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Vertical
All-electric Vertical Injection Molding Machine

The machines in this series have acquired
JIS B 6711:2021 (equivalent to ISO 20430:2020)
certification.

We support the enhancement of our customers' corporate value through providing high performance, high quality, and safe injection molding machines.



Vertical
All-electric Vertical Injection Molding Machine



Lineup	
SR50Z ²	(490kN)
SR75Z ²	(730kN)
SR120Z ²	(1170kN)
SV18M ²	(170kN)
SV50M ²	(490kN)
SR100H ²	(980kN)

SR-Z2

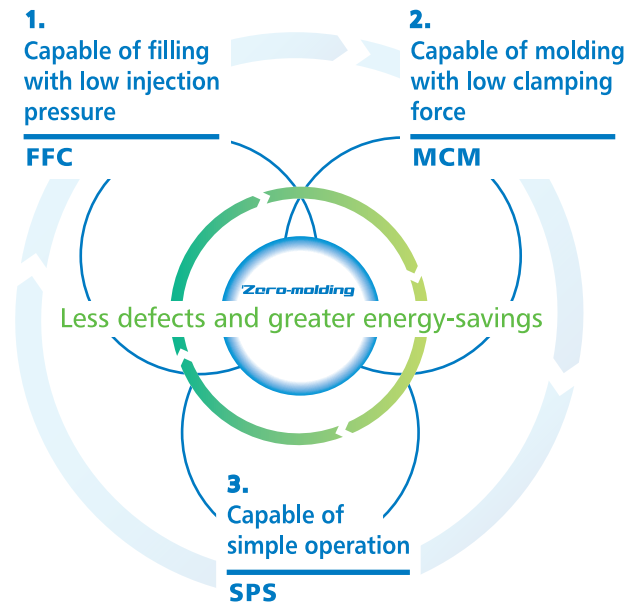
All-electric Vertical Rotary Type Injection Molding Machine

This vertical rotary molding machine performs insert molding with engineering plastics and super-engineering plastics. It is equipped with an SL screw and large, high-speed rotary table that combine to deliver precision, fast-cycle molding.

Unique technology that reduces molding defects and saves energy with simple operation

'Zero-molding'

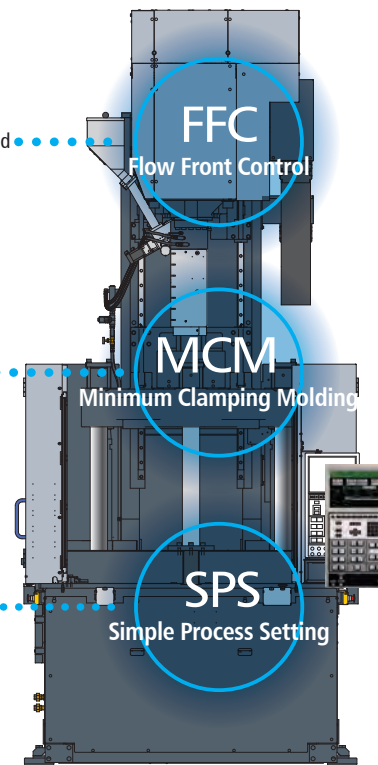
Less defects and greater energy-savings realized by low injection pressure and low clamping force. Molding work supported by simple operation.



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

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

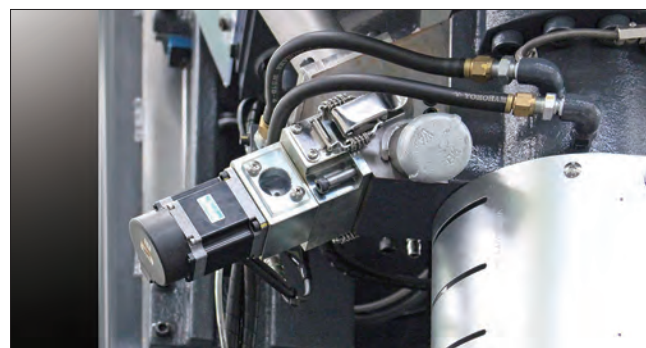
- Easy, mistake-free setup anyone can do
- Greatly shortened setup and operation



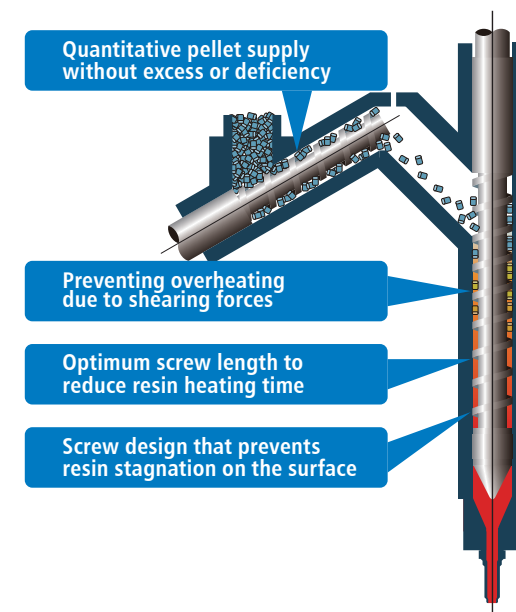
Lower material costs owing to smooth melting

SL Screw System

The SL Screw System prevents resin stagnation and shearing. It was designed by visually analyzing resin melting behavior with respect to temperature and pressure.



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.



- Example of reduction in resin loss to purging -

SL Screw	1017 g
Ordinary screw	1880 g

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.

- Example of defective shot reduction -

SL Screw	← -3,600 shots/yr
Ordinary screw	

SR120Z2 / Insert part for automobile / PBT / 2 cav.
Shots of defective parts were reduced by improving mold deposits. When converted to CO₂, it decreased emissions by 572 kg for the year.

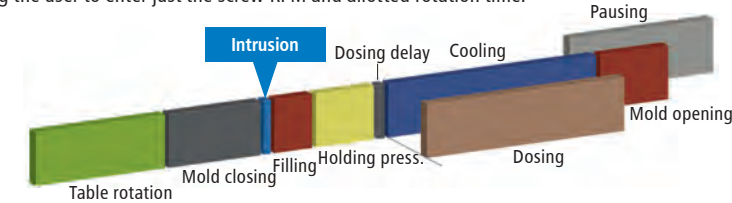
Stable filling even with high volume injection

Refilling control Intrusion

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

Optional

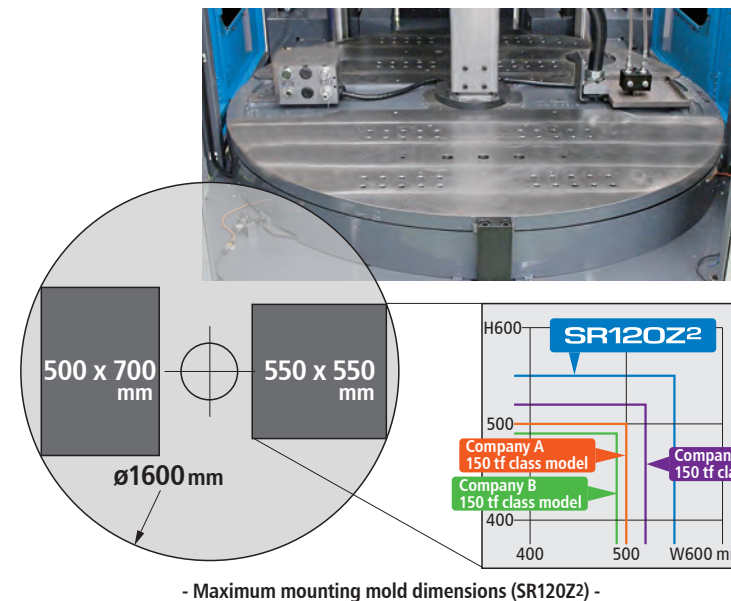
Any anticipated resin shortfalls are made up during screw rotations prior to resin injection. Set up is simple requiring the user to enter just the screw RPM and allotted rotation time.



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 to apply their more complex composite molding needs.



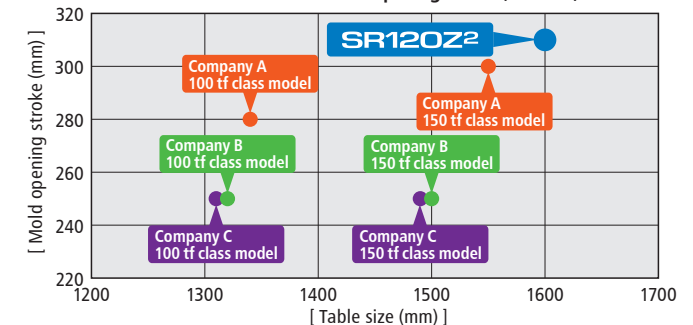
Contamination-free molding

Tie bar plating

Prevents rust caused by condensation, gases, etc., and prevents contamination.

Optional

- Table diameter and mold opening stroke (SR120Z2) -



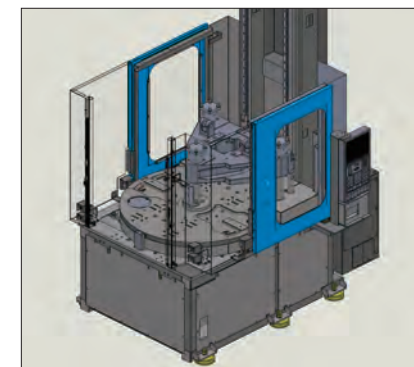
Flexibility in building automated production lines

The package for automation equipment

Molding machine specifications are customized and packaged according to automation equipment specifications, location in the line and loading direction. This flexibility lends itself well to building automated production lines.

Optional

Selectable items	Number of patterns
Safety door and cover	7
Controller location	6
Cycle start switch location	6



- An example of the package -

- Safety door and cover: Type II (Left/Right safety doors can be removed)
- Controller location: Type II (Controller installed on the right side of the molding machine)
- Cycle start switch location: Type III (Start switch installed on operating panel)

Screw Assembly

Specifications		Wear and corrosion resistant A	Wear and Corrosion resistant B
Material	Screw	Wear and corrosion resistant A	Wear and corrosion resistant B
	Cylinder	Wear and corrosion resistant A	Wear and corrosion resistant B
	GS Valve	Wear and corrosion resistant A	Wear and corrosion resistant A + MK coating
Type	SL Screw	○	○
Wear resistance		★★	★★★
Corrosion resistance		★★	★★
Suitable resins		Resins with less than 30% GF, flame retardant resins	Resin with 30 - 40% GF, resins with large amount of filler (GB, CF, MR)

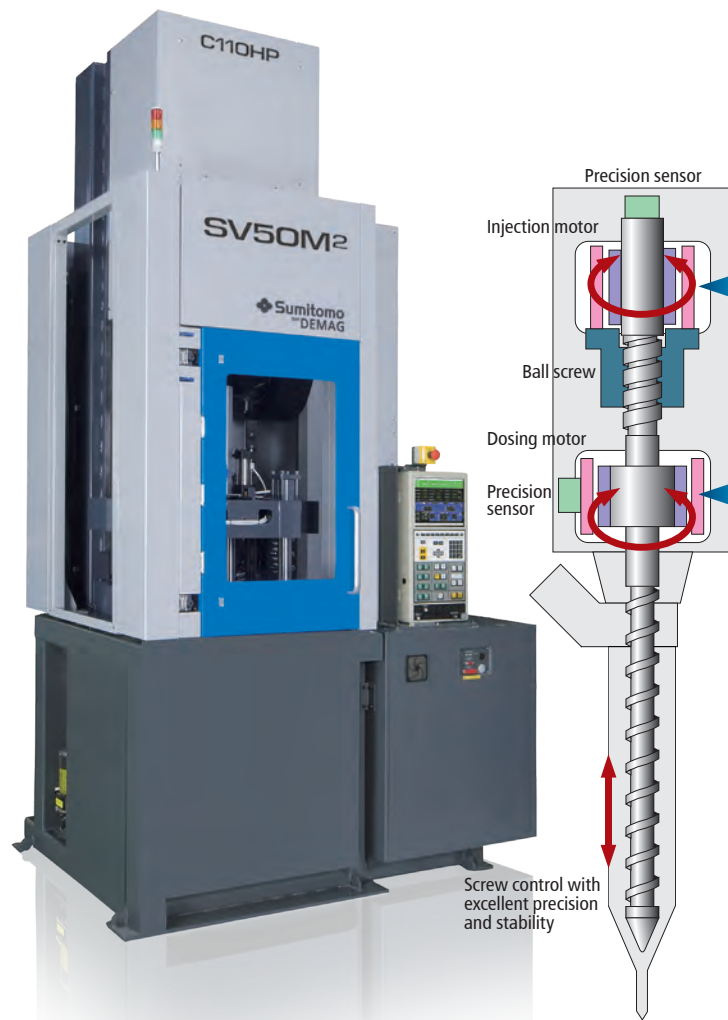
★★★ Most suitable ★★ Suitable ★ Usable



SV-M2

All-electric Vertical Injection Molding Machine

This single-action vertical molding machine is suited for molding hoops, etc. It has a direct drive injection unit that enables precision, stable molding.



Precision stability at its best

Direct drive system

The originally-developed low-inertia servomotor is controlled by an advanced control system ISC (Intelligent Servo Controller). It allows the screw to achieve high-precision and high-response control, so precision and stability of plasticizing, filling and holding pressure processes can be satisfied.

PAT. pend. in Japan

Original algorithm
+
High-performance applications

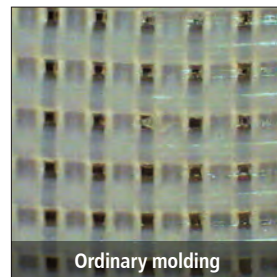
ISC

Advanced filling control

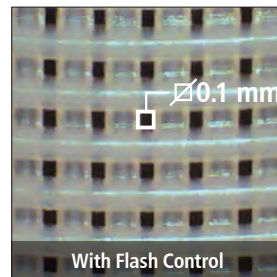
Flash Control

It precisely controls the behavior of the screw in the filling process, and performs smooth and complete filling using the viscoelasticity of the resin.

- Filling comparison of small opening mesh -



Ordinary molding



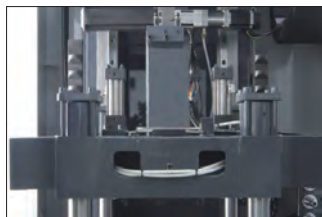
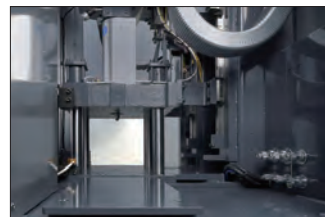
With Flash Control

Screw control with excellent precision and stability

Greatly improved production efficiency

High workability and safety

The wide opening for ease of work has a highly visible plastic cover. Equipped with double mechanical stoppers for added safety.

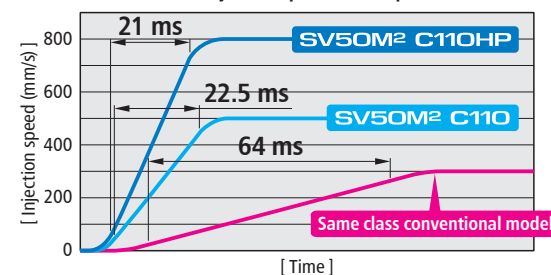


Support for composite molding of thin-walled products and multi-cavity molds

Ultra high-speed injection unit

For the SV50M2, users can select the ultra high-speed injection unit C110HP with the maximum injection speed of 800 mm/s.

- Maximum injection speed and responsiveness -



Screw Assembly

Machine model	SV18M2/SV50M2	SV50M2	SV18M2/SV50M2	SV50M2	SV18M2
Specifications	Nitrided	Chrome Plated	Wear and Corrosion resistant (II)	Wear and Corrosion resistant (III)	High temperature
Material	Screw	Nitride Coating	Chromium Plated	Wear and Corrosion resistant (II)	Wear and Corrosion resistant (II)
	Cylinder	Nitride Coating	Nitride Coating	Wear and Corrosion resistant (III)	Wear and Corrosion resistant (II)
	Screw tip (set)	Rotating type	Rotating type	Wear and Corrosion resistant (II)	Wear and Corrosion resistant (II)
Type	SD Screw	○	○	○	○
	SF Screw	—	○	—	—
Wear resistance	★	★	★★	★★★	★★
Corrosion resistance	★	★	★★	★★	★★
Suitable resins	Non-abrasive (wear) and corrosive resins	Resins may burn, resins with poor thermal stability	Resins with less than 30% GF, flame retardant resins	Resin with 40% - 60% GF, highly corrosive resins	Resin with high melting temperatures

★★★ Most suitable ★★ Suitable ★ Usable

SR-H2

All-electric Vertical Rotary Horizontal Injection Molding Machine

This all-electric molding machine is equipped with a rotary table for inserts, while its vertical mold clamping and horizontal resin injection keep machine height lower.

⚠ For details of main specifications and equipment, please contact us.



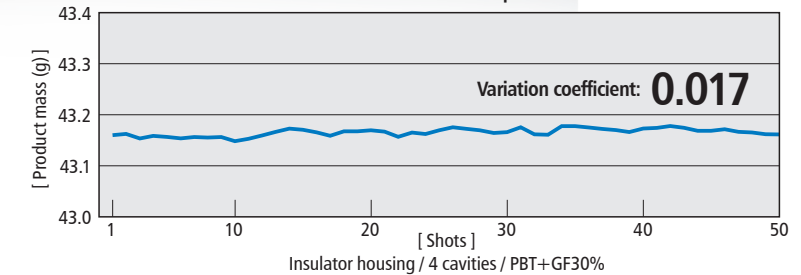
Outstanding precision stability

Direct drive system

The SR-H2 incorporates the standard direct drive system used with horizontal machines. The screw control with high-precision and high-response performance improves precision and stability of plasticizing, filling and holding pressure processes.

PAT. pend. in Japan

- Mass fluctuation of molded products -

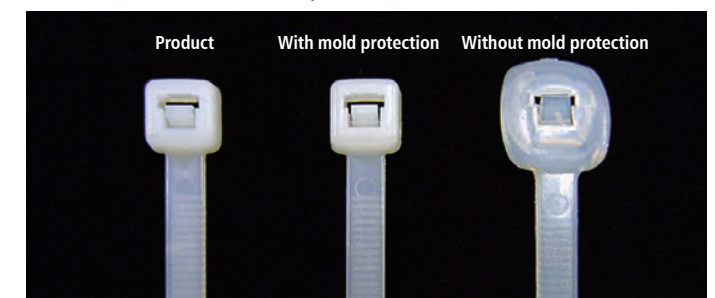


Protect your important molds

Highly sensitive mold protection

Mold protection function has become more sensitive. It greatly protects the mold in the event of accidents during insertion processes, etc.

- Mold protection function -

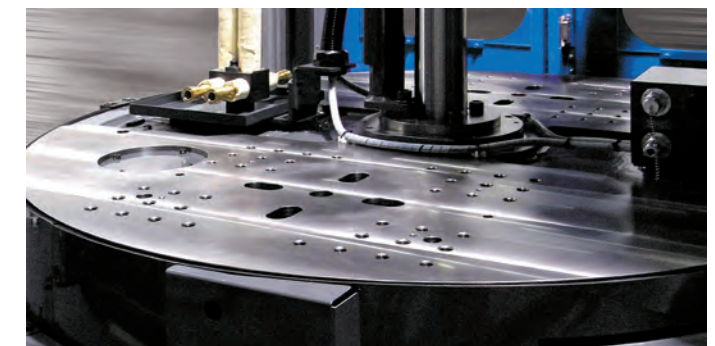


Comparison of cable tie crushing with/without mold protection

Low rotary table and fully open door

Enhanced workability

In order to improve workability, it's adopted the lowest table in the same class machine and a fully open door that secures a spacious space.



⚠ For details of screw assembly, please contact us.

Standard Equipment

Plasticizing and injection unit	SR-Z ²	SV-M ²
1. Standard screw assembly (open nozzle, hard chromium plating)	*1	*2
2. Injection pressure program control (5-stage/2-stage)	○	○
3. Holding pressure program control (4-stage/2-stage)	○	○
4. Screw pull back (after holding/after dosing)	○	○
5. Digital display of screw position (0.01 mm setting)	○	○
6. Holding time 0.01 seconds setting	○	○
7. V/P switchover function (pressure/position)	○	○
8. Filling delay timer	○	○
9. Automatic pursing device with interlock (nozzle contact/when the injection unit backward end)	○	○
10. Zone 1 high capacity heater	☆	○
11. 2-mode temperature control (production/standby)	○	○
12. Screw cold start prevention function (with interlock variable timer)	○	○
13. Injection unit retreat timing setting (with delay timer)	○	○
14. Injection unit movement setting (detection of nozzle contact, moving time)	○	○
15. Digital display of screw rotation speed	○	○
16. Remaining cooling time display	○	○
17. Dosing start delay timer	○	○
18. Speed rise time selection during injection/holding pressure (10 modes)	○	○
19. Speed setting during holding pressure	○	○
20. Independent temperature control device of nozzle	○	○
21. Stepped heat-up operation	○	○
22. Water cooling jacket temperature control device	○	○
23. Mold open operation during dosing (needle nozzle drive control)	○	○
24. Melt retention prevention function	○	○
25. One-touch manual dosing	○	○
26. Purge material receiving tray and protection device	☆	○
27. Screw pull back delay control function	○	○
28. Flow meter for water cooling jacket	○	○
29. Synchro dosing function	○	○
30. Flash Mode	○	○
31. Heating cylinder temperature control device	○	○
32. SK Control software	○	○

Mold clamping unit	SR-Z ²	SV-M ²
1. Position and speed program control during mold opening/closing (5-stage/3-stage)	○	○
2. Mold protection function	○	○
3. Low pressure mold clamping function	○	○
4. Mold opening/closing pause function	○	○
5. Clamping force setting	○	○
6. Mold height setting	○	○
7. Ejector unit (multi-eject and return signal available)	○	○
8. Ejector ejection delay timer	○	○
9. Ejector setting (speed, stroke and pressure)	○	○
10. Ejector 2-speed control	○	○
11. Ejector ejection protection device	○	○
12. Ejector ejection interlock (only possible at mold opening end position in manual mode)	—	○
13. Ejector ejection during mold opening	—	○
14. Ejector ejection during mold closing	—	○
15. Ejector plate return signal (input signal to molding machine, metal outlet connection) *9	☆	○
16. Mold opening/closing signal (spear control signal) *9	○	○
17. Valve gate drive circuit (control circuit only) *9	○	○
18. Mold installation standby mode (low-speed mold opening/closing)	○	○
19. Safety door with clear PMMA window	*3	○
20. Non-operation side emergency stop button	○	○
21. Clamping safety system (electrical/mechanical)	*3	○
22. Low vibration mode/high speed mode during mold opening/closing	○	○
23. Multi-toggle function (multi-stage clamping force setting)	○	○
24. Ejector unit with brake	○	○

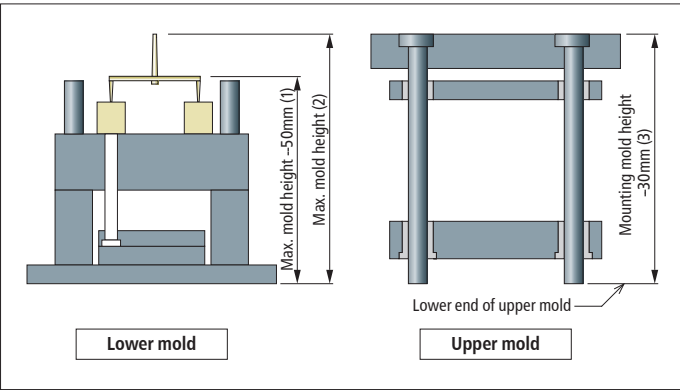
○ Standard ☆ Optional — Cannot be selected

*1 The wear and corrosion resistant SL Screw is a standard specification of the SR-Z² series.
*2 The SV18M2 is mounted with an open nozzle.
*3 The SR-Z² series is equipped with a safety light curtain for the clamping safety system on the operating side.
*4 Only available for SV50M².
*5 There are manual greasing points also.
*6 The total height of the machine will increase by 50 mm.
*7 The needle valve type nozzle of C450-ø40 cannot be chosen.
*8 Only available for SR120Z².
*9 All input and output signals are no-voltage contact signals. Power is not supplied with output signals.
*10 Due to an addition of the safety guard for Motion mode, mold dimensions should be as follows. (See also the illustration above.)
- Mold height : Less than or equal to the height of the standard spec and 50 mm extension spec for SR120Z²
- Lower mold height (1) : Maximum mold height minus 50mm or less (Excluding center sprue, including moldings and runners)
- Sprue section height (2) : Maximum mold height or less
- Upper mold height (3) : Mounting mold height minus 30 mm or less (Including guide posts and puller bolts, etc.)
● Specifications are subject to change without notice for performance improvement.

Control unit	SR-Z ²	SV-M ²
1. 12.1 inch TFT color LCD screen	○	○
2. Setting input device (sheet-key and touch panel)	○	○
3. Molding condition storage function (200 conditions)	○	○
4. Operation support function	○	○
5. Molding support function	○	○
6. Waveform display function (waveform memory function, display value reading function, data storage by trigger, etc.)	○	○
7. Screen hard copy function	○	○
8. Take-out robot connection circuit *9	○	○
9. 3 language screen switching (Japanese/English/Chinese)	○	○
10. Maintenance management function (inspection time, grease greasing time, item, operation method display)	○	○
11. Automatic start/stop function (lowered temperature/heater start/molding machine stop) *9	○	○
12. Process display function	○	○
13. SSR heater drive circuit	○	○
14. Industrial unit input function (speed, position, pressure, rotation speed)	○	○
15. Molding machine status output signal (5 ch) *9	○	○
16. USB connection circuit	○	○
17. PC connection circuit	○	○
18. Molding conditions protection	○	○
19. Abnormal processing selection function	○	○
20. Initial reject/short stop reject function	○	○

Monitor unit	SR-Z ²	SV-M ²
1. Actual value display function	○	○
2. Heater breakage monitoring device	○	○
3. Peripheral equipment monitoring function (1 ch) *9	○	○
4. Abnormality monitoring function (maximum cushion, minimum cushion, filling pressure, mold protection, cycle time, dosing time)	○	○
5. Abnormality monitoring condition automatic setting function	○	○
6. Abnormal history display function (abnormal item/occurrence time display)	○	○
7. Molded product discrimination	○	○
8. Quality control function (actual value statistics, various graphs, 100,000 shots saved data confirmation)	○	○
9. Production number management function	○	○
10. Auto start function (heater, external output signal)	○	○
11. Heating cylinder temperature monitoring function (all zones)	○	○
12. Self diagnosis function	○	○
13. Abnormal alarm buzzer	○	○
14. Shot counter	○	○
15. Molding cycle time monitor (attended/unattended selection)	○	○
16. Production automatic completion circuit	○	○
17. Overall Screen	○	○
18. Prevent forgetting to set monitoring	○	○
19. Brake inspection (mold opening/closing motor brake)	○	○

Others	SR-Z ²	SV-M ²
1. Auto grease supply unit (cartridge grease type) *5	○	○
2. Mold cooling water block device (2 systems) (Flow meter and valve are options.)	○	○
3. Standard spare parts (fuse, mechanical string)	○	○



Relationship illustration of Note 10

Optional Equipment

Plasticizing selection	SR-Z ²	SV-M ²
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 ²	SV-M ²
1. Resin temperature sensing device (only when needle valve nozzle is equipped)	☆	*4
2. Standard type hopper	☆	☆
3. V/P switchover by mold cavity pressure	☆	☆
4. Needle valve nozzle drive circuit	☆	*4
5. FTC nozzle electric control circuit	☆	☆
6. High temperature heater control circuit (max. temp. 499 °C)	—	☆
7. Hopper slide device	—	—
8. Hopper shutter device	☆	☆
9. Plating resin inlet of cooling water jacket	☆	☆

Mold clamping unit	SR-Z ²	SV-M ²
1. Pneumatic core puller system (lower mold 2 systems)	☆	—
2. SPI take-out robot connection circuit	—	☆
3. Mold exchanging table (SV18M2)/Mold exchanging preroller (SV50M2)	—	☆
4. Die clamp control unit	—	☆
5. Heat insulating plate (5 mm/10 mm)	☆	☆
6. Hoop feeder connection circuit	—	☆
7. Insert device connection circuit	—	☆
8. Mold height extension 50 mm *6, *7	*8	—
9. Heavy duty mold opening/closing spec	—	*4
10. Upper ejector (pneumatic drive)	☆	☆
11. Rotary table high-speed and high-load spec	*8	—
12. Tie bar plating	☆	☆

List of Preparation Items (Summary)

Main Breaker Capacity

Machine	SR50Z ²	SR75Z ²	SR120Z ²	SV18M ²	SV50M ²
Main breaker capacity	100 A (34.6 kVA)	125 A (43.3 kVA)	175 A (60.6 kVA)	60 A (20.8 kVA)	100 A (34.6 kVA)

● Voltage and frequency of main power source is applicable to the areas of AC 200 V-50 Hz/AC 200 V-60 Hz/AC 220 V-60 Hz.
● Connect to the mating of 3-phases 3-wires, and grounding cable.

Spare Power Receptacles (Optional)

Machine	SR50Z ²	SR75Z ²	SR120Z ²	SV18M ²	SV50M ²
Maximum amperage	40A	60A	60A	40A	40A

● 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 ²	SR75Z ²	SR120Z ²	SV18M ²	SV50M ²
Primary side power cable size	30 mm ²	38 mm ²	60 mm ²	14 mm ²	30 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

● 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)

Machine	SR50Z ²	SR75Z ²	SR120Z ²	SV18M ²	SV50M ²
Band heater capacity	3.7 kW	6.3 kW	7.6 kW	2.9 kW	4.8 kW
Required cooling water	0.9 L/min	1.5 L/min	1.8 L/min	0.7 L/min	1.1 L/min
Injection unit / Screw dia.	C140 / ø28	C250 / ø36	C450 / ø40	C30 / ø20	C110 / ø28

Mold Cooling Line

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

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

Required compressed air values (Reference by approximate value for standard nozzle)

Machine	All models
Required compressed air (Pressure and consumption)	0.5 MPa 1.0 L/min

● If there is compressed air used for mold control such as needle valves and core puller, please add it to the above consumption amount.

Control and monitor unit	SR-Z ²	SV-M ²
1. Leak circuit breaker (AC 200 V/220 V 3ø3W+E) (Asian countries only)	☆	☆
2. Mold temperature monitor 2 zones	—	☆
3. Mold temperature monitor 3 zones	☆	—
4. Peripheral equipment monitoring function (standard+2 ch)	☆	☆
5. Waveform analog signal output	☆	☆
6. Mold temperature automatic adjuster	☆	☆
7. Automatic starting system (heater, water supply, external output signal)	☆	☆
8. Revolving alarm lamp	☆	☆
9. Multi function 3-color LED signal tower	☆	☆
10. 4-line closed circuit water connection lines (with flow meter and stop valve)	—	☆
11. 2-line closed circuit water connection lines (with flow meter and stop valve)	☆	☆
12. Spare power receptacles	☆	☆
13. Power receptacles for tools (with transformer)	☆	☆
14. Stop valve and filter for cooling water line	☆	☆
15. Key-lock switch for molding setup	☆	☆
16. Motion *10	☆	☆

Spare parts and accessories	SR-Z ²	SV-M ²
1. Spare parts A (mechanical parts: brake lining, lub. parts)	☆	☆
2. Spare parts B (electrical parts: thermocouple)	☆	☆
3. Spare parts for export (encoder, limit switch, relay, switch and inductive proximity sensors)	☆	☆
4. Leveling pads (for one machine)	☆	☆
5. Anchor bolts (for one machine)	☆	☆
6. Mechanical parts and hook for hosting machine	☆	☆
7. Tools A	☆	☆
8. Grease gun	☆	☆
9. Grease cartridge (700 cc)	☆	☆
10. Grease cartridge (400 cc)	☆	☆

Main Specifications

Item	Unit	SR50Z ²	SR75Z ²	SR120Z ²
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■Clamping unit

Clamping system		Double toggle (lower platen fixed)	Double toggle (lower platen fixed)	Double toggle (lower platen fixed)
Clamping force (max.)	kN	490	730	1170
Mountable mold dimensions (max.)	mm	420 x 420	420 x 420	550 x 550
Table size	mm	ø1220	ø1220	ø1600
Daylight (When mold height extension 50 mm is selected)	mm	520	570	660
		—	—	(710)
Mold opening stroke	mm	220	250	310
Mold height (min. - max.) (When mold height extension 50 mm is selected)	mm	200 - 300	220 - 320	250 - 350
		—	—	(300 - 400)
Locating hole diameter	mm	ø100	ø100	ø100
Ejector system (ejecting points)		Motor driven type (1 point)	Motor driven type (1 point)	Motor driven type (1 point)
Ejector ejection force	kN	26	26	26
Ejector stroke	mm	60	60	60
Mountable upper mold weight (max.)	kg	100	100	300
Mountable lower mold weight (max.) (When rotary teble hige speed high load spec selected)	kg	200 x 2	200 x 2	500 x 2
		—	—	600 x 2

■Injection unit

		C140				C140		C250			C250			C450		
		S				S		M			M			M		
Screw diameter	mm	20	22	25	(28)*7	25	28	28	32	(36)*7	28	32	36	36	40	
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 weight (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					
Screw speed (max.)	min⁻¹	400				400					400					
Number of temperature control zone		4				4		4		5	4		5			
Heater capacity	kW	2.4	2.8	3.4	3.7	3.4	3.7	4.3	5.3	6.3	4.3	5.3	6.3	6.3	7.6	
Nozzle contact force	kN	7.8				11					11					
Protrusion	mm	30				30		45			45					
Hopper capacity (When the standard hopper is selected)	L	(10)				(10)					(10)					

■Machine dimensions and weight

Machine dimensions (W x D)	mm	1544 x 2299				1544 x 2299					1908 x 2565				
Machine height (H) ^{*4,*5} (When mold height extension 50 mm is selected)	mm	3010	3045	3100	3155	3202	3257	3295	3385	3475	3638	3728	3818	4018	4098
		—	—	—	—	—	—	—	—	—	(3688)	(3778)	(3868)	(4068)	(4148)
Table height ^{*5}	mm	898				950					1168				
Machine weight	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-Z² series are given for when machines are mounted with the SL Screw and, for the SV-M² series, when equipped with the SD Screw.
^{*4} The dimensions are at the retract end position of the injection unit when equipped with an open exclusive screw assembly.
^{*5} Includes the leveling pads.
^{*6} Does not include the leveling pads.
^{*7} These specs are optional.
 ● 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	SV18M ²	SV50M ²
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■Clamping unit

Clamping system		Double toggle (Lower platen fixed)	Double toggle (Lower platen fixed)
Clamping force (max.)	kN	170	490
Clearance between tie bars	mm	260 x 260	360 x 360
Table size	mm	400 x 560	505 x 690
Daylight (When mold height extension 50 mm is selected)	mm	450	550
		—	—
Mold opening stroke	mm	200	250
Mold height (min. - max.) (When mold height extension 50 mm is selected)	mm	150 - 250	200 - 300
		—	—
Locating hole diameter	mm	ø60	ø100
Ejector system (ejecting points)		Motor driven type (1 point)	Motor driven type (3 points)
Ejector ejection force	kN	7.8	22
Ejector stroke	mm	40	40
Upper mold weight (max.)	kg	50	100
Lower mold weight (max.)	kg	90 (Total of the upper and the lower)	240 (Total of the upper and the lower)

■Injection unit

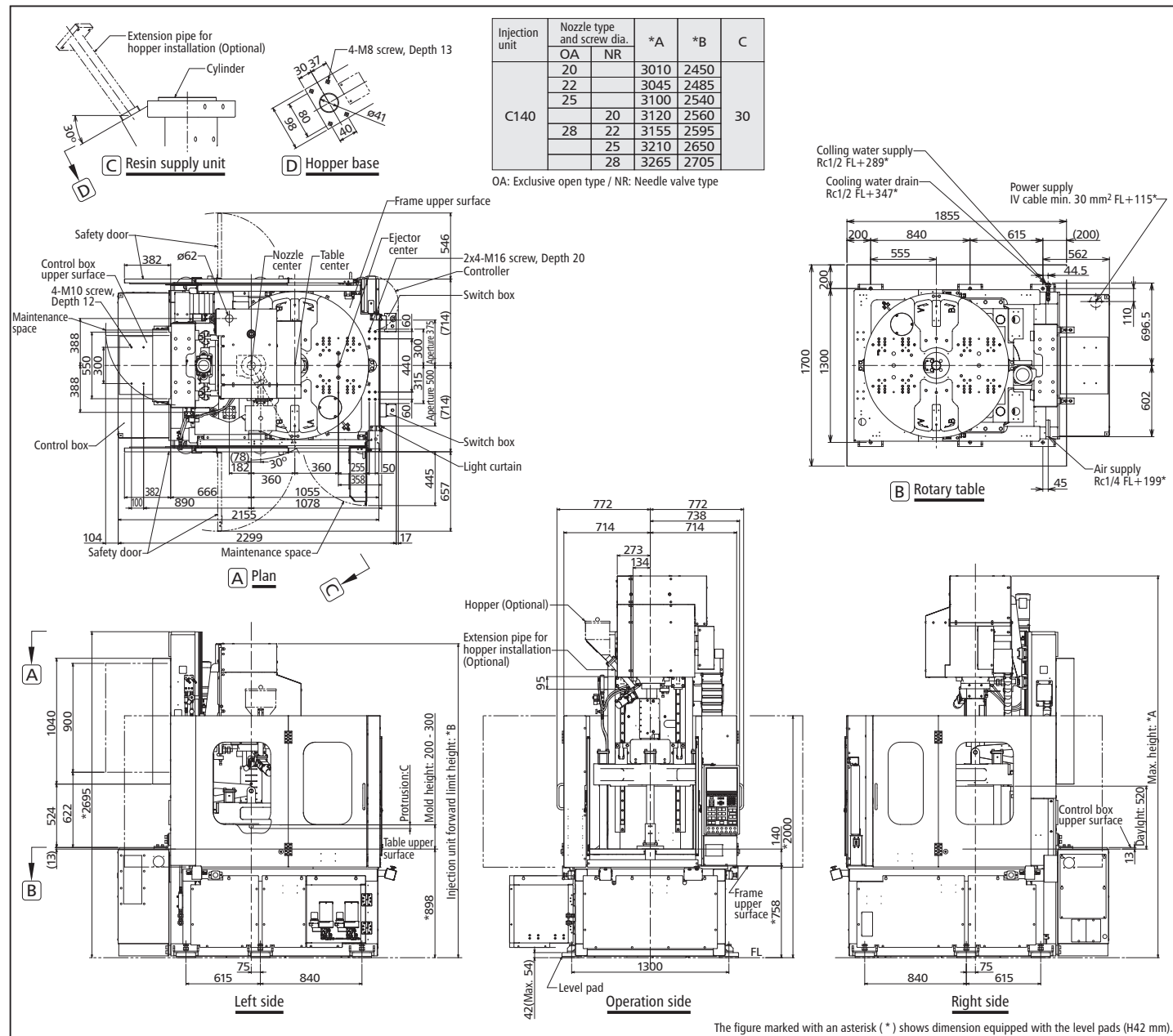
		C30				C32			C110			C110HP	
		MN				S			S			S	
Screw diameter	mm	14	16	18	20	18	20	22	22	25	28	22	25
Injection pressure (max.) ^{*1,*2}	MPa	223	266	210	170	225	182	150	274	212	174	274	241
Holding pressure (max.) ^{*1,*2}	MPa	223	212	168	136	180	146	120	219	170	139	219	192
Theoretical injection capacity	cm ³	6.2	11	14	17	14	17	21	40	51	64	40	51
Injection weight (GPPS)	g	5.9	11	13	17	13	17	20	38	49	61	38	49
Plasticizing rate ^{*3}	kg/h	5.1	9.5	13	16	9.0	13	18	18	26	37	18	26
Injection rate	cm ³ /s	77	101	127	157	127	157	190	190	245	308	304	393
Screw stroke	mm	40	55			55			104			104	
Injection speed (max.)	mm/s	500				500						800	
Screw speed (max.)	min ⁻¹	460	430			400							
Number of temperature control zone		4				4		5	5			5	
Heater capacity	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
Nozzle contact force	kN	3.9				7.8							
Protrusion	mm	30				30							
Hopper capacity (When the standard hopper is selected)	L	(4)				(10)							

■Machine dimensions and weight

Machine dimensions (W x D)	mm	1231 x 1117	1812 x 1210		
Machine height (H) *4	mm	2970	3393	3859	3804
(When mold height extension 50 mm is selected)		—	—	—	
Mold mounting surface *6	mm	900	1090		
Machine weight	t	1.7	2.6	2.8	

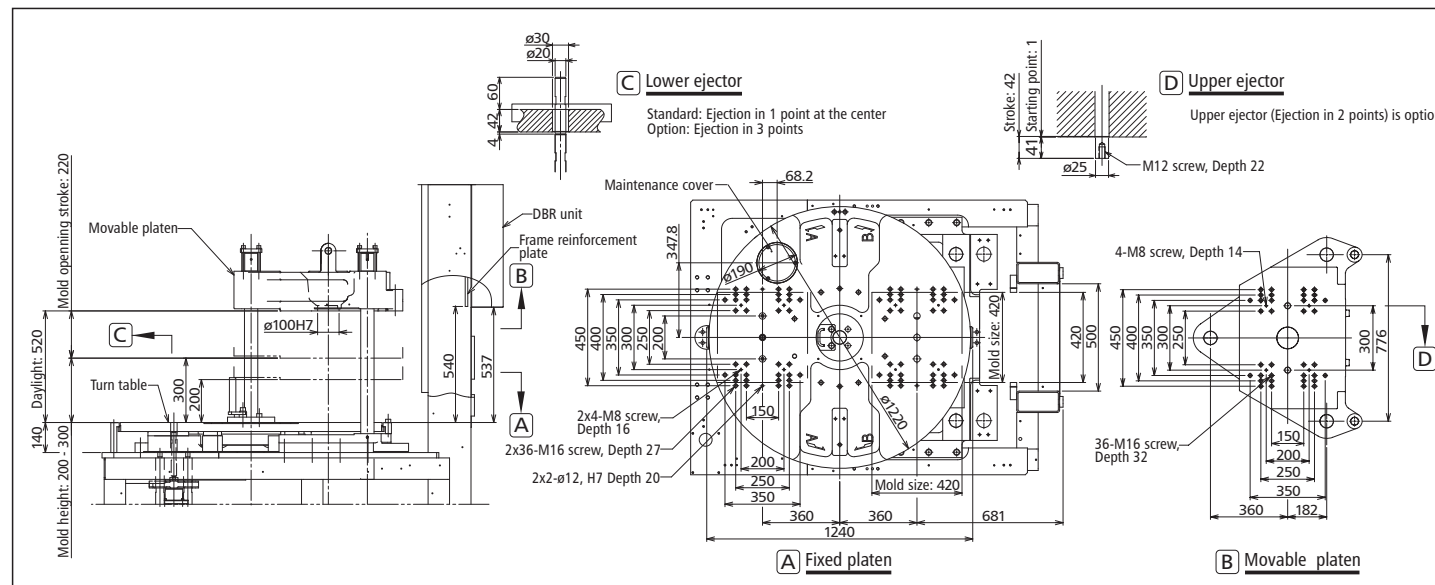
SR50Z² Dimensions and Foundation Plan

● All dimensions are for machines used in Japan.



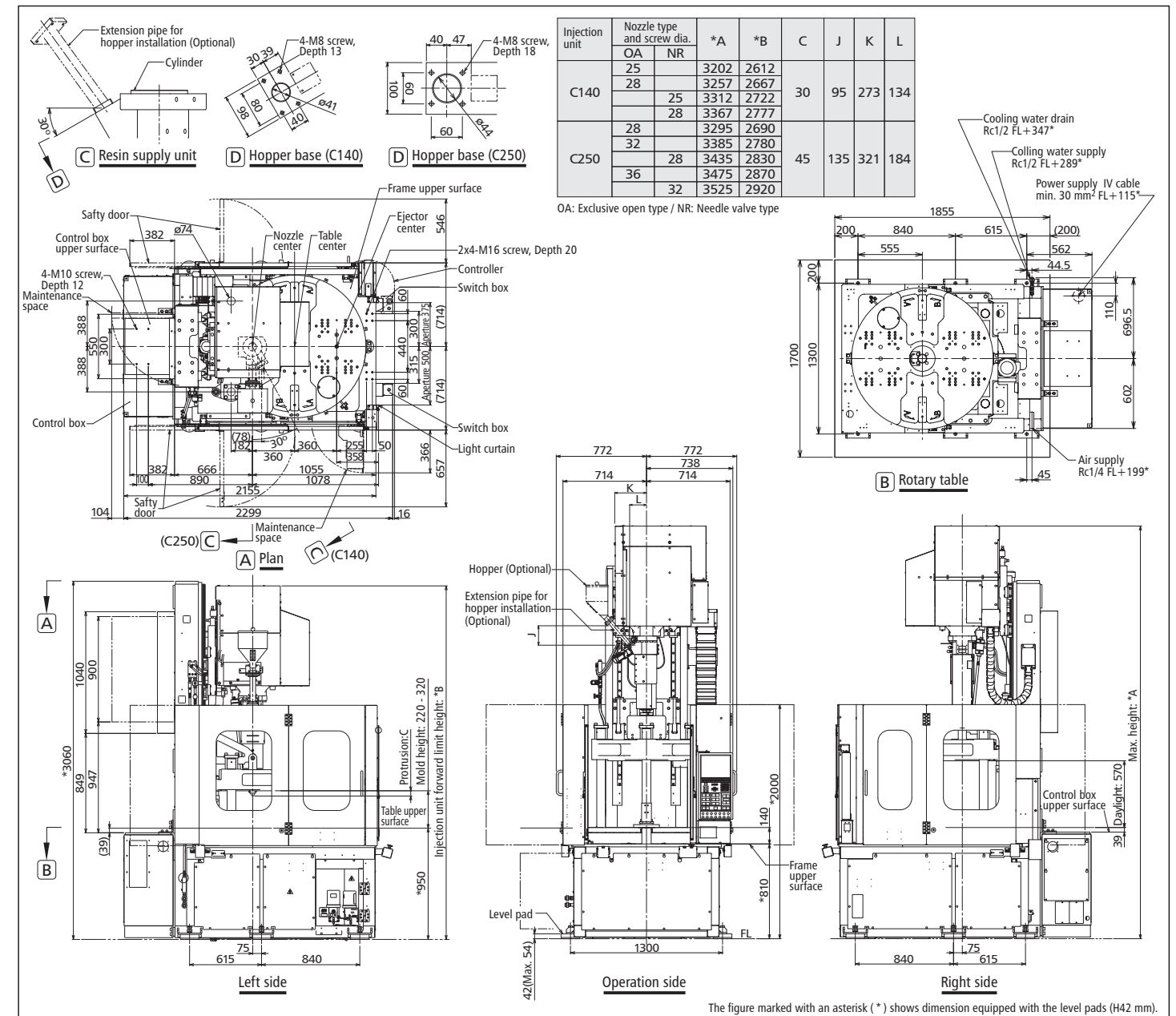
SR50Z² Dimensions of Platens

● This drawing complies with JIS B 6701.



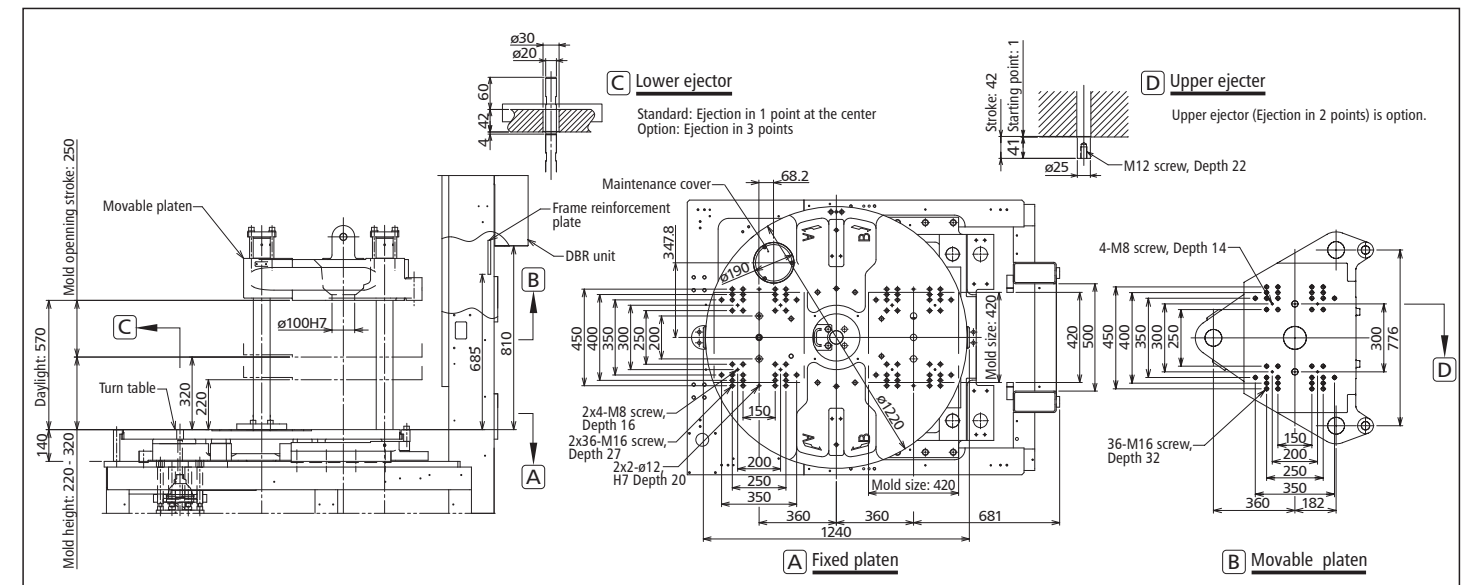
SR75Z² Dimensions and Foundation Plan

● All dimensions are for machines used in Japan.



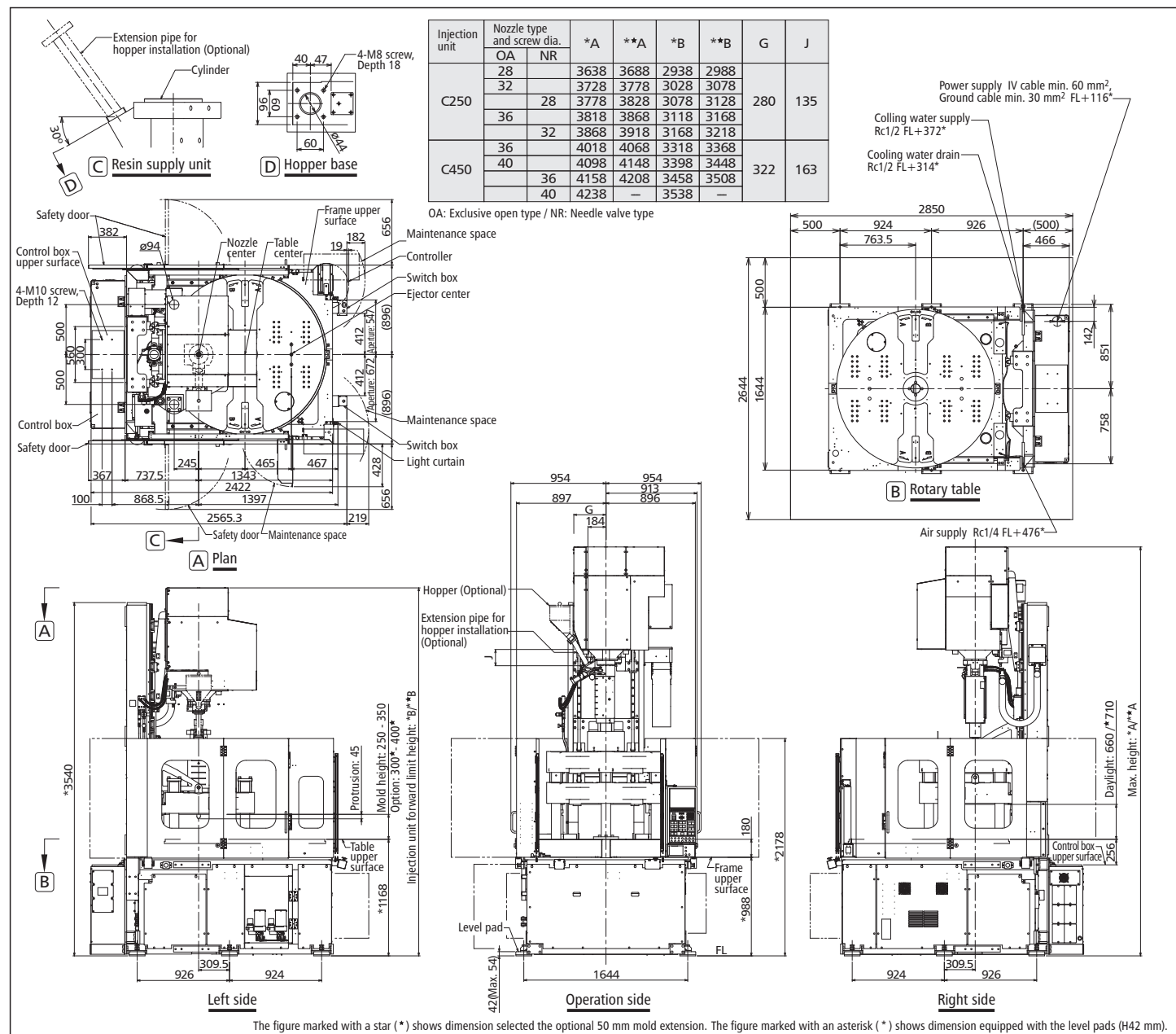
SR75Z² Dimensions of Platens

● This drawing complies with JIS B 6701.



Dimensions and Foundation Plan

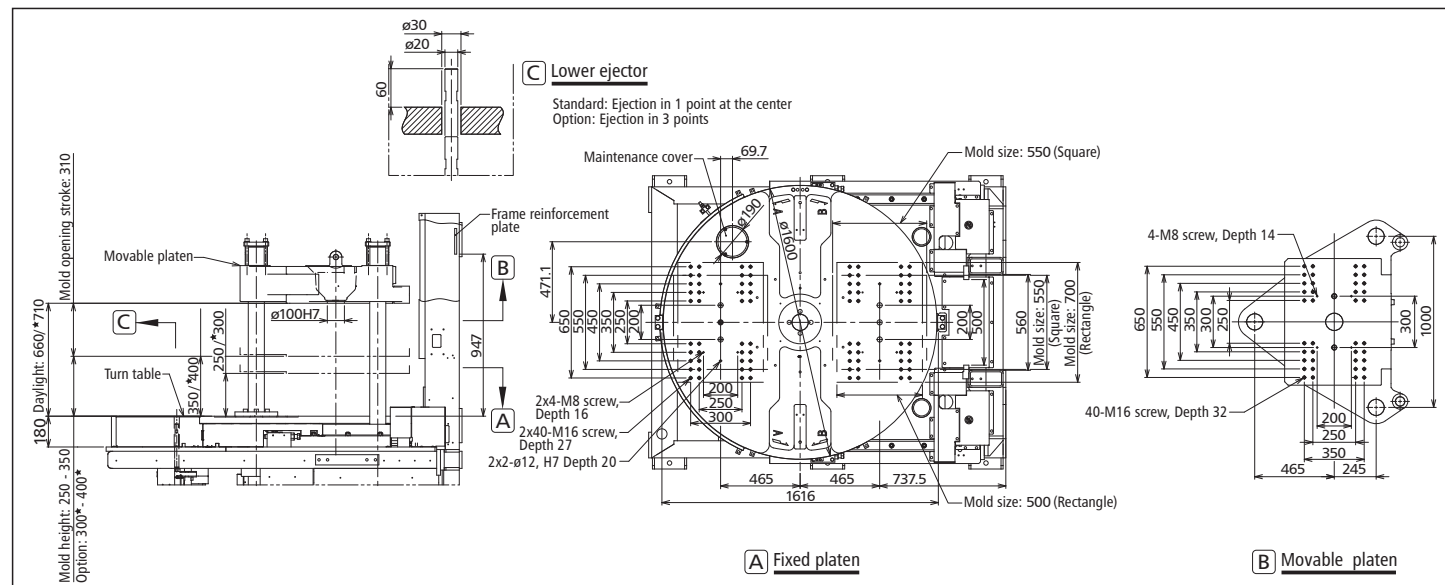
All dimensions are for machines used in Japan.



SR120Z2

Dimensions of Platens

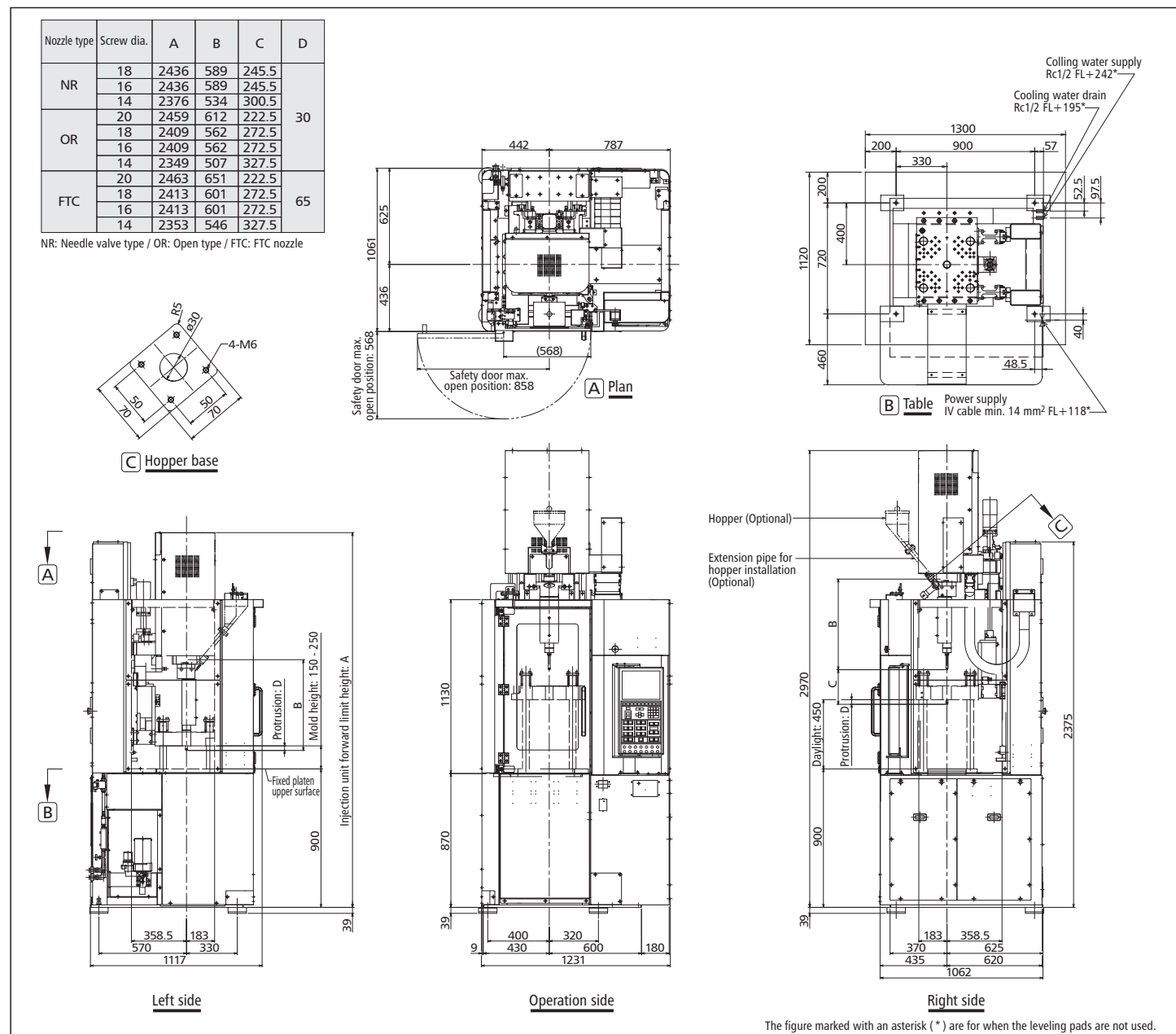
This drawing complies with JIS B 6701.



SV18M2

Dimensions and Foundation Plan

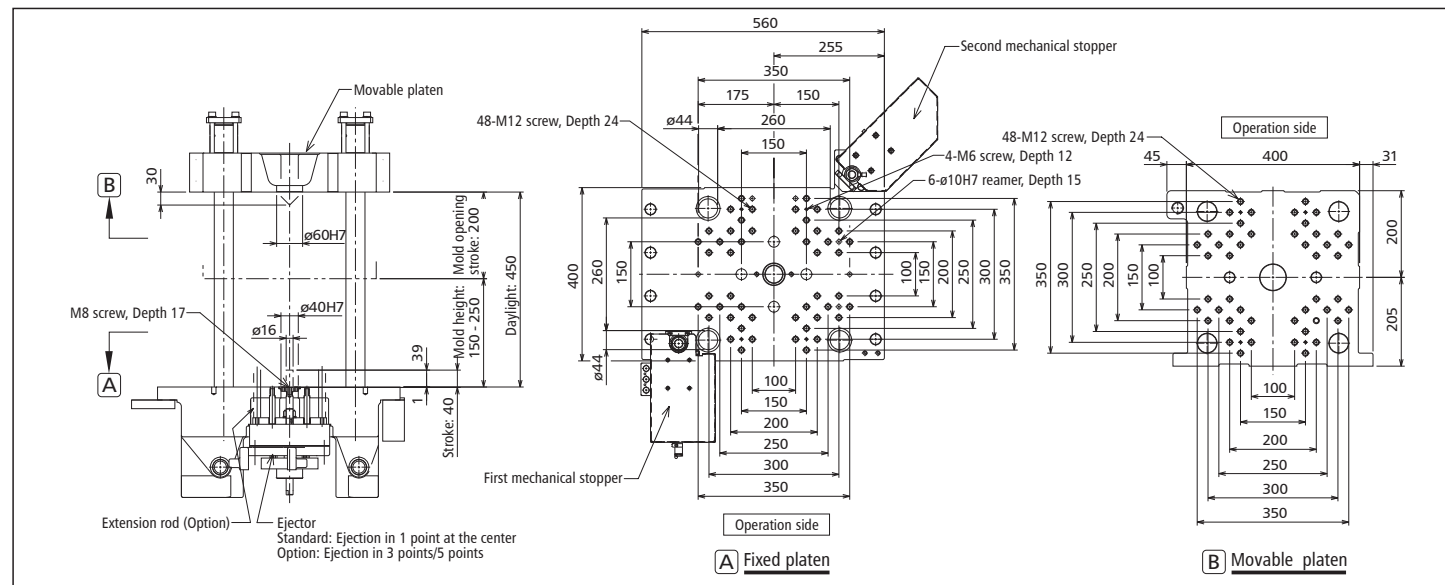
All dimensions are for machines used in Japan

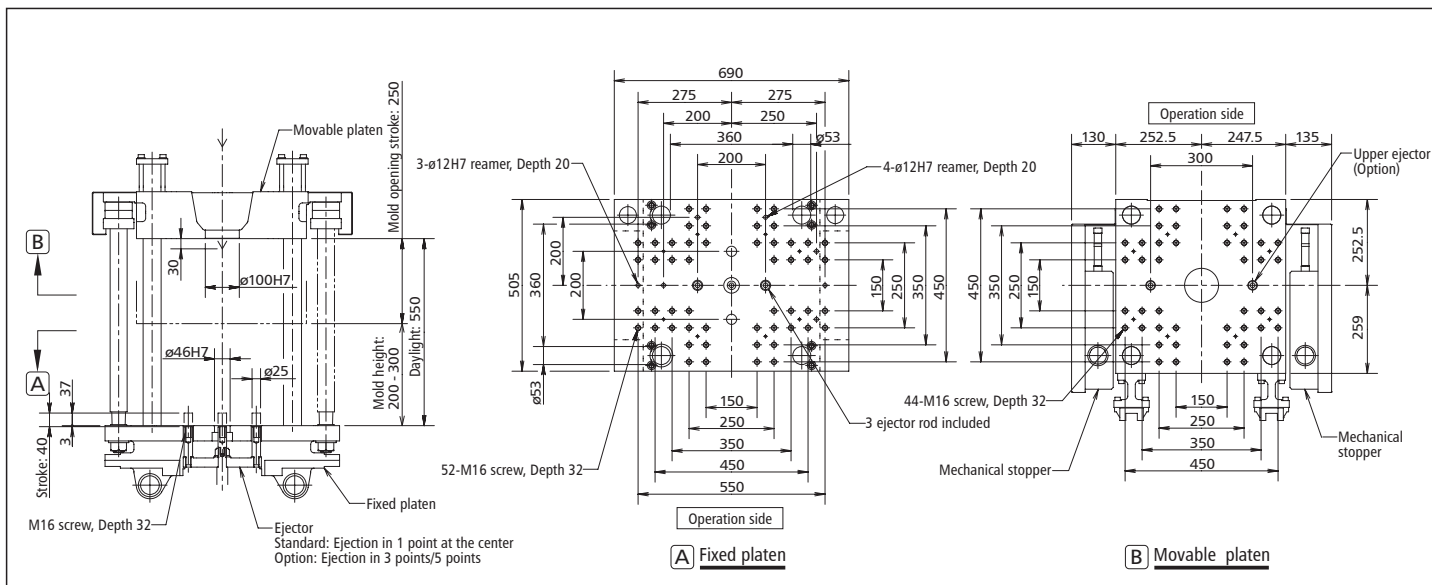
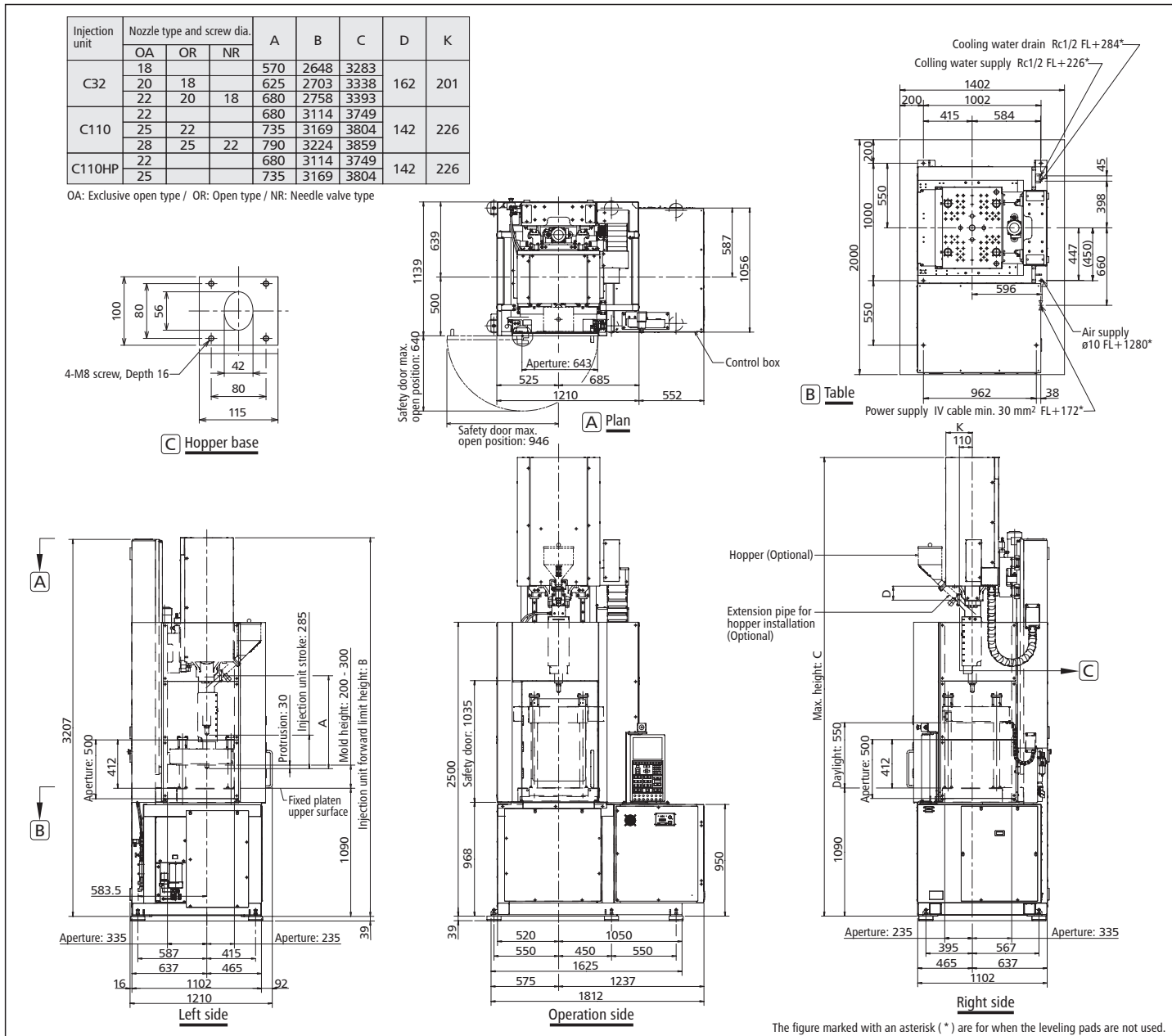


SV18M2

Dimensions of Platens

This drawing complies with JIS B 6701.





Providing high-quality safety worldwide



Compliant with the international safety standards ISO 20430:2020 (JIS B 6711:2021)

Safety is one of the biggest priorities of any manufacturing site anywhere in the world.

Not long ago, Japan amended its national safety standards for injection molding machines (JIS B 6711:2021) to comply with international standards set forth in ISO 20430:2020.

Therefore, all Sumitomo injection molding machines now comply with ISO 20430:2020 and we are providing the same high level of safety across the globe.



Even if you are looking to procure or relocate equipment across national/regional borders, the burden when changing specifications or remodeling will be reduced. We assist businesses with globalizing their manufacturing activities.

※Safety requirements for molding machines differ according to the place of use.

Safety measures protect machine operators and lead to retention of human resources. It also prevents accidental troubles and contributes to minimizing downtime.

We aspire to support our customers' sound corporate management. What we create is a sustainable future.

