

Global Network

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Plastics Machinery Div.

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Vertical
All-electric Vertical Injection Molding Machine

Vertical
All-electric Vertical Injection Molding Machine



Vertical

All-electric Vertical Injection Molding Machine



Lineup	
SR50Z	(490kN)
SR75Z	(730kN)
SR120Z	(1170kN)
SV18M	(170kN)
SV50M	(490kN)
SR100H	(980kN)



Our products have acquired ISO9001 certification.

www.shi.co.jp/plastics/



Sumitomo Heavy Industries, Ltd.

● Photographs of machines and details may differ from actual products.
● Specifications subject to change without notice for performance improvement.

SR-Z

All-electric Vertical Rotary Type Injection Molding Machine

The SR-Z series comes equipped with a large, high-speed invertible rotary table. It is more than ready for high-caliber composite molding with engineering and super-engineering plastics.

Reducing defects, loss and faults to zero

Integrated application 'Zero-molding'

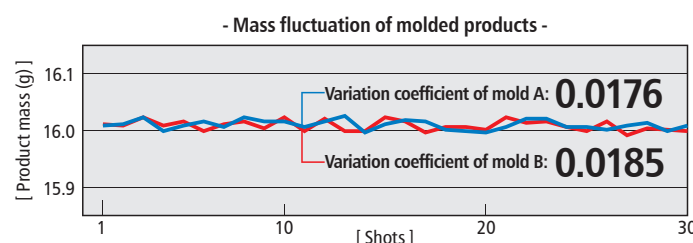
In FFC (Flow Front Control) molding, front-end resin flow is dexterously controlled to ensure all cavities are filled completely and evenly, which translates into tremendous precision stability for users.

Zero-molding brings 3 technologies for improving production efficiency to molding workshops: MCM for mold clamping, FFC for resin filling and SPS for operability.

- Smooth filling at low pressure and proper venting
- Improved cavity filling balance

- Venting assured by lower mold clamp force
- Less need for maintenance, longer-lasting molds

- Easy, mistake-free setup anyone can do
- Greatly shortened setup and operation

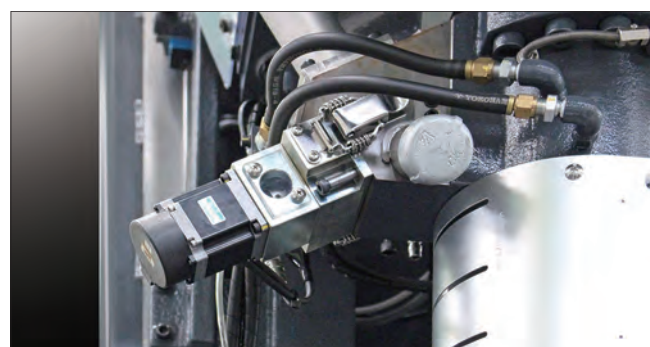


Lower material costs owing to smooth melting

New theoretical plasticization SL Screw

The SL Screw prevents resin from stagnating in the flow channel, thus avoiding undesirable overheating that can cause resins to carburize. Moreover, because the screw is short, the resin is exposed to heat for considerably less time.

The SL screw helps improve yield by eliminating issues caused by entrapped gases such as short shots and mold deposits. It also serves to eliminate spotting and discoloring. It is the right tool for molding with engineering and super-engineering plastics.

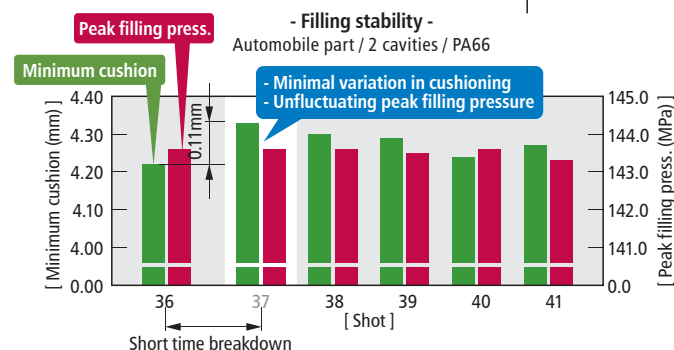
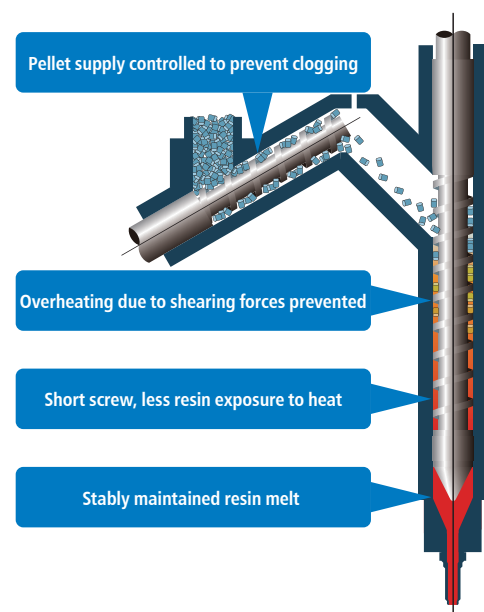


Because resin is stably melted and protected against thermal degradation, users do not lose resin to wasted shots. The SL Screw saves on resin when changing product colors, too.

Because the SL Screw even minimizes resin degradation during minor trouble that can halt production for 10 - 20 minutes, users have to discard far less shots. Moreover, it works great with color changes because it eliminates a good portion of the purging needed with conventional screws.

- Example of reduction in resin loss to purging -

Ordinary screw	1880 g
SL Screw	1017 g



The number of discarded shots after a 25-minute breakdown improved from 10 to 1.

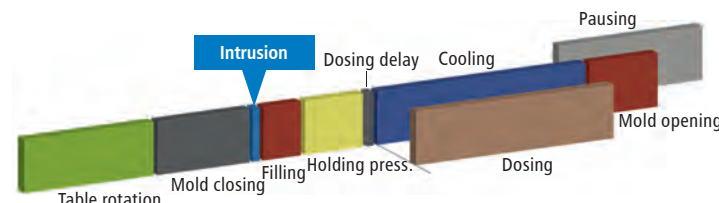
Stable filling even with high volume injection

Intrusion Refilling control

"Intrusion" filling control keeps filling stable even with products that require large amounts of resin.

Option

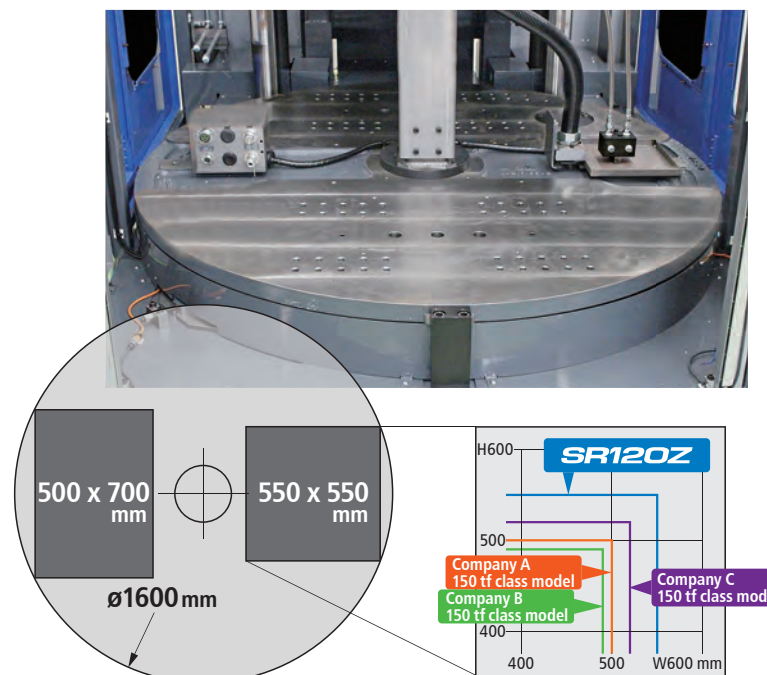
Any anticipated resin shortfalls are made up during screw rotations prior to resin injection. Set up is simple requiring the user to enter just the screw RPM and allotted rotation time.



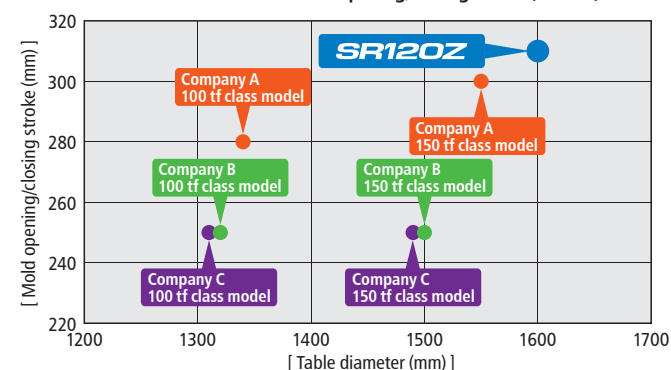
Accommodates larger molds

High performance rotary table

Despite the compact frame, the machines come with a large rotary table. It allows users to mount larger molds and apply their composite molding skills to bigger products.



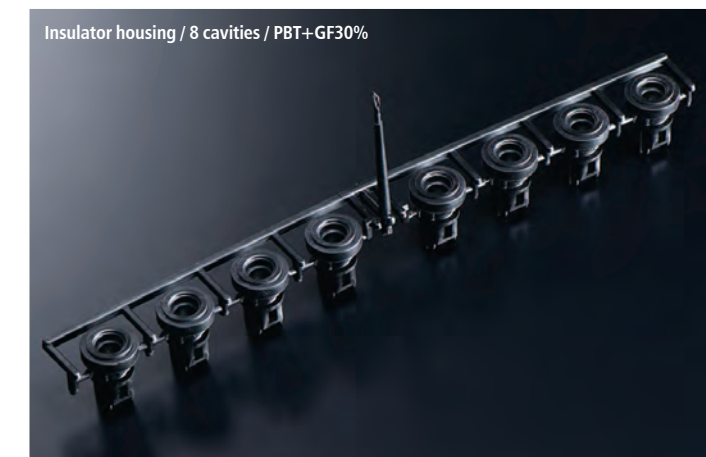
- Table diameter and mold opening/closing stroke (SR120Z) -



Plasticizing system

Optional screw diameters are given in ().

Model	Clamp force (kN)	Plasticizing unit	Max. injection speed (mm/s)	Screw dia. (mm)
SR50Z	490	C140	270	20/22/25/(28)
SR75Z	730	C140	270	25/28
		C250	200	28/32/(36)
SR120Z	1170	C250	200	28/32/36
		C450	200	36/40

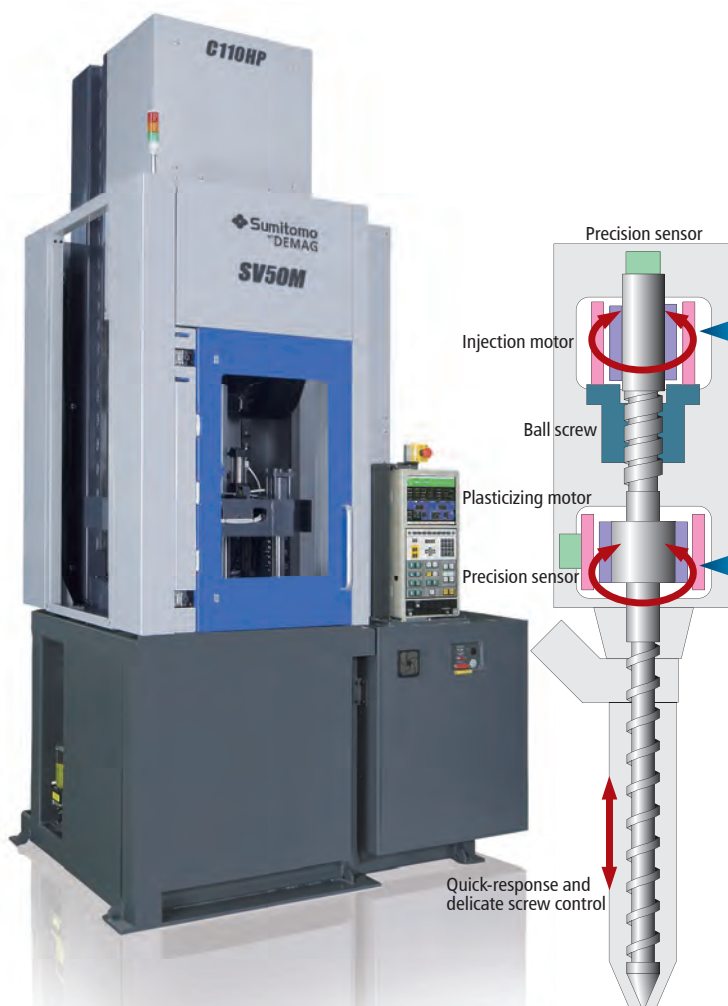


Insulator housing / 8 cavities / PBT+GF30%

SV-M

All-electric Vertical Injection Molding Machine

The SV-M series is a group of all-electric, single-action vertical machines that demonstrate the fruits of their precision stability and work efficiency pursuits in hoop molding and other applications.



Precision stability at its best

Direct drive system

The machines employ purpose-specific servomotors and an advanced Intelligent Servo Controller (ISC) to control them. As a result, the screw is nimbly responsive to control commands and super-precise in how it operates, thus ensuring users greater accuracy and stability in plasticization, filling and holding pressure processes.

PAT. pend. in Japan

Original algorithm
+
High-performance applications

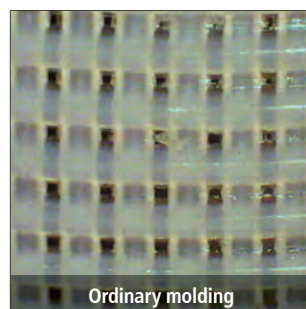
ISC

Advanced filling control

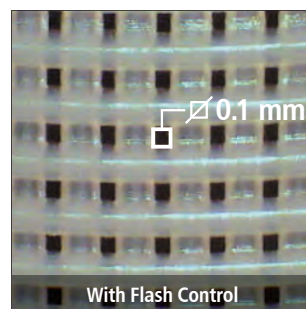
Flash Control

Screw behavior is dexterously controlled during the filling process so that resin viscosity can be used to smoothly and fully fill cavities.

- Filling comparison of small opening mesh -



Ordinary molding



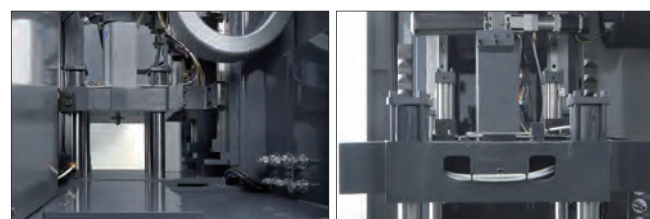
With Flash Control

Quick-response and delicate screw control

Greatly improved production efficiency

High workability and safety

Clear plastic covers are adopted for wide openings to ensure visibility and enhance workability. Moreover, the SV50M is equipped with double mechanical stoppers for a heightened level of safety.

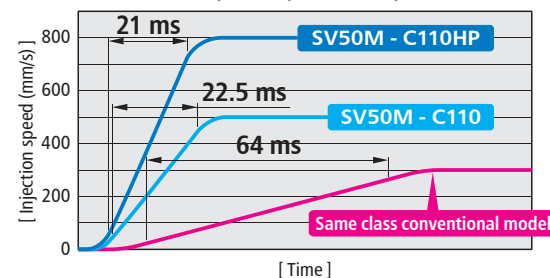


Support for composite molding of thin-walled products and multi-cavity molds

Ultra high-speed injection unit

With the SV50M, users can opt for the C110HP ultra high-speed injection unit that delivers 800 mm of resin per second. This level of injection performance supports composite molding of thin-walled products and multi-cavity molds.

- Maximum injection speed and responsiveness -



Plasticizing system

Model	Clamp force (kN)	Plasticizing unit	Max. injection speed (mm/s)	Screw dia. (mm)
SV18M	170	C30	500	14/16/18/20
SV50M	490	C32	500	18/20/22
		C110	500	22/25/28
		C110HP	800	22/25

SR-H

All-electric Vertical Rotary Horizontal Injection Molding Machine

The SR-H is an all-electric machine with a vertical clamp and horizontal parting line (horizontal injection as well) that flexibly fits into production sites with limited space.



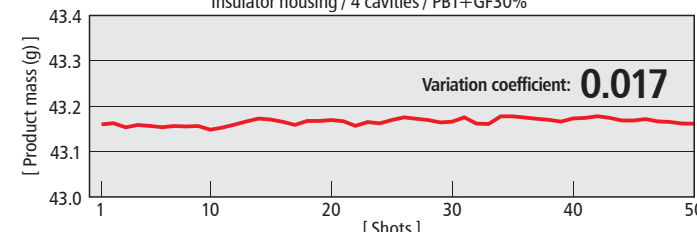
Outstanding precision stability

Direct drive system

The SR-H incorporates the standard direct drive system used with horizontal machines. The highly precise, quickly responsive screw control delivers greatly improved precision stability in plasticization, filling and pressure holding processes.

PAT. pend. in Japan

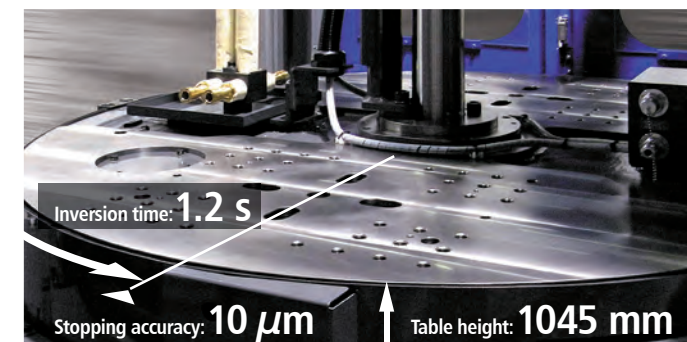
- Mass fluctuation of molded products -
Insulator housing / 4 cavities / PBT+GF30%



Fast inversion and highly accurate mold clamping

High performance rotary table

With a table rotation time of just 1.2 sec and stopping accuracy within 10 μm, the high performance rotary table gives users much welcomed precision in high-cycle composite molding.



Inversion time: 1.2 s

Stopping accuracy: 10 μm

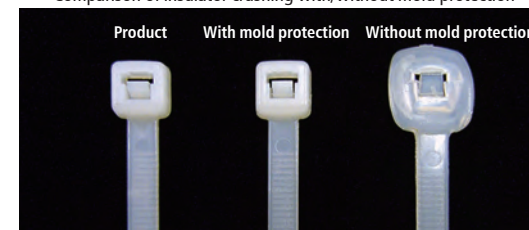
Table height: 1045 mm

Protect your important molds

Highly sensitive mold protection

The mold protection mechanism has been made more sensitive. It adds greater protection for molds in the event of accidents during insertion processes, etc.

- Mold protection function -
Comparison of insulator crushing with/without mold protection



Plasticizing system

Model	Clamp force (kN)	Plasticizing unit	Max. injection speed (mm/s)	Screw dia. (mm)
SR100H	980	C250	300	28/32/36

Low rotary table and fully open door

Enhanced workability

To enhance user access and workability, the SR-H positions the table at the lowest height amongst same-class machines and adopts a fully open door that offers operators plenty of space.



Automobile parts / 4 cavities / PA66 / Product mass: 1.3 g

Standard Equipment

Plasticizing and injection unit	SR-Z	SV-M	SR-H
1. Standard screw assembly (Open nozzle, Hard chromium plating)	*1	*2	○
2. Programming control of injection (5-step/2-step)	○	○	○
3. Programming control hold pressure (4-step/2-step)	○	○	○
4. Screw pull back (After holding pressure/After screw rotating)	○	○	○
5. Screw position digital indicator (0.01 mm)	○	○	○
6. Step timer for hold pressure to 0.01 sec.	○	○	○
7. V-P switchover controller (Pressure, Position)	○	○	○
8. Injection start delay timer	○	○	○
9. Automatic purging program Interlock attaching (Select between nozzle touch and plasticizing unit withdraw limit)	○	○	○
10. Zone 1 high capacity heater	☆	○	☆
11. 2-mode temperature control (Production/Standby)	○	○	○
12. Cold screw startup protection (Interlock variable timer attaching)	○	○	○
13. Injection unit retraction delay selector (With delay timer)	○	○	○
14. Sprue break stroke remote setting (Detection of nozzle touch, Moving time)	○	○	○
15. Screw speed digital indicator	○	○	○
16. Remaining cooling timer indicator	○	○	○
17. Plasticizing start delay timer	○	○	○
18. Injection/Holding response 10-mode	○	○	○
19. Hold pressure speed setting	○	○	○
20. Temperature controller for nozzle	○	○	○
21. Stepped heat-up operation	○	○	○
22. Water cooling jacket temperature control device	○	○	○
23. Mold open operation during plasticizing (Needle nozzle drive control)	○	○	○
24. Resin staying protection	○	○	○
25. Manual one-touch plasticizing	○	○	○
26. Purged resin tray and protective mechanism	☆	○	○
27. Pull back delay control	○	○	○
28. Flow indicator for water cooling jacket	○	○	○
29. Synchro-plast control	○	○	○
30. Flash speed mode	○	○	○
31. Temperature control	○	○	○
32. SK control	○	○	○

Clamp unit	SR-Z	SV-M	SR-H
1. Programmed control of mold opening/closing speed (5-step/3-step)	○	○	○
2. Mold protection	○	○	○
3. Low pressure mold clamping	○	○	○
4. Temporary stop of mold opening/closing	○	○	○
5. Remote control of clamp force	○	○	○
6. Remote control of mold space	○	○	○
7. Ejector (With selective multi-functions and return check)	○	○	○
8. Ejector protrusion delay timer	○	○	○
9. Ejector remote control (Speed, stroke and pressure)	○	○	○
10. Ejector 2-speed control	○	○	○
11. Ejector protrusion holding device	○	○	○
12. Interlock for ejector (In manual operation, only the mold open limit is available)	—	○	—
13. Ejector protrusion during mold opening	—	○	—
14. Ejector protrusion during mold closing	—	○	—
15. Ejector plate retun signal (Input signal for molding machine, connecting by metal concent) *9	☆	○	☆
16. Mold closing and mold opening signals (Spear control signal, no-voltage dry contact) *9	○	○	○
17. Valve gate drive circuit (Control circuit only) *9	○	○	○
18. Standby mode for mold mounting (Low mold closing/opening speed)	○	○	○
19. Safety doors with clear PMMA windows	*3	○	*3
20. Emergency stop switch (On both sides)	○	○	○
21. Safety doors (Interlocked electrically/Mechanically)	*3	○	*3
22. Mold opening/closing selection low vibration or high speed mode	○	○	○
23. Multi-toggles	○	○	○
24. Ejector unit with brake	○	○	○

○ Standard ☆ Optional — Cannot be selected

*1 The wear and corrosion resistant SL Screw is a standard specification of the SR-Z series.

*2 The SV18M is mounted with an open nozzle.

*3 The SR-Z series and SR-H model are equipped with a safety light curtain for the clamping system on the operating side.

*4 Applicable only with the SV50M.

*5 There are manual greasing points also.

*6 The total height of the machine will increase by 50 mm when equipped with mold space 50 mm extension.

*7 The needle valve type nozzle of C450-ø40 cannot be chosen.

*8 Applicable only with the SR120Z.

*9 All input and output signals are no-voltage contact signals. Power is not supplied with output signals.

● Specifications are subject to change without notice for performance improvement.

Control unit	SR-Z	SV-M	SR-H
1. 12.1 inch TFT color LCD screen	○	○	○
2. Input setting device (Sheet-key and touch panel)	○	○	○
3. Internal memory of mold conditions (200 conditions)	○	○	○
4. Operation guide for beginners	○	○	○
5. Production guide for beginners	○	○	○
6. Molding profiles display functions (Mold profiles storage, cursor, display and so on)	○	○	○
7. Screen hard copy	○	○	○
8. Printer connection circuit	○	○	○
9. Take-out robot connection circuit *9	○	○	○
10. Three languages screen changeover (Japanese/English/Chinese)	○	○	○
11. Operation guide for maintenance	○	○	○
12. Automatic starting system (Heater warming, heater start, machine stop) *9	○	○	○
13. Molding process indication	○	○	○
14. SSR control circuit for heater bands	○	○	○
15. Input expressed in industrial units of velocity, position, pressure and screw revolution	○	○	○
16. Signal output for machine condition (5ch) *9	○	○	○
17. USB connection circuit	○	○	○
18. PC connection circuit	○	○	○
19. Molding condition protection	○	○	○
20. Alarm sequence selection	○	○	○
21. Initial rejection and short stop rejection	○	○	○

Monitor unit	SR-Z	SV-M	SR-H
1. Actual operating values indicator	○	○	○
2. Heater band burnout monitor	○	○	○
3. Auxiliary facility monitor (1ch) *9	○	○	○
4. Alarm monitor (6 items)	○	○	○
5. Automatic setting of monitor high/low value	○	○	○
6. Abnormal history (Item and time)	○	○	○
7. Product quality monitor	○	○	○
8. Statistics product quality control (Actual value control, quality transition graph)	○	○	○
9. Production control	○	○	○
10. Automatic starting system (Heater and external output signal)	○	○	○
11. Cylinder heater temperature monitor (All zones)	○	○	○
12. Self-diagnosis	○	○	○
13. Audible alarm	○	○	○
14. Shot counter	○	○	○
15. Molding cycle time monitor (Attended/Unattended selection)	○	○	○
16. Total production control circuit	○	○	○
17. All-in-one setting screen	○	○	○
18. Monitor setting fail protection	○	○	○
19. Brake inspection function (Mold opening/closing motor brake)	○	○	○

Others	SR-Z	SV-M	SR-H
1. Automatic centralized greasing device *5	○	○	○
2. 2-line closed circuit cooling water piping connection (With flow detector, stop valve)	○	○	○
3. Standard spare parts (Fuse, mechanical string)	○	○	○

Optional Equipment

Plasticizing selection	SR-Z	SV-M	SR-H
1. Wear and corrosion resistant screw assembly II and III (C30: Type II only)	—	☆	☆
2. High-temperature screw assembly (Max. temp. 450°C)	—	☆	☆
3. SF screw assembly	—	☆	☆
4. Needle valve nozzle (Pneumatic nozzle actuating cylinder)	☆	*4	☆
5. FTC I nozzle (C30)/FTC II nozzle (C32 or larger)	☆	☆	☆
6. High capacity heater	☆	☆	☆

Plasticizing and injection unit	SR-Z	SV-M	SR-H
1. Resin temperature finder (Only for needle type with thermocouple)	☆	*4	☆
2. Standard type hopper	☆	☆	☆
3. V-P switchover by mold cavity pressure	☆	☆	☆
4. Needle valve nozzle drive circuit (Pneumatic cylinder)	☆	*4	☆
5. FTC nozzle electric control circuit	☆	☆	☆
6. High temperature heater control circuit (Max. temp. 499°C)	—	☆	☆
7. Hopper swivel mounting plate (Including hopper shutter)	—	—	☆
8. Hopper shutter device	☆	☆	☆
9. Plating resin inlet of cooling water jacket	☆	☆	☆

Clamp unit	SR-Z	SV-M	SR-H
1. Pneumatic core pull (For the lower mold, 2 lines)	☆	—	☆
2. SPI take-out robot connection circuit	—	☆	—
3. Mold exchanging table (SV18M)/Mold exchanging preroller (SV50M)	—	☆	—
4. Die clamp connection circuit	—	☆	—
5. Heat insulating plate (5mm/10mm)	☆	☆	☆
6. Hoop feeder connection circuit	—	☆	—
7. Insert device connection circuit	☆	☆	☆
8. Mold space extension 50mm *6, *7	*8	—	—
9. High speed mold opening/closing	—	*4	—
10. Upper ejector (Pneumatic drive)	☆	☆	—
11. Rotary table high speed high load spec.	*8	—	—

List of Preparation Items (Summary)

Main Breaker Capacity

Machine	SR50Z	SR75Z	SR120Z	SV18M	SV50M	SR100H
Main breaker capacity	100A (34.6kVA)	125A (43.3kVA)	175A (60.6kVA)	60A (20.8kVA)	100A (34.6kVA)	150A (52.0kVA)

●Voltage and frequency of main power source is applicable to the areas of AC200V-50Hz/AC200V-60Hz/AC220V-60Hz.

●Connect to the mating of 3-phases 3-wires, and grounding cable.

Main Breaker Capacity

Machine	SR50Z	SR75Z	SR120Z	SV18M	SV50M	SR100H
Maximum amperage	40 A	60A	60A	40A	40A	100A

●For powering peripheral equipment.

●The table shows the limit of total amperage available at the same time when each type of molding machine runs.

Primary Side Power Cable Size and Grounding Cable Size

Machine	SR50Z	SR75Z	SR120Z	SV18M	SV50M	SR100H
Primary side power cable size	30 mm ²	38 mm ²	60 mm ²	14 mm ²	30 mm ²	50 mm ²
Grounding cable size	Above 22 mm ²	Above 22 mm ²	Above 30 mm ²	Above 14 mm ²	Above 22 mm ²	Above 30 mm ²

●The size of electric cables listed above is based on the allowable current when the ambient temperature of piping of a single core polyvinyl cable is 40°C.

●The values listed above are calculated base on the sum of load current listed in the item of main breaker capacity. When the power must be supplied in large quantities of peripheral equipment from the molding machine, it is required to use a large size cable. However, there may be enough room for the size of the cable currently used depending on the selection of the options.

●Voltage fluctuation of the power source must be within ±10% of the rated voltage at the power source contact point (main breaker) on the molding machine side.

●Protection network against service interruption is not provided for the control circuit of the molding machine. When the instant interruption time exceeds one molding cycle, the molding machine may stop running in some cases. In an area where instant service interruptions are frequent due to thunderbolts, be sure to install an uninterruptive power supply system at the plant site.

Required Cooling Water Values (Reference by approximate value)

Water Jacket Cooling Line

Machine	SR50Z	SR75Z	SR120Z	SV18M	SV50M	SR100H
Band heater capacity	3.7 kW	6.3 kW	7.6 kW	2.9 kW	4.8 kW	8.5 kW
Required cooling water	0.9 L/min	1.5 L/min	1.8 L/min	0.7 L/min	1.1 L/min	2.0 L/min
Plasticizing unit / Screw dia.	C140 / ø28	C250 / ø36	C450 / ø40	C30 / ø20	C110 / ø28	C250 / ø36

Mold Cooling Line

Machine	All models
Required cooling water	10 L/min (2 lines total)

●Cooling water required for 1 line is approx 5L/min.

Required compressed air values (Reference by approximate value)

Machine	All models	
Required compressed air (Pressure and consumption)	Standard nozzle	0.5 MPa 1.0 L/min
	Needle valve nozzle	0.5 MPa 9.0 L/min

●Please include separately in the case where compressed air for mold control purpose such as pneumatic core-pull is required.

Main Specifications

Item	Unit	<i>SR50Z</i>	<i>SR75Z</i>	<i>SR120Z</i>
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■ Clamp unit

Clamp system		Double toggle (Lower platen fixed)	Double toggle (Lower platen fixed)	Double toggle (Lower platen fixed)
Clamp driving system		Belt drive	Belt drive	Belt drive
Clamp force	kN	490	730	1170
Clearance between tie-bars (WxH)	mm	420 x 420	420 x 420	550 x 550
Table size	mm	ø1220	ø1220	ø1600
Daylight (When mold thickness extension 50 mm is selected)	mm	520	570	660
		—	—	(710)
Mold opening stroke	mm	220	250	310
Mold thickness (min. - max.) (When mold thickness extension 50 mm is selected)	mm	200~300	220~320	250~350
		—	—	(300~400)
Locating ring diameter	mm	100	100	100
Ejector driving system		Belt drive	Belt drive	Belt drive
Ejecting points		1 point	1 point	1 point
Ejector force	kN	26	26	26
Ejector stroke	mm	60	60	60
Maximum mold mass (Upper mold)	kg	100	100	300
Maximum mold mass (Lower mold) (When rotary teble hige speed high load spec selected)	kg	200 x 2	200 x 2	500 x 2
		—	—	600 x 2

■ Injection unit

Plasticizing capacity		C140				C140		C250			C250			C450	
		S				S		M			M			M	
Screw diameter	mm	20	22	25	(28)* ⁶	25	28	28	32	(36)* ⁶	28	32	36	36	40
Injection driving system		Belt drive				Belt drive					Belt drive				
Injection pressure max.* ^{1,2}	MPa	274	274	274	218	274	218	284	217	171	284	217	171	270	218
Holding pressure max.* ^{1,2}	MPa	219	219	219	175	219	175	227	174	137	227	174	137	216	174
Theoretical injection capacity	cm3	27	40	51	64	51	64	86	113	143	86	113	143	163	201
Injection mass (GPPS)	g	26	38	49	61	49	61	83	108	137	83	108	137	156	193
Plasticizing rate* ³	kg/h	6.5	9.0	13	19	13	19	19	27	38	19	27	38	38	51
Injection rate	cm³/s	85	103	133	166	133	166	123	161	204	123	161	204	204	251
Screw stroke	mm	87	104			104		140			140			160	
Injection speed max.	mm/s	270				270		200			200			200	
Screw rotating speed max.	min-1	400				400		400			400			400	
Number of temperature control zone		4				4		4		5	4	5		5	
Heater capacity* ⁴	kW	2.4	2.8	3.4	3.7	3.4	3.7	4.3	5.3	6.2	4.3	5.3	6.3	6.3	7.6
Nozzle contact force	kN	7.8				11.0					11.0				

■ Machine dimensions and mass

Machine dimensions (WxD)	mm	1544 x 2299				1544 x 2299					1908 x 2565				
Machine height (H) * ⁵ (When mold thickness extension 50 mm is selected)	mm	3021	3056	3111	3166	3213	3268	3295	3385	3475	3638	3728	3818	4018	4098
		—	—	—	—	—	—	—	—	—	(3688)	(3778)	(3868)	(4068)	(4148)
Table height * ⁵	mm	898				950					1168				
Machine mass	t	3.9				3.9		4.0			8.0				

*1 The max. injection pressure and max. hold pressure are calculated values and represent machine output, not resin pressure.
*2 The max. injection pressure and max. hold pressure are not sustained pressure levels.
*3 Values for the SR-Z series are given for when machines are mounted with the SL Screw and, for the SV-M series and SR100H, when equipped with the SD Screw.
*4 Values are given for when machines are mounted with exclusive open type screw assembly .
*5 Includes the leveling pads.
*6 Wide-diameter screws are optional features.
● Machine dimensions are for machines used in Japan.
● All machines appearing in this brochure comply with USA (ANSI), Japanese (K1001), Chinese (GB22530) and Korean (KC Mark) safety standards.
● Specifications are subject to change without notice for performance improvement.

Item	Unit	<i>SV18M</i>	<i>SV50M</i>	<i>SR100H</i>
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■ Clamp unit

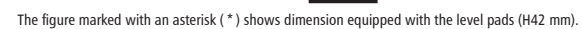
Clamp system		Double toggle (Lower platen fixed)	Double toggle (Lower platen fixed)	Double toggle (Lower platen fixed)
Clamp driving system		Belt drive	Belt drive	Belt drive
Clamp force	kN	170	490	980
Clearance between tie-bars (WxH)	mm	260 x 260	360 x 360	435 x 435
Table size (Lower platen size)	mm	400 x 560	505 x 690	ø1300
Daylight (When mold thickness extension 50 mm is selected)	mm	450	550	600
		—	—	—
Mold opening stroke	mm	200	250	250
Mold thickness (min. - max.) (When mold thickness extension 50 mm is selected)	mm	150~250	200~300	250~350
		—	—	—
Locating ring diameter	mm	60	100	—
Ejector driving system		Belt drive	Belt drive	Belt drive
Ejecting points		1 point	3 points	3 points
Ejector force	kN	7.8	22	26
Ejector stroke	mm	40	40	60
Maximum mold mass (Upper mold)	kg	50	100	120
Maximum mold mass (Lower mold) (When rotary teble hige speed high load spec selected)	kg	90 (Total of the upper and the lower)	240 (Total of the upper and the lower)	240 x 2
		—	—	—

■ Injection unit

Plasticizing capacity		C30				C32			C110			C110-HP		C250		
		MN				S			S			S		M		
Screw diameter	mm	14	16	18	20	18	20	22	22	25	28	22	25	28	32	36
Injection driving system		Direct drive				Direct drive								Direct drive		
Injection pressure max.*1,*2	MPa	223	266	210	170	225	182	150	274	212	174	274	241	284	217	171
Holding pressure max.*1,*2	MPa	223	212	168	136	180	146	120	219	170	139	219	192	227	174	137
Theoretical injection capacity	cm3	6.2	11	14	17	14	17	21	40	51	64	40	51	86	113	143
Injection mass (GPPS)	g	5.9	11	13	17	13	17	20	38	49	61	38	49	83	108	137
Plasticizing rate *3	kg/h	5.1	9.5	13	16	9.0	13	18	18	26	37	18	26	37	53	76
Injection rate	cm³/s	77	101	127	157	127	157	190	190	245	308	304	393	185	241	305
Screw stroke	mm	40	55			55			104			104		140		
Injection speed max.	mm/s	500				500			500			800		300		
Screw rotating speed max.	min-1	460	430			400			400			400		400		
Number of temperature control zone		4				4		5	5			5		5		
Heater capacity *4	kW	2.1	2.5	2.5	2.9	3.2	3.5	3.9	3.9	4.3	4.8	3.9	4.3	6.6	7.6	8.5
Nozzle contact force	kN	3.9				7.8								11.0		

■ Machine dimensions and mass

Machine dimensions (WxD)	mm	1231 x 1117	1812 x 1210		4283 x 1540 (L x W)
Machine height (H) * ⁵	mm	2970	3393	3859	2003
(When mold thickness extension 50 mm is selected)		—	—	—	—
Table height * ⁵	mm	900	1090		1045
Machine mass	t	1.7	2.6	2.8	5.3

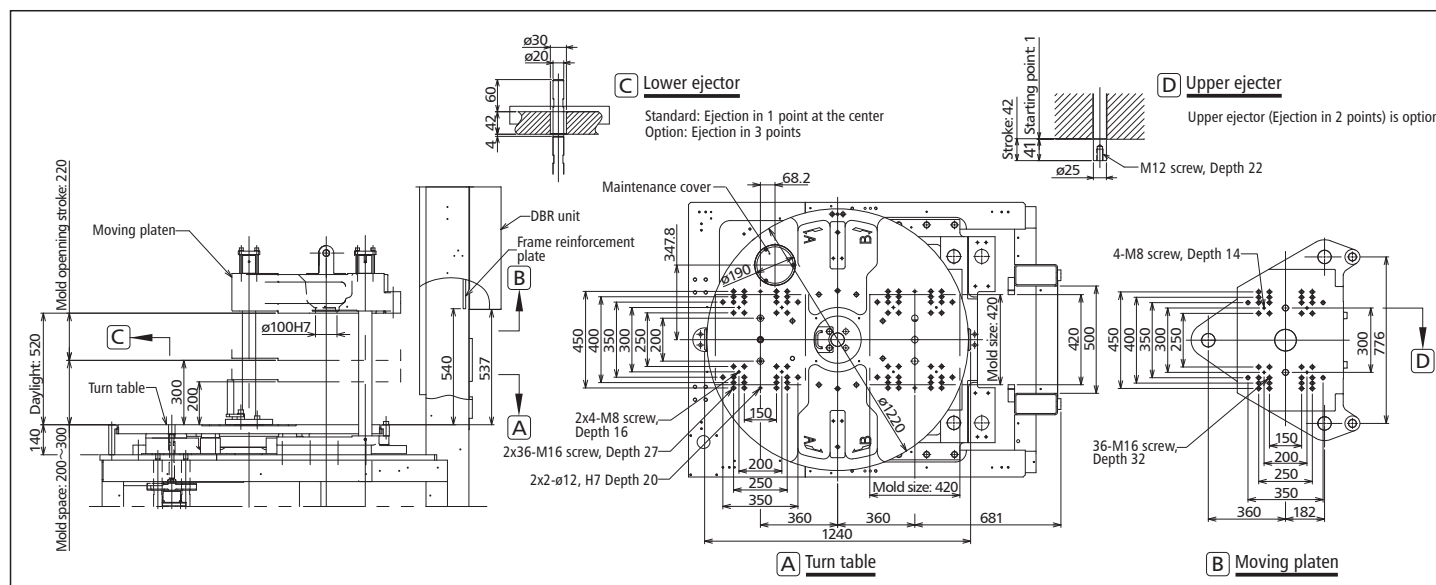


 C Lower ejector

Standard: Ejection in 1 point at the center
Option: Ejection in 3 points

D Upper ejecter

Upper ejector (Ejection in 2 points) is option.



Injection unit	Nozzle type and screw dia.		*A	*B	C
	OA	NR			
C140	25		3213	2608	30
	28		3268	2663	
		25	3323	2718	
		28	3378	2773	
C250	28		3295	2690	45
	32		3385	2780	
		28	3435	2830	
	36		3475	2870	
		32	3525	2920	

OA: Exclusive open type / NR: Needle valve type

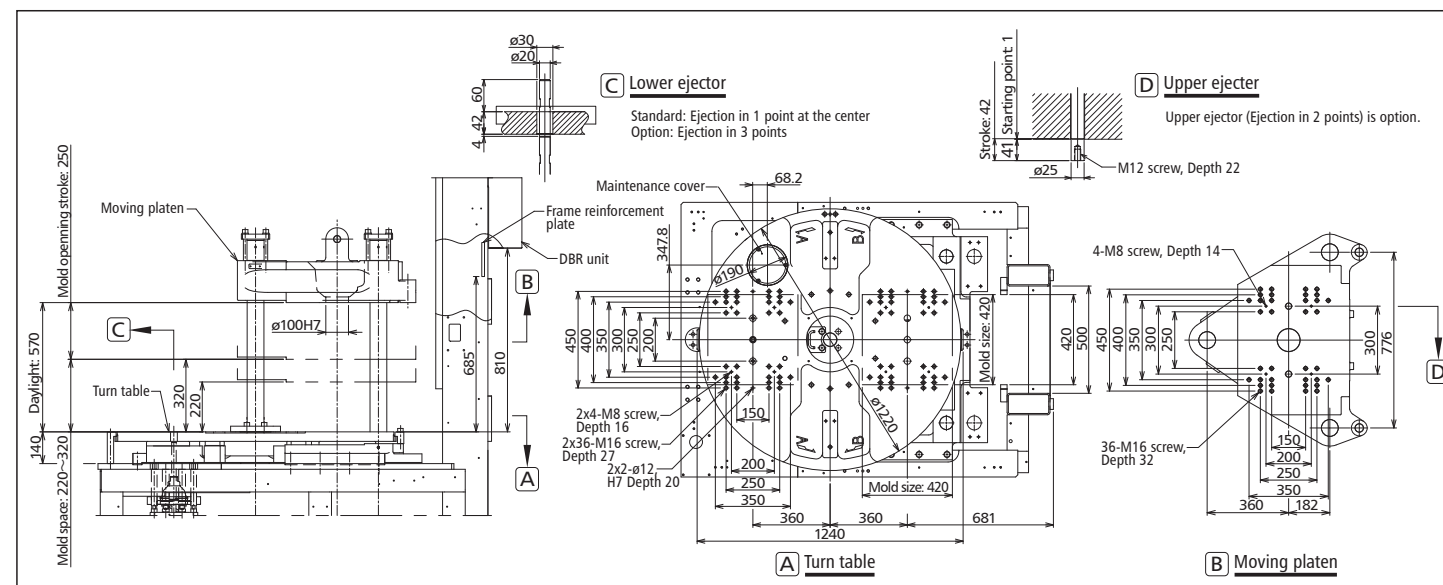


☐ Lower ejector

Standard: Ejection in 1 point at the center
Option: Ejection in 3 points

D Upper ejecter

Upper ejector (Ejection in 2 points) is option.

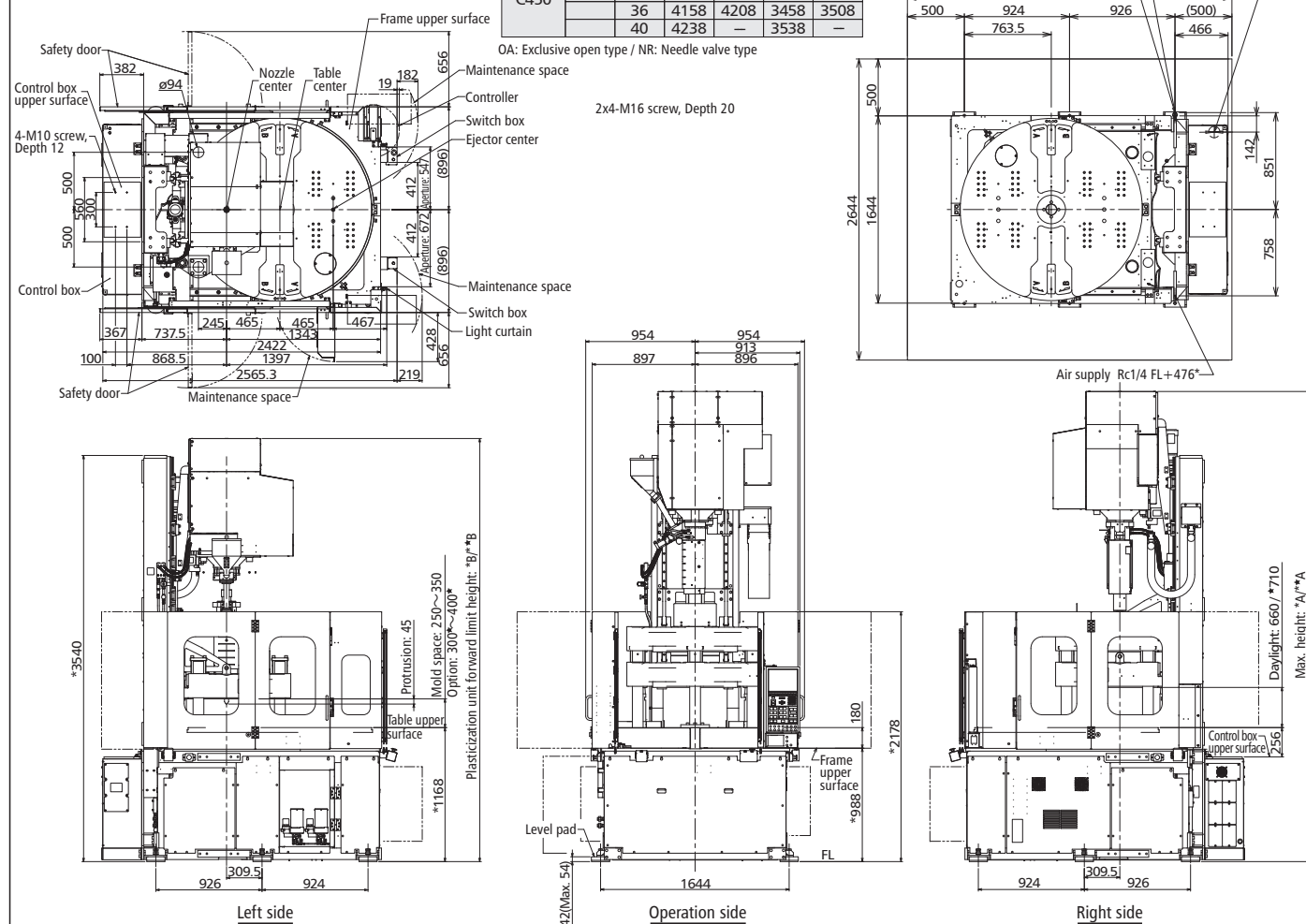


SR120Z Dimensions and Foundation Plan ● All dimensions are for machines used in Japan.

Injection unit	Nozzle type and screw dia.		*A	**A	*B	**B
	OA	NR				
C250	28		3638	3688	2938	2988
	32		3728	3778	3028	3078
		28	3778	3828	3078	3128
	36		3818	3868	3118	3168
C450		32	3868	3918	3168	3218
	36		4018	4068	3318	3368
	40		4098	4148	3398	3448
		36	4158	4208	3458	3508
	40		4238		3538	

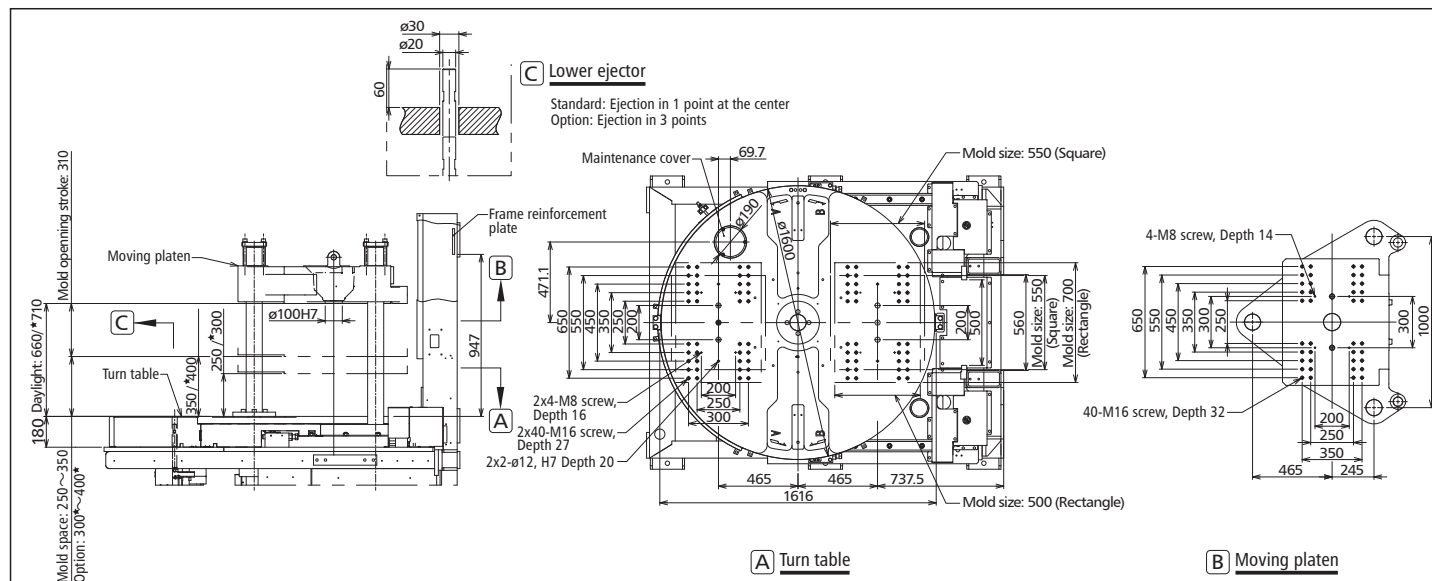
OA: Exclusive open type / NR: Needle valve type

2x4-M16 screw, Depth 20



The figure marked with a star (*) shows dimension selected the optional 50 mm mold extension. The figure marked with an asterisk (*) shows dimension equipped with the level pads (H42 mm).

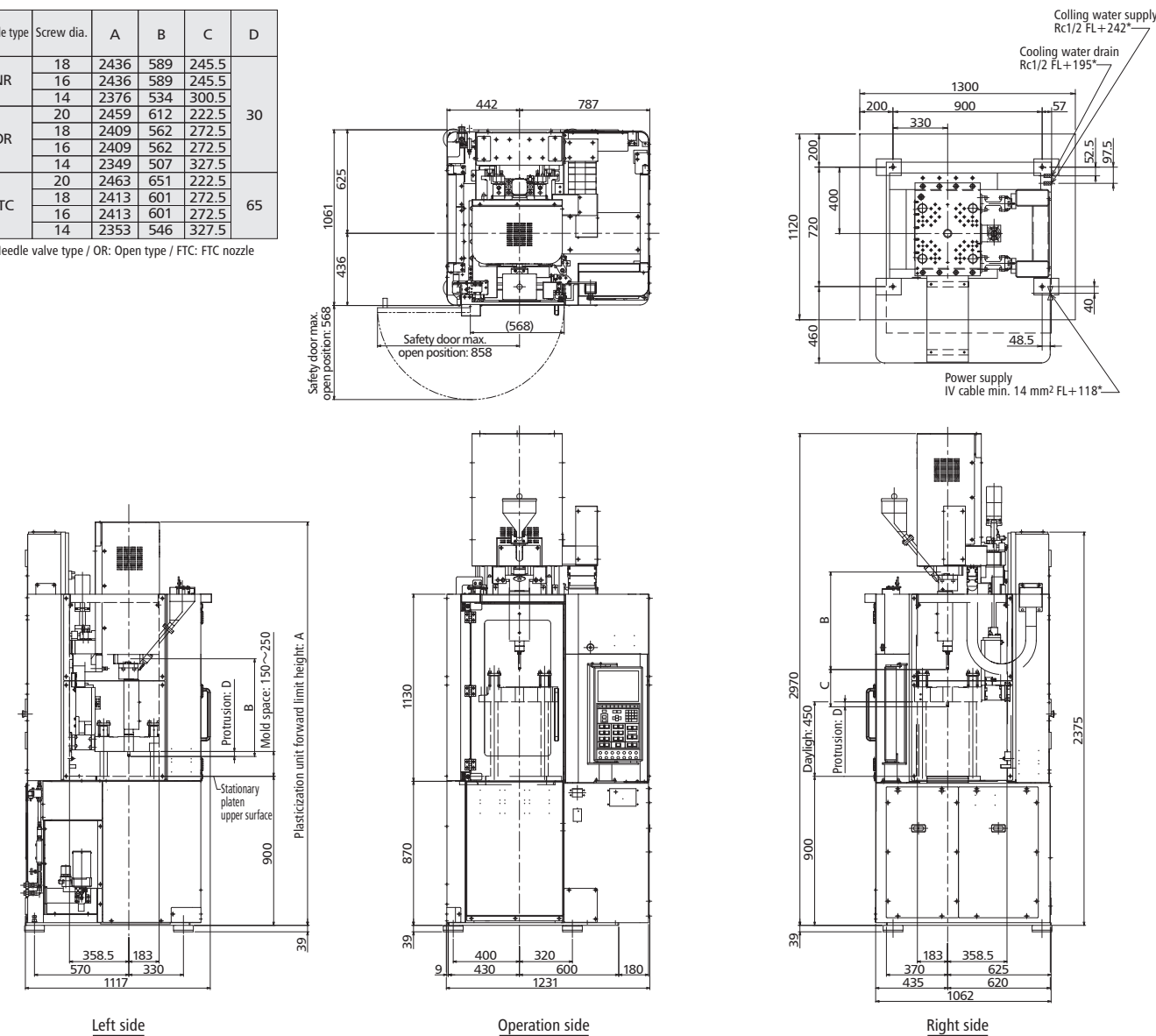
SR120Z Dimensions of Platens ● This drawing complies with JIS B 6701.



SV18M Dimensions and Foundation Plan ● All dimensions are for machines used in Japan.

Nozzle type	Screw dia.	A	B	C	D
NR	18	2436	589	245.5	30
	16	2436	589	245.5	
	14	2376	534	300.5	
OR	20	2459	612	222.5	
	18	2409	562	272.5	
	16	2409	562	272.5	
	14	2349	507	327.5	
FTC	20	2463	651	222.5	65
	18	2413	601	272.5	
	16	2413	601	272.5	
	14	2353	546	327.5	

NR: Needle valve type / OR: Open type / FTC: FTC nozzle



The figure marked with an asterisk (*) are for when the leveling pads are not used.

SV18M Dimensions of Platens ● This drawing complies with JIS B 6701.

