.53	17.71	17.71	19.68	19.68
	Theoretical injection capacity	in <sup>3</sup>	67.81	101.09	123.81	138.67	174.69	215.67	239.63	289.96
	Injection unit	–	K600FA			L750EA ※1			M750FA	
	Max. injection speed	in/s	7.08			6.69			5.90	
	Injection rate	in <sup>3</sup> /s	39.89	48.53	59.43	56.13	66.00	81.48	71.89	86.99
	Max. injection pressure	psi	32050	26400	21760	32050	27850	22630	27120	22050
	Max. injection holding pressure	psi	28430	22770	18560	28430	24220	20020	24220	20020
	Injection unit	–	K750FA			–			–	
	Max. injection speed	in/s	9.84			–			–	
	Injection rate	in <sup>3</sup> /s	55.4	67.4	82.54	–	–	–	–	–
	Max. injection pressure	psi	32050	26400	21760	–	–	–	–	–
	Max. injection holding pressure	psi	28430	22770	18560	–	–	–	–	–
	Recovery rate (PS)	oz/s	2.20	2.91	3.89	3.30	4.41	6.00	5.64	7.41
	Screw revolution speed	min <sup>-1</sup>	200			170			160	
	Heater capacity	kW	24.8	31.2	38.8	38.8	49.4	53.4	53.4	61.4
Nozzle pressing force	U.S ton	4.38			4.38			4.38		
Clamping	Clamping system	–	Double toggle							
	Clamping force	U.S ton	610							
	Clamping stroke	in	35.43							
	Min. mold height	in	15.74							
	Max. mold height	in	35.43							
	Tie bar clearance (H × V)	in	38.18 x 38.18							
	Die plate size (H × V)	in	51.96 x 51.96							
	Ejector force	U.S ton	13.22							
Ejector stroke	in	9.84								
Others	Machine dimensions(L)	in	372.45	372.45	372.45	378.19	389.06	398.00	407.64	416.78
	Machine dimensions (W × H)	in	85.12 × 93.19			85.12 × 95.67			85.12 × 95.67	
	Power source	–	3-phase AC200V±10% 50Hz / AC200V±10% 60Hz / AC230V±10% 60Hz							
	Main breaker capacity	A	K600FA:400 [200] K750FA:400 [225]			400 [225]			500 [250]	
	Total electric capacity	kVA	K600FA:98 K750FA:113			124			130	
	Incoming supply wire size	in <sup>2</sup>	K600FA:0.504 [0.155] K750FA:0.504 [0.233]			0.504 [0.233]			0.620 [0.233]	
	Protective earthing wire size	in <sup>2</sup>	K600FA:0.310 [0.093] K750FA:0.310 [0.155]			0.310 [0.155]			0.310 [0.155]	
	Machine weight	U.S ton	34.3 [ Injection unit:9.9 / Clamping unit:24.4 ]			37.0 [ Injection unit:12.6 / Clamping unit:24.4 ]			39.2 [ Injection unit:14.9 Clamping unit:24.4 ]	
	Noise (L <sub>pA</sub> )	dB	77.7 dB							

## Note

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- Maximum injection and holding pressures may be limited by the molding conditions and the cycle time.
- The injection rate and the maximum injecting speed are calculated values. These values may be limited by set injecting pressures.
- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in [ ] are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

※1 The heat barrel φ 3.26(φ 83) for the L750FA Injection unit is not compatible with that of the K600FA.

# PLASTAR Si-750-7 Specifications

Injection	Screw diameter	in (mm)	2.67(68)	2.95(75)	3.26(83)	3.26(83)	3.54(90)	3.93(100)	3.93(100)	4.33(110)	
	Injection stroke	in	12.04	14.76	14.76	16.53	17.71	17.71	19.68	19.68	
	Theoretical injection capacity	in <sup>3</sup>	67.81	101.09	123.81	138.67	174.69	215.67	239.63	289.96	
	Injection unit	—	K600FA			L750EA ※1			M750FA		
	Max. injection speed	in/s	7.08			6.69			5.90		
	Injection rate	in <sup>3</sup> /s	39.89	48.53	59.43	56.13	66.00	81.48	71.89	86.99	
	Max. injection pressure	psi	32050	26400	21760	32050	27850	22630	27120	22050	
	Max. injection holding pressure	psi	28430	22770	18560	28430	24220	20020	24220	20020	
	Injection unit	—	K750FA			—			—		
	Max. injection speed	in/s	9.84			—			—		
	Injection rate	in <sup>3</sup> /s	55.4	67.4	82.54	—	—	—	—	—	
	Max. injection pressure	psi	32050	26400	21760	—	—	—	—	—	
	Max. injection holding pressure	psi	28430	22770	18560	—	—	—	—	—	
	Clamping	Recovery rate (PS)	oz/s	2.20	2.91	3.89	3.30	4.41	6.00	5.64	7.41
Screw revolution speed		min <sup>-1</sup>	200			170			160		
Heater capacity		kW	24.8	31.2	38.8	38.8	49.4	53.4	53.4	61.4	
Nozzle pressing force		U.S ton	4.38			4.38			4.38		
Clamping system		—	Double toggle								
Clamping force		U.S ton	750								
Clamping stroke		in	35.43								
Min. mold height		in	15.74								
Max. mold height		in	37.40								
Tie bar clearance (H × V)		in	38.18 x 38.18								
Die plate size (H × V)	in	51.96 x 51.96									
Ejector force	U.S ton	13.20									
Ejector stroke	in	9.84									
Others	Machine dimensions(L)	in	372.45	372.45	372.45	378.19	389.06	398.00	407.64	416.78	
	Machine dimensions (W × H)	in	85.12 × 93.19			85.12 × 95.67			85.12 × 95.67		
	Power source	—	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz								
	Main breaker capacity	A	K600FA:400 [200] K750FA:400 [225]			400 [225]			500 [250]		
	Total electric capacity	kVA	K600FA:98 K750FA:113			124			130		
	Incoming supply wire size	in <sup>2</sup>	K600FA:0.504 [0.155] K750FA:0.504 [0.233]			0.504 [0.233]			0.620 [0.233]		
	Protective earthing wire size	in <sup>2</sup>	K600FA:0.310 [0.093] K750FA:0.310 [0.155]			0.310 [0.155]			0.310 [0.155]		
	Machine weight	U.S ton	34.3 [ Injection unit:9.9 Clamping unit:24.4 ]			37.0 [ Injection unit:12.7 Clamping unit:24.4 ]			39.2 [ Injection unit:14.9 Clamping unit:24.4 ]		
Noise (L <sub>PA</sub> )	dB	77.7 dB									

## Note

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- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in [ ] are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140F and ambient temperature is 86F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

※1 The heat barrel φ 3.26(φ 83) for the L750FA Injection unit is not compatible with that of the K600FA.

# PLASTAR Si-940-7 Specifications

Injection	Screw diameter	in (mm)	2.67 (68)	2.95 (75)	3.26 (83)	3.26 (83)	3.54 (90)	3.93 (100)	3.93 (100)	4.33 (110)	4.33 (110)	4.72 (120)
	Injection stroke	in	12.04	14.76	14.76	16.53	17.71	17.71	19.68	19.68	19.68	21.65
	Theoretical injection capacity	in <sup>3</sup>	67.81	101.09	123.81	138.67	174.69	215.67	239.63	289.96	290	380
	Injection unit	–	K600FA			L750EA ※1			M750FA		N1100FA	
	Max. injection speed	in/s	7.08			6.69			5.90		150	
	Injection rate	in <sup>3</sup> /s	39.89	48.53	59.43	56.13	66.00	81.48	71.89	86.99	86.99	103.52
	Max. injection pressure	psi	32050	26400	21760	32050	27850	22630	27120	22050	25670	21470
	Max. injection holding pressure	psi	28430	22770	18560	28430	24220	20020	24220	20020	22480	18850
	Injection unit	–	K750FA			–			–		–	
	Max. injection speed	in/s	9.84			–			–		–	
	Injection rate	in <sup>3</sup> /s	55.4	67.4	82.54	–	–	–	–	–	–	–
	Max. injection pressure	psi	32050	26400	21760	–	–	–	–	–	–	–
	Max. injection holding pressure	psi	28430	22770	18560	–	–	–	–	–	–	–
	Recovery rate (PS)	oz/s	2.20	2.91	3.89	3.30	4.41	6.00	5.64	7.41	6.02	7.64
	Screw revolution speed	min <sup>-1</sup>	200			170			160		130	
	Heater capacity	kW	24.8	31.2	38.8	38.8	49.4	53.4	53.4	61.4	61.4	72.1
Nozzle pressing force	U.S ton	4.38			4.38			4.38		6.61		
Clamping	Clamping system	–	Double toggle									
	Clamping force	U.S ton	940									
	Clamping stroke	in	39.37									
	Min. mold height	in	17.71									
	Max. mold height	in	43.30									
	Tie bar clearance (H × V)	in	45.07 x 45.07									
	Die plate size (H × V)	in	60.62 x 60.62									
	Ejector force	U.S ton	19.90									
Ejector stroke	in	11.02										
Others	Machine dimensions(L)	in	420.32	420.32	420.32	420.32	420.32	423.82	433.47	442.6	452.45	464.34
	Machine dimensions (W × H)	in	88.31 × 97.88			88.31 × 97.88			96.19 × 99.02		96.19 × 98.86	
	Power source	–	3-phase AC200V±10% 50Hz / AC200V±10% 60Hz / AC230V±10% 60Hz									
	Main breaker capacity	A	K600FA:400 【200】 K750FA:400 【225】			400 【225】			500 【250】		600 【350】	
	Total electric capacity	kVA	K600FA:98 K750FA:113			124			130		179	
	Incoming supply wire size	in <sup>2</sup>	K600FA:0.504 【0.155】 K750FA:0.504 【0.233】			0.504 【0.233】			0.620 【0.233】		0.388 × 2 【0.388】	
	Protective earthing wire size	in <sup>2</sup>	K600FA:0.310 【0.093】 K750FA:0.310 【0.155】			0.310 【0.155】			0.310 【0.155】		0.233 × 2 【0.233】	
	Machine weight	U.S ton	44.5 [ Injection unit:10.4 Clamping unit:34.1 ]			47.8 [ Injection unit:13.7 Clamping unit:34.1 ]			50.0 [ Injection unit:15.9 Clamping unit:34.1 ]		51.7 [ Injection unit:17.6 Clamping unit:34.1 ]	
	Noise (L <sub>pA</sub> )	dB	73.2 dB									

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- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in [ ] are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

※1 The heat barrel φ 3.26(φ 83) for the L750FA Injection unit is not compatible with that of the K600FA.



# PLASTAR Si-1050-7 Specifications

Injection	Screw diameter	in (mm)	3.26 (83)	3.54 (90)	3.93 (100)	3.93 (100)	4.33 (110)	4.33 (110)	4.72 (120)
	Injection stroke	in	16.53	17.71	17.71	19.68	19.68	19.68	21.65
	Theoretical injection capacity	in <sup>3</sup>	138.67	174.69	215.67	239.63	289.96	290	380
	Injection unit	–	L750EA			M750FA		N1100FA	
	Max. injection speed	in/s	6.69			5.90		150	
	Injection rate	in <sup>3</sup> /s	56.13	66.00	81.48	71.89	86.99	86.99	103.52
	Max. injection pressure	psi	32050	27850	22630	27120	22050	25670	21470
	Max. injection holding pressure	psi	28430	24220	20020	24220	20020	22480	18850
	Recovery rate (PS)	oz/s	3.30	4.41	6.00	5.64	7.41	6.02	7.64
	Screw revolution speed	min <sup>-1</sup>	170			160		130	
	Heater capacity	kW	38.8	49.4	53.4	53.4	61.4	61.4	72.1
Nozzle pressing force	U.S ton	4.38			4.38		6.61		
Clamping	Clamping system	–	Double toggle						
	Clamping force	U.S ton	1050						
	Clamping stroke	in	47.24						
	Min. mold height	in	19.68						
	Max. mold height	in	47.24						
	Tie bar clearance (H × V)	in	51.96 x 51.96						
	Die plate size (H × V)	in	68.89 x 68.89						
	Ejector force	U.S ton	27.55						
	Ejector stroke	in	11.81						
Others	Machine dimensions(L)	in	451.46	451.46	451.46	460.08	469.22	479.06	490.95
	Machine dimensions (W × H)	in	105.95 × 105.12			105.95 × 105.12		105.95 × 105.12	
	Power source	–	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz						
	Main breaker capacity	A	400 [225]			500 [250]		600 [350]	
	Total electric capacity	kVA	124			130		179	
	Incoming supply wire size	in <sup>2</sup>	0.504 [0.233]			0.620 [0.233]		0.388 × 2 [0.388]	
	Protective earthing wire size	in <sup>2</sup>	0.310 [0.155]			0.310 [0.155]		0.233 × 2 [0.233]	
	Machine weight	U.S ton	63.9 [ Injection unit:14.3 Clamping unit:49.6 ]			66.1 [ Injection unit:16.5 Clamping unit:49.6 ]		67.2 [ Injection unit:17.6 Clamping unit:49.6 ]	
	Noise (L <sub>pA</sub> )	dB	75.2 dB						

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- When the machine is attached with an option, the capacity of the breaker may be changed.
- Figures in [ ] are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.

# PLASTAR Si-1430-7 Specifications

Injection	Screw diameter	in (mm)	4.33(110)	4.72(120)
	Injection stroke	in	19.68	21.65
	Theoretical injection capacity	in <sup>3</sup>	290	380
	Injection unit	–	N1100FA	
	Max. injection speed	in/s	150	
	Injection rate	in <sup>3</sup> /s	86.99	103.52
	Max. injection pressure	psi	25670	21470
	Max. injection holding pressure	psi	22480	18850
	Recovery rate (PS)	oz/s	6.02	7.64
	Screw revolution speed	min <sup>-1</sup>	130	
	Heater capacity	kW	61.4	72.1
	Nozzle pressing force	U.S ton	6.61	
Clamping	Clamping system	–	Double toggle	
	Clamping force	U.S ton	1430	
	Clamping stroke	in	59.05	
	Min. mold height	in	19.68	
	Max. mold height	in	51.18	
	Tie bar clearance (H × V)	in	55.11 x 55.11	
	Die plate size (H × V)	in	78.74 x 78.74	
	Ejector force	U.S ton	33.74	
Ejector stroke	in	17.71		
Others	Machine dimensions(L)	in	524.85	536.74
	Machine dimensions (W × H)	in	116.34 × 111.15	
	Power source	–	3-phase AC200V ± 10% 50Hz / AC200V ± 10% 60Hz / AC230V ± 10% 60Hz	
	Main breaker capacity	A	600 【350】	
	Total electric capacity	kVA	179	
	Incoming supply wire size	in <sup>2</sup>	0.388 × 2 【0.388】	
	Protective earthing wire size	in <sup>2</sup>	0.233 × 2 【0.233】	
	Machine weight	U.S ton	94.8 [ Injection unit:17.6 / Clamping unit:77.2 ]	
Noise (L <sub>pA</sub> )	dB	72.8 dB		

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- Figures in 【 】 are 400V class (a transformer (Option) is necessary for the machine) values.
- Noise values determined according to the noise test code given in JIS B 6711:2021 (ISO 20430:2020). Values will be changed by the operating condition.
- Incoming supply wire size is calculated on the condition that three insulated wires with a rated temperature of 140°F and ambient temperature is 86°F and metallic conduit work is made.
- Protective earthing wire size is selected based on the incoming supply wire size.
- The total electric capacity is calculated based on the maximum performance of the drive unit. The operating conditions of the injection unit may reduce the total electric capacity.



TOYO MACHINERY & METAL CO., LTD.  
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Maruka USA, Inc.  
information is available here.

# TOYO

TOYO MACHINERY & METAL CO., LTD.

#### Overseas Division

523-1 Fukusato, Futami-cho,  
Akashi City, Hyogo 674-0091 Japan  
TEL : +81-78-943-7474  
FAX : +81-78-943-7275



The products are produced at the  
factory certified with ISO 14001.



For safe use of the machine, please read the respective manual carefully,  
especially sections for operation and maintenance, and follow all the safety  
precaution instructions specified in the manual.

- 1 Photographs in the catalog include optional devices.
- 2 For the improvement of the product, the appearance and specification are subject to change without notice.
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