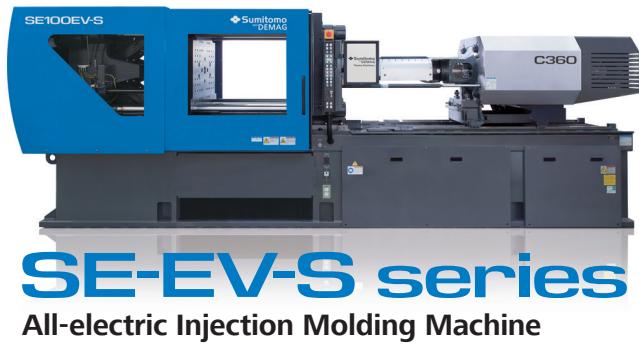


Product Range

Based on the SE-EV-S series of all-electric injection molding machines, a wide variety of LSR exclusive screws are also available. The “LSR Molding Package” combines the necessary specifications for LSR molding, while the “Optional Specifications” can be customized according to mold specifications. We can build the best system to meet your needs.



LSR Exclusive Screws (SK screw tip set as standard equipment)																			
Clamping force (kN)	300	500		750		1000		1300		1800									
Injection unit	C65	C65	C110	C160	C110	C160	C250	C110	C160	C250	C360	C160	C250	C360	C450	C250	C360	C450	C560
Screw dia (mm)																			
16*	○	○	○	○	○	○	○	○	○	○		○	○			○			
20*	○	○	○	○	○	○	○	○	○	○		○	○			○			
25	○	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○		
32							○			○	○		○	○	○	○	○	○	○
40											○			○	○		○	○	○

LSR Molding Package	Package of options for LSR molding	Optional Specifications	Options selectable according to mold specifications
LSR exclusive screw assembly loading confirmation function		Integrated mold heats (high capacity)	
LSR screw and cylinder cooling monitoring function		Vacuum pump control circuit with high-precision mold closing pause function	
LSR molding software		Valve gate drive circuit	
Signal output during dosing (24 V)		Needle valve nozzle drive circuit	

● For details on LSR Molding Package and Optional Specifications, please contact us.

Example of combined specifications					
Screw dia. (mm)	Injection unit	Screw stroke max. (mm)	Injection pressure max. (MPa)	Injection weight* (g)	Clamping force (kN)
16	C65	78	215	0.6 - 14	300/500
16	C110	104	215	0.6 - 19	500/750/1000
20	C110	104	215	2.4 - 30	500/750/1000
25	C110	104	212	5.3 - 45	500/750/1000
32	C250	140	215	12 - 100	750/1000/1300/1800
32	C360	160	215	13 - 120	1000/1300/1800
40	C360	160	175	21 - 180	1000/1300/1800

● \*Injection weight is for reference only.

Compatible with Double-shot/ Vertical molding

Composite molding of LSR with different materials and vertical molding are also available. They expand the possibilities of LSR molding and contribute to the development and production of new products.



All-electric Double-shot Injection Molding Machine

All-electric Vertical Injection Molding Machine

LSR Molding

Liquid Silicone Rubber Molding



● TOKYO Sumitomo Heavy Industries, Ltd.  
Industrial Machinery Segment, Plastics Machinery Div., Global Sales Dept.  
Tel: +81-3-6737-2576 Fax: +81-3-6866-5176



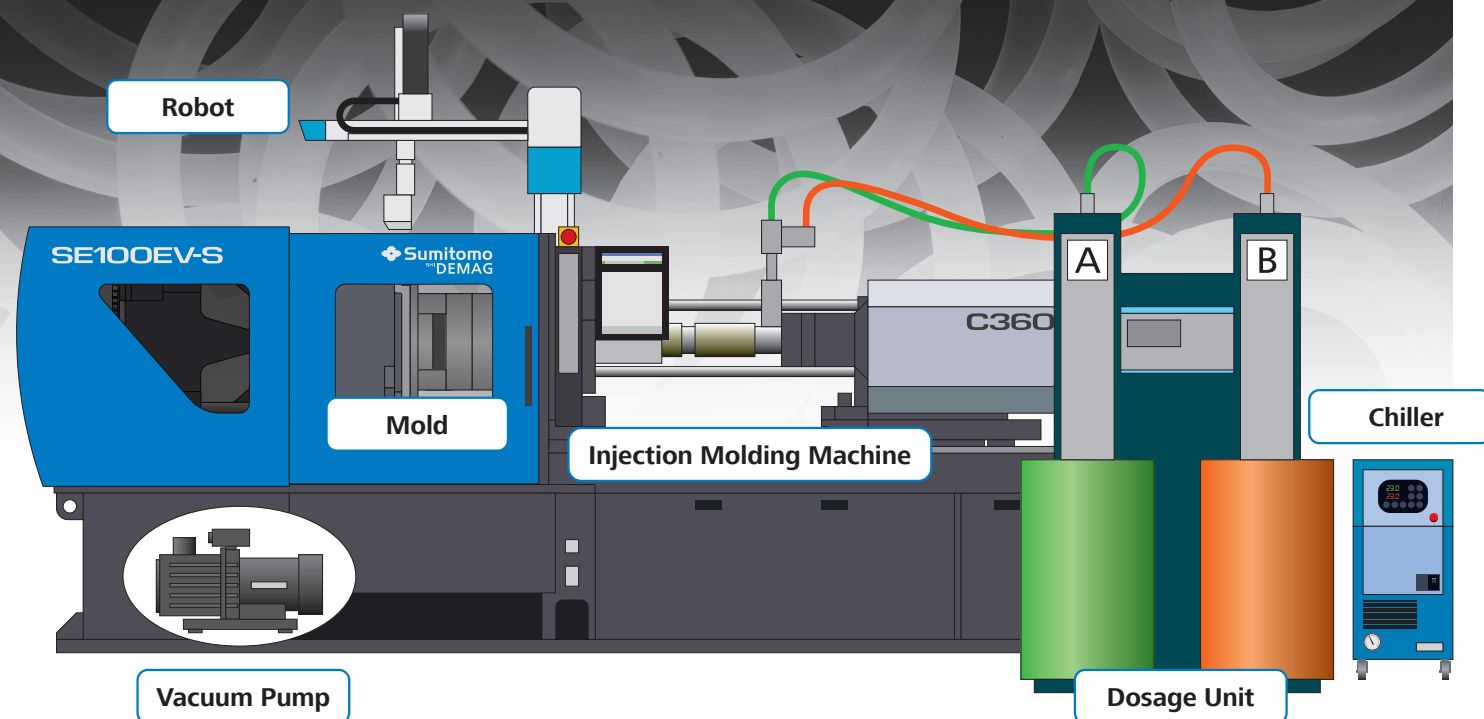
[www.shi.co.jp/plastics/](http://www.shi.co.jp/plastics/) Sales and Service Global Network





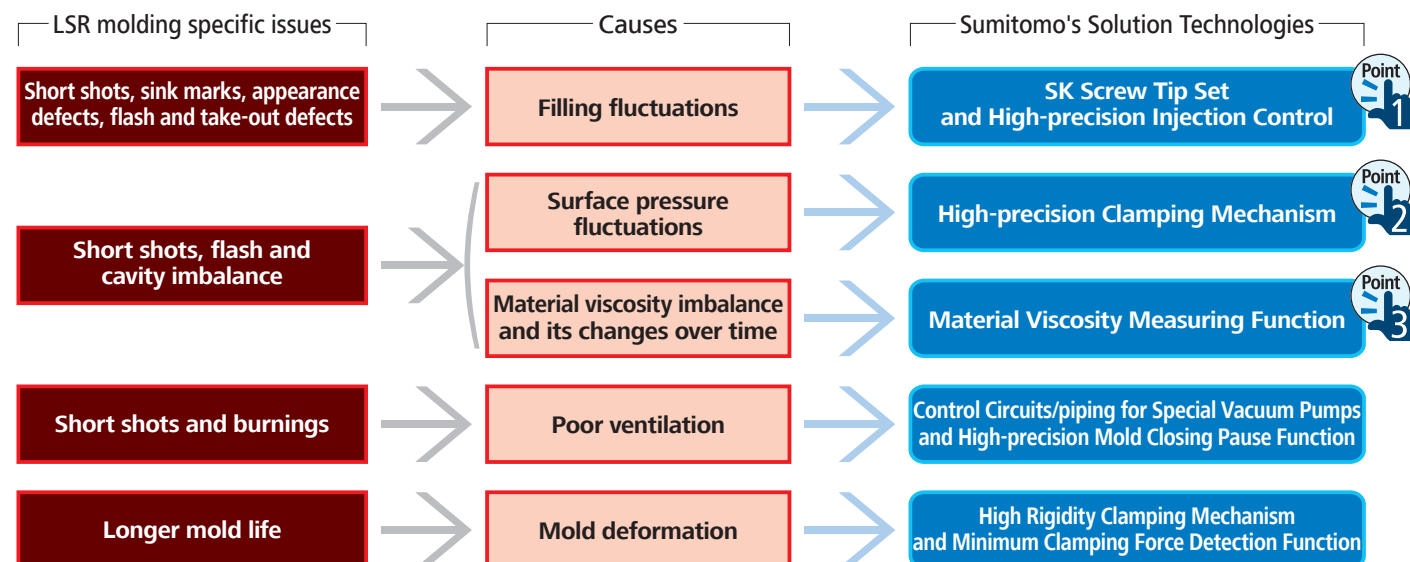
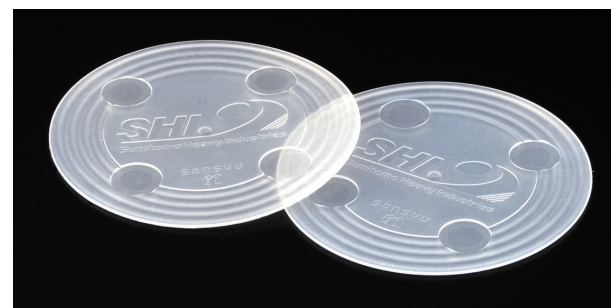
# LSR molding with optimal packaging system

We offer a complete package with strong peripheral equipment partnerships.



## Sumitomo's Precision Technology Solutions

LSR molding has unique challenges. Sumitomo's all-electric injection molding machines provide stable production of LSR with advanced and precise technical solutions.



Point 1

## SK Screw Tip Set and High-precision Injection Control

Due to the low viscosity of LSR, the sealing property of the screw tip is important. The SK Screw Tip Set blocks the material flow path by counter rotating the screw, eliminating backflow during filling and stabilizing metering. In addition, the high-precision injection control provided by the standard direct drive system enables quick and complete sealing capabilities. This enables precision stable molding even with small injection volumes.

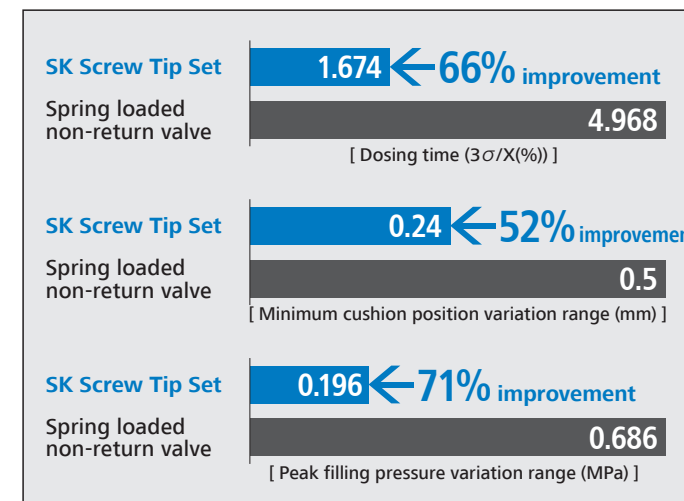


SK Screw Tip Set

### Improved molding accuracy and stability

Compared to the spring loaded non-return valve used in typical LSR injection molding machines, the SK Screw Tip Set offers greatly improved dosing and filling stability.

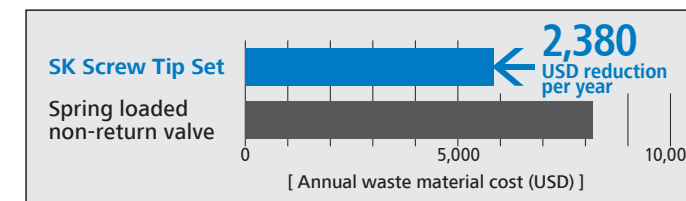
- Comparison of precision stability -



### Reduced waste material

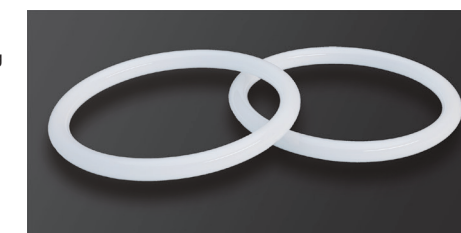
The increased yield of good products due to stable dosing reduces defective products = waste material and significantly lowers production costs.

- Reduction of waste material costs -



● All data in the graphs are actual measured values under the following conditions.  
● Exchange rate: 1 USD = 150 JPY

Product: Medical O-ring  
Size : Outer dia. 44 mm/Body dia. 3 mm  
Number of cavities : 16  
Product weight : 1.17 g  
Injection weight : 21.2 g

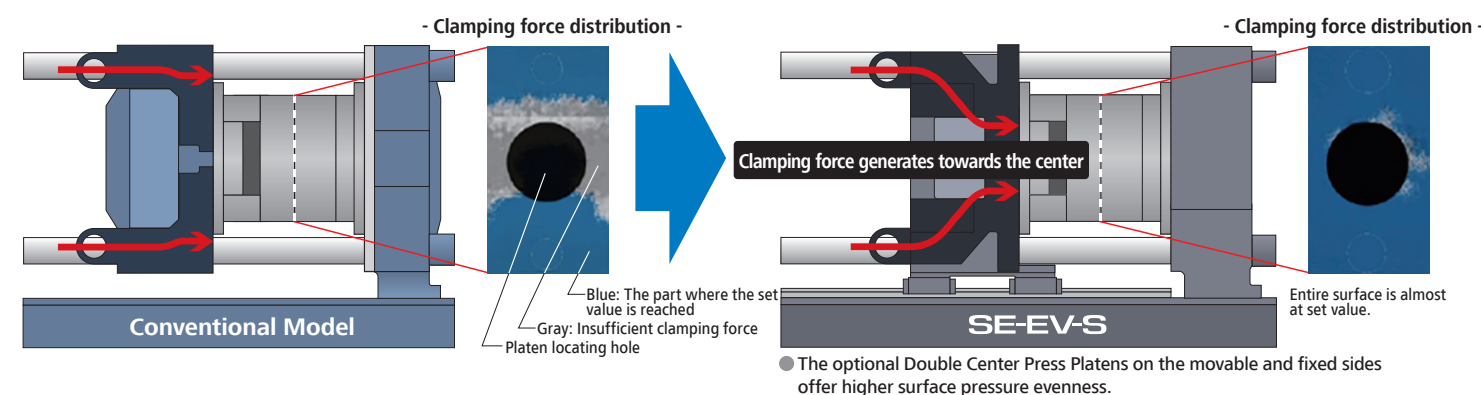


● The photo above is for reference only.

Point 2

## High-Precision Clamping Mechanism (Center Press Platen)

Standard installed Center Press Platen to equalize surface pressure distributions. A unique structure design reduces surface pressure unevenness and improves cavity balance.



No. of level	Level 5th	Level 4th	Level 3rd	Level 2nd	Level 1st	Speed	Plastic viscosity measurement
5	80.0	40.0	20.0	10.0	5.0	mm/s	Confirming message ON
Flow	39.27	19.64	9.82	4.91	2.45	cm/s	Tmp. Pres. Temperature level 1 only
Temp level 3	0.00	0.00	0.00	0.00	0.00	Pa	Detect Pres. Load Cell Pressure
Temp level 2	0.00	0.00	0.00	0.00	0.00	Pa	
Temp level 1	28.55	44.82	64.36	94.69	133.61	Pa	
Mark	11.7	9.2	6.6	5.1	3.5	MPa	Screw q25 4.91
Smpl Pres	11.7	9.2	6.5	4.8	3.4	MPa	Screw cross-section 2.50
	11.7	9.2	6.6	4.7	3.3	MPa	Nozz Hl Dmtr 10.00
	0.0	0.0	0.0	0.0	0.0	MPa	Nozzle bore 10.00
	0.0	0.0	0.0	0.0	0.0	MPa	Number of purging 3
	0.0	0.0	0.0	0.0	0.0	MPa	Standby time 0
Ave	11.7	9.2	6.6	4.8	3.4	MPa	Pres. measuring Pos. 8.33
Shr.Stress	0.73	0.57	0.41	0.30	0.21	MPa	Process display
Viscosity	28.55	44.82	64.36	94.69	133.61	Pa	Temperature level 1 Spd Level 5
Shr Vel. 1	25600.00	12800.00	6400.00	3200.00	1600.00	s-1	Actual purging 3

Point 3

## Material Viscosity Measuring Function

Material Viscosity Measurement Function is included as standard equipment. Material viscosity can be measured at any screw speed level. This feature helps reduce fluctuations in production stability due to differences in material lots.