



Sumitomo Heavy Industries, Ltd.
Industrial Machinery Segment, Plastics Machinery Div.

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SE-EV-S-HD

All-electric Middle-sized Injection Molding Machine



SE-EV-S-HD

All-electric Middle-sized 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.

Technical Data

SE220EV-S-HD	(2200kN)
SE250EV-S-HD	(2500kN)
SE280EV-S-HD	(2800kN)
SE315EV-S-HD	(3150kN)
SE350EV-S-HD	(3500kN)
SE385EV-S-HD	(3850kN)
SE450EV-S-HD	(4500kN)
SE500EV-S-HD	(5000kN)

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Main Specifications

● For the C560 High filling spec common to all models, please refer to P05.

Item	Unit	SE220EV-S ^{HD}	SE250EV-S ^{HD}
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■Clamping unit

Clamping system		Double toggle (5 points)			Double toggle (5 points)		
Clamping force (max.)	kN	2200			2500		
Clearance between tie-bars (HxV)	mm	660 x 660			660 x 660		
Platen size (HxV)	mm	930 x 930			930 x 930		
Daylight		1175			1225		
	(Mold height extension 100 mm)	(1275)			(1325)		
	(Mold height extension 200 mm)	(1375)			—		
Mold opening stroke	mm	575			625		
Platen speed max.	mm/s	1349			1431		
Mold height (min. - max.)		200~600			200~600		
	(Mold height extension 100 mm)	(200~700)			(200~700)		
	(Mold height extension 200 mm)	(200~800)			—		
Locating hole diameter		ø120			ø120		
	(Locating ring inner diameter ø120 mm)	—			—		
	(Locating ring inner diameter ø100 mm)	(ø100)			(ø100)		
Ejector system (ejecting points)		Motor driven type (13 points)			Motor driven type (13 points)		
Ejector ejection force	kN	60			60		
		(100)			(100)		
Ejector speed (max.)	mm/s	267			267		
Ejector stroke	mm	220			220		
Mold weight (max.)	kg	2800			2800		
		(1850)			(1850)		

■Injection unit

		C750				C1100				C750				C1100			
		M				L				M				L			
Screw diameter	mm	36	40	45	50	45	50	56	63	36	40	45	50	45	50	56	63
Injection pressure (max.) *1,*2	MPa	259	274	215	174	267	230	187	148	259	274	215	174	267	230	187	148
Holding pressure (max.) *1,*2	MPa	259	274	215	174	267	230	187	148	259	274	215	174	267	230	187	148
Theoretical injection capacity	cm ³	162	201	337	416	365	510	640	810	162	201	337	416	365	510	640	810
Injection weight (GPPS)	g	156	193	323	399	350	490	614	778	156	193	323	399	350	490	614	778
Plasticizing rate *3	kg/h	48	63	98	134	98	151	192	227	48	63	98	134	98	151	192	227
Injection rate	cm ³ /s	162	201	254	314	254	314	394	498	162	201	254	314	254	314	394	498
(When high speed filling specification is selected)		(335)	(414)	(524)	(647)	(493)	(608)	(763)	(966)	(335)	(414)	(524)	(647)	(493)	(608)	(763)	(966)
Screw stroke	mm	160		212		230	260			160		212		230	260		
Injection speed (max.)	mm/s	160				160				160				160			
(When high speed filling specification is selected)		(330)				(310)				(330)				(310)			
Screw speed (max.)	min ⁻¹	250								250							
Number of temperature control zone		5				6				5				6			
Heater capacity	kW	8.5	10.3	11.1	12.2	17.0	19.2	21.1	28.4	8.5	10.3	11.1	12.2	17.0	19.2	21.1	28.4
Nozzle contact force	kN	43				58				43				58			
Injection unit moving stroke	mm	395								395							
Nozzle protrusion	mm	65								65							
Hopper capacity (When the standard hopper is selected)	L	(50)				(100)				(50)				(100)			

■Machine dimensions and weight

Machine dimensions (LxWxH)*4	mm	6466 x 1832 x 2057	6466 x 1832 x 2084	6566 x 1832 x 2057	6566 x 1832 x 2084
(Mold height extension 100 mm)		(6566 x 1832 x 2057)	(6566 x 1832 x 2084)	(6666 x 1832 x 2057)	(6666 x 1832 x 2084)
(Mold height extension 200 mm)		(6666 x 1832 x 2057)	(6666 x 1832 x 2084)	—	—
(Dust prevention cover above toggle (Fixed type))		(6466 x 1832 x 2100)	(6466 x 1832 x 2100)	(6566 x 1832 x 2100)	(6566 x 1832 x 2100)
(Dust prevention cover above toggle (Slide type))		(6466 x 1832 x 2245)	(6466 x 1832 x 2245)	(6566 x 1832 x 2245)	(6566 x 1832 x 2245)
(Safety door wide expansion)		(6466 x 1932 x 2057)	(6466 x 1932 x 2084)	(6566 x 1932 x 2057)	(6566 x 1932 x 2084)
Machine weight	t	11.6	12.6	11.6	12.6

^{*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} The plasticizing rate is shown for a machine equipped with SD Screw.
^{*4} The total length of the machine is to the front end of the injection unit when mounting the screw of the smallest diameter.
● Specifications are subject to change without notice for performance improvement.

SE280EV-S ^{HD}	SE315EV-S ^{HD}
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Double toggle (5 points)													Double toggle (5 points)												
2800													3150												
730 x 730													730 x 730												
1020 x 1020													1020 x 1020												
1275													1325												
(1375)													(1425)												
(1475)													—												
625													675												
1298													1394												
300~650													300~650												
(300~750)													(300~750)												
(300~850)													—												
ø150													ø150												
(ø120)													(ø120)												
(ø100)													(ø100)												
Motor driven type (13 points)													Motor driven type (13 points)												
60													60												
(100)													(100)												
267													267												
220													220												
3800													3800												
(2500)													(2500)												

C1100				C1600					C2200					C1100				C1600	
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Main Specifications ● For the C560 High filling spec common to all models, please refer to P05.

Item	Unit	SE350EV-S-HD	SE385EV-S-HD
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■Clamping unit

Clamping system		Double toggle (5 points)		Double toggle (5 points)	
Clamping force (max.)	kN	3500		3850	
Clearance between tie-bars (HxV)	mm	830 x 830		830 x 830	
Platen size (HxV)	mm	1140 x 1140		1140 x 1140	
Daylight	mm	1425		1475	
(Mold height extension 100 mm)		(1525)		(1575)	
(Mold height extension 200 mm)		(1625)		—	
Mold opening stroke	mm	725		775	
Platen speed max.	mm/s	1346		1438	
Mold height (min. - max.)	mm	350～700		350～700	
(Mold height extension 100 mm)		(350～800)		(350～800)	
(Mold height extension 200 mm)		(350～900)		—	
Locating hole diameter	mm	ø150		ø150	
(Locating ring inner diameter φ120 mm)		(ø120)		(ø120)	
(Locating ring inner diameter φ100 mm)		(ø100)		(ø100)	
Ejector system (ejecting points)		Motor driven type (13 points)		Motor driven type (13 points)	
Ejector ejection force	kN	60		60	
(When ejector force power up is selected)		(100)		(100)	
Ejector speed (max.)	mm/s	267		267	
Ejector stroke	mm	220		220	
Mold weight (max.)	kg	5200		5200	
(Moving side (max.))		(3450)		(3450)	

■Injection unit

		C1100				C1600				C2200				C1100				C1600				C2200							
		L				L				L				L				L				L							
Screw diameter	mm	45	50	56	63	45	50	56	63	71	50	56	63	71	80	45	50	56	63	45	50	56	63	71	50	56	63	71	80
Injection pressure (max.) *1,*2	MPa	267	230	187	148	267	230	230	188	148	230	230	216	188	148	267	230	187	148	267	230	230	188	148	230	230	216	188	148
Holding pressure (max.) *1,*2	MPa	267	230	187	148	267	230	230	188	148	230	230	216	188	148	267	230	187	148	267	230	230	188	148	230	230	216	188	148
Theoretical injection capacity	cm ³	365	510	640	810	365	510	714	904	1148	510	714	997	1266	1608	365	510	640	810	365	510	714	904	1148	510	714	997	1266	1608
Injection weight (GPPS)	g	350	490	614	778	350	490	685	867	1102	490	685	957	1216	1544	350	490	614	778	350	490	685	867	1102	490	685	957	1216	1544
Plasticizing rate *3	kg/h	98	151	192	227	98	151	192	227	230	151	192	227	230	303	98	151	192	227	98	151	192	227	230	151	192	227	230	303
Injection rate	cm ³ /s	254	314	394	498	254	314	394	498	633	314	394	498	633	804	254	314	394	498	254	314	394	498	633	314	394	498	633	804
(When high speed filling specification is selected)		(493)	(608)	(763)	(966)	(493)	(608)	(763)	(966)	(1227)	(608)	(763)	(966)	(1227)	(1558)	(493)	(608)	(763)	(966)	(493)	(608)	(763)	(966)	(1227)	(608)	(763)	(966)	(1227)	(1558)
Screw stroke	mm	230	260			230	260	290			260	290	320			230	260			230	260	290			260	290	320		
Injection speed (max.)	mm/s	160														160													
(When high speed filling specification is selected)		(310)														(310)													
Screw speed (max.)	min ⁻¹	250				250				200	250				200	250				250				200	250				200
Number of temperature control zone		6														6													
Heater capacity	kW	17.0	19.2	21.1	28.4	17.0	19.2	21.1	28.4	30.5	19.3	21.2	28.4	30.5	34.6	17.0	19.2	21.1	28.4	17.0	19.2	21.1	28.4	30.5	19.3	21.2	28.4	30.5	34.6
Nozzle contact force	kN	58														58													
Injection unit moving stroke	mm	450														450													
Nozzle protrusion	mm	65														65													
Hopper capacity (When the standard hopper is selected)	L	(100)														(100)													

■Machine dimensions and weight

Machine dimensions (LxWxH) *4		mm	7446 x 2072 x 2192			7546 x 2072 x 2192		
(Mold height extension 100 mm)			(7546 x 2072 x 2192)			(7646 x 2072 x 2192)		
(Mold height extension 200 mm)			(7646 x 2072 x 2192)			—		
(Dust prevention cover above toggle (Fixed type))			(7446 x 2072 x 2225)			(7546 x 2072 x 2225)		
(Dust prevention cover above toggle (Slide type))			(7446 x 2072 x 2375)			(7546 x 2072 x 2375)		
(Safety door wide expansion)			(7446 x 2172 x 2192)			(7546 x 2172 x 2192)		
Machine weight		t	17.2	17.3	17.9	17.3	17.4	18.0

*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 The plasticizing rate is shown for a machine equipped with 5D Screw. *4 The total length of the machine is to the front end of the injection unit when mounting the screw of the smallest diameter.
*5 The injection unit moving stroke differs as follows;
SE220EV-S-HD and SE250EV-S-HD: 395 mm, SE280EV-S-HD and SE315EV-S-HD: 420 mm, SE350EV-S-HD and SE385EV-S-HD: 450 mm, SE450EV-S-HD and SE500EV-S-HD: 495 mm

SE450EV-S-HD	SE500EV-S-HD
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Double toggle (5 points)				Double toggle (5 points)			
4500				5000			
920 x 920				920 x 920			
1300 x 1300				1300 x 1300			
1625				1675			
(1725)				(1775)			
(1825)				—			
825				875			
1109				1167			
350~800				350~800			
(350~900)				(350~900)			
(350~1000)				—			
ø150				ø150			
(ø120)				(ø120)			
(ø100)				(ø100)			
Motor driven type (21 points)				Motor driven type (21 points)			
100				100			
(150)				(150)			
267				267			
220				220			
7500				7500			
(5000)				(5000)			

C2200					C3000					C2200					C3000				
L					L					L					L				
50 ^{*6}	56 ^{*6}	63	71	80	63	71	80	90	50 ^{*6}	56 ^{*6}	63	71	80	63	71	80	90		
230	230	216	188	148	216	216	187	148	230	230	216	188	148	216	216	187	148		
230	230	216	188	148	216	216	187	148	230	230	216	188	148	216	216	187	148		
510	714	997	1266	1608	997	1425	1809	2290	510	714	997	1266	1608	997	1425	1809	2290		
490	685	957	1216	1544	957	1368	1737	2198	490	685	957	1216	1544	957	1368	1737	2198		
151	192	227	230	303	182	230	303	390	151	192	227	230	303	182	230	303	390		
314	394	498	633	804	498	633	804	1017	314	394	498	633	804	498	633	804	1017		
(608)	(763)	(966)	(1227)	(1558)	(685)	(871)	(1105)	(1399)	(608)	(763)	(966)	(1227)	(1558)	(685)	(871)	(1105)	(1399)		
260	290	320			320	360			260	290	320			320	360				
160									160										
(310)					(220)				(310)					(220)					
250				200		200					250				200		200		
6									6										
19.3	21.2	28.4	30.5	34.6	28.4	30.5	34.6	35.0	19.3	21.2	28.4	30.5	34.6	28.4	30.5	34.6	35.0		
58									58										
495									495										
65									65										
(100)									(100)										

Main Specifications

Model	SE220EV-S ^{HD}	SE250EV-S ^{HD}
Use application	CT-6 spec.	CT-6 spec.

■Clamping unit

Clamping system		Double toggle (5 points)		Double toggle (5 points)	
Clamping force (max.)	kN	2200		2500	
Clearance between tie-bars (HxV)	mm	660 x 660		660 x 660	
Platen size (HxV)	mm	930 x 930		930 x 930	
Daylight	mm	1175		1225	
(Mold height extension 100 mm)		(1275)		(1325)	
(Mold height extension 200 mm)		(1375)		—	
Mold opening stroke	mm	575		625	
Platen speed max.	mm/s	1349		1431	
Mold height (min. - max.)	mm	200～600		200～600	
(Mold height extension 100 mm)		(200～700)		(200～700)	
(Mold height extension 200 mm)		(200～800)		—	
Locating hole diameter	mm	φ120		φ120	
(Locating ring inner diameter φ120 mm)		—		—	
(Locating ring inner diameter φ100 mm)		(φ100)		(φ100)	
Ejector system (ejecting points)		13 points		13 points	
Ejector ejection force	kN	60		60	
(When ejector force power up is selected)		(100)		(100)	
Ejector speed (max.)	mm/s	267		267	
Ejector stroke	mm	220		220	
Mold weight (max.)	kg	2800		2800	
(Moving side (max.))		(1850)		(1850)	

■Injection unit

		C750				C1100				C750				C1100				
		M				L				M				L				
Screw diameter		mm	36	40	45	50	45	50	56	63	36	40	45	50	45	50	56	63
Injection pressure (max.) *1,*2		MPa	259	274	215	174	267	230	187	148	259	274	215	174	267	230	187	148
Holding pressure (max.) *1,*2		MPa	259	274	215	174	267	230	187	148	259	274	215	174	267	230	187	148
Theoretical injection capacity	CT-6 STD (High-rotation)	cm³	162	201	254	314	329	406	510	645	162	201	254	314	329	406	510	645
	High-capacity mode		162	201	337	416	365	510	640	810	162	201	337	416	365	510	640	810
Injection weight (GPPS)	CT-6 STD (High-rotation)	g	156	193	244	302	316	390	489	619	156	193	244	302	316	390	489	619
	High-capacity mode		156	193	323	399	350	490	614	778	156	193	323	399	350	490	614	778
Plasticizing rate*3	CT-6 STD (High-rotation)	kg/h	76	101	136	193	149	202	246	290	76	101	136	193	149	202	246	290
	High-capacity mode		48	63	85	121	93	126	171	227	48	63	85	121	93	126	171	227
Injection rate		cm³/s	335	414	524	647	493	608	763	966	335	414	524	647	493	608	763	966
Screw stroke	CT-6 STD (High-rotation)	mm	160		160		207		207		160		160		207		207	
	High-capacity mode		160		212		230		260		160		212		230		260	
Injection speed (max.)		mm/s	330				310				330				310			
Screw speed (max.)	CT-6 STD (High-rotation)	min ⁻¹	400				400		360	320	400				400		360	320
	High-capacity mode		250				250		250	250	250				250		250	250
Number of temperature control zone			5				6				5				6			
Heater capacity		kW	8.9	10.8	11.4	12.6	22.1	25.0	29.4	35.3	8.9	10.8	11.4	12.6	22.1	25.0	29.4	35.3
Nozzle contact force		kN	43				58				43				58			
Injection unit moving stroke		mm	395								395							
Nozzle protrusion		mm	65								65							
Hopper capacity (When the standard hopper is selected)		L	(50)				(100)				(50)				(100)			

■Machine dimensions and weight

Machine dimensions (LxWxH) *4	mm	6466 x 1832 x 2057	6466 x 1832 x 2084	6566 x 1832 x 2057	6566 x 1832 x 2084
(Mold height extension 100 mm)		(6566 x 1832 x 2057)	(6566 x 1832 x 2084)	(6666 x 1832 x 2057)	(6666 x 1832 x 2084)
(Mold height extension 200 mm)		(6666 x 1832 x 2057)	(6666 x 1832 x 2084)	—	—
(Dust prevention cover above toggle (Fixed type))		(6466 x 1832 x 2100)	(6466 x 1832 x 2100)	(6566 x 1832 x 2100)	(6566 x 1832 x 2100)
(Dust prevention cover above toggle (Slide type))		(6466 x 1832 x 2245)	(6466 x 1832 x 2245)	(6566 x 1832 x 2245)	(6566 x 1832 x 2245)
(Safety door wide expansion)		(6466 x 1932 x 2057)	(6466 x 1932 x 2084)	(6566 x 1932 x 2057)	(6566 x 1932 x 2084)
Machine weight	t	11.8	12.9	11.8	12.9

*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 The plasticizing rate is shown for a machine equipped with SM Screw.
*4 The total length of the machine is to the front end of the injection unit when mounting the screw of the smallest diameter.

Model	SE280EV-S ^{HD}	SE315EV-S ^{HD}
Use application	CT-6 spec.	CT-6 spec.

■Clamping unit

Clamping system		Double toggle (5 points)		Double toggle (5 points)	
Clamping force (max.)	kN	2800		3150	
Clearance between tie-bars (HxV)	mm	730 x 730		730 x 730	
Platen size (HxV)	mm	1020 x 1020		1020 x 1020	
Daylight	mm	1275		1325	
(Mold height extension 100 mm)		(1375)		(1425)	
(Mold height extension 200 mm)		(1475)		—	
Mold opening stroke	mm	625		675	
Platen speed max.	mm/s	1298		1394	
Mold height (min. - max.)	mm	300～650		300～650	
(Mold height extension 100 mm)		(300～750)		(300～750)	
(Mold height extension 200 mm)		(300～850)		—	
Locating hole diameter	mm	φ150		φ150	
(Locating ring inner diameter φ120 mm)		(φ120)		(φ120)	
(Locating ring inner diameter φ100 mm)		(φ100)		(φ100)	
Ejector system (ejecting points)		13 points		13 points	
Ejector ejection force	kN	60		60	
(When ejector force power up is selected)		(100)		(100)	
Ejector speed (max.)	mm/s	267		267	
Ejector stroke	mm	220		220	
Mold weight (max.)	kg	3800		3800	
(Moving side (max.))		(2500)		(2500)	

■Injection unit

		C1100				C1600				C2200				C1100				C1600				C2200												
		L				L				L				L				L				L												
Screw diameter		mm	45	50	56	63	45	50	56	63	71	50	56	63	71	80	45	50	56	63	45	50	56	63	71	50	56	63	71	80				
Injection pressure (max.) *1,*2		MPa	267	230	187	148	267	230	230	188	148	230	230	216	188	148	267	230	187	148	267	230	230	188	148	230	230	216	188	148				
Holding pressure (max.) *1,*2		MPa	267	230	187	148	267	230	230	188	148	230	230	216	188	148	267	230	187	148	267	230	230	188	148	230	230	216	188	148				
Theoretical injection capacity	CT-6 STD (High-rotation)	cm ³	329	406	510	645	329	406	562	711	902	406	561	773	982	1246	329	406	510	645	329	406	562	711	902	406	561	773	982	1246				
	High-capacity mode		365	510	640	810	365	510	714	904	1148	510	714	977	1266	1608	365	510	640	810	365	510	714	904	1148	510	714	977	1266	1608				
Injection weight (GPPS)	CT-6 STD (High-rotation)	g	316	390	489	619	316	390	539	682	866	390	539	742	943	1196	316	390	489	619	316	390	539	682	866	390	539	742	943	1196				
	High-capacity mode		350	490	614	778	350	490	685	867	1102	490	685	957	1216	1544	350	490	614	778	350	490	685	867	1102	490	685	957	1216	1544				
Plasticizing rate *3	CT-6 STD (High-rotation)	kg/h	149	202	246	290	134	182	246	290	327	162	219	290	327	343	149	202	246	290	134	182	246	290	327	162	219	290	327	343				
	High-capacity mode		93	126	171	227	93	126	171	227	234	126	171	227	234	275	93	126	171	227	93	126	171	227	234	126	171	227	234	275				
Injection rate		cm ³ /s	493	608	763	966	493	608	763	966	1227	608	763	966	1227	1558	493	608	763	966	493	608	763	966	1227	608	763	966	1227	1558				
Screw stroke	CT-6 STD (High-rotation)	mm	207	207		207		207		228		207		228		248		207	207		207		207		228		207		228		248			
	High-capacity mode		230	260		230		260		290		260		290		320		230	260		230		260		290		260		290		320			
Injection speed (max.)		mm/s	310																310															
Screw speed (max.)	CT-6 STD (High-rotation)	min ⁻¹	400	360	320	360			320	280	320			280	250	400	360	320	360			320	280	320			280	250						
	High-capacity mode		250	250	250	250			250	200	250			200	200	250	250	250	250			250	200	250			200	200						
Number of temperature control zone			6																6															
Heater capacity		kW	22.1	25.0	29.4	35.3	22.1	25.0	29.4	35.3	40.6	25.1	29.5	35.3	40.6	43.8	22.1	25.0	29.4	35.3	22.1	25.0	29.4	35.3	40.6	25.1	29.5	35.3	40.6	43.8				
Nozzle contact force		kN	58																58															
Injection unit moving stroke		mm	420																420															
Nozzle protrusion		mm	65																65															
Hopper capacity (When the standard hopper is selected)		L	(100)																(100)															

Main Specifications

Model	SE350EV-S+HD	SE385EV-S+HD
Use application	CT-6 spec.	CT-6 spec.

■Clamping unit

Clamping system		Double toggle (5 points)		Double toggle (5 points)	
Clamping force (max.)	kN	3500		3850	
Clearance between tie-bars (HxV)	mm	830 x 830		830 x 830	
Platen size (HxV)	mm	1140 x 1140		1140 x 1140	
Daylight	mm	1425		1475	
(Mold height extension 100 mm)		(1525)		(1575)	
(Mold height extension 200 mm)		(1625)		—	
Mold opening stroke	mm	725		775	
Platen speed max.	mm/s	1346		1438	
Mold height (min. - max.)	mm	350～700		350～700	
(Mold height extension 100 mm)		(350～800)		(350～800)	
(Mold height extension 200 mm)		(350～900)		—	
Locating hole diameter	mm	φ150		φ150	
(Locating ring inner diameter φ120 mm)		(φ120)		(φ120)	
(Locating ring inner diameter φ100 mm)		(φ100)		(φ100)	
Ejector system (ejecting points)		13 points		13 points	
Ejector ejection force	kN	60		60	
(When ejector force power up is selected)		(100)		(100)	
Ejector speed (max.)	mm/s	267		267	
Ejector stroke	mm	220		220	
Mold weight (max.)	kg	5200		5200	
(Moving side (max.))		(3450)		(3450)	

■Injection unit

		C1100				C1600				C2200				C1100				C1600				C2200			
		L				L				L				L				L				L			
Screw diameter	mm	45	50	56	63	45	50	56	63	71	50	56	63	71	80	45	50	56	63	71	50	56	63	71	80
Injection pressure (max.) *1,*2	MPa	267	230	187	148	267	230	230	188	148	230	230	216	188	148	267	230	187	148	267	230	230	188	148	230
Holding pressure (max.) *1,*2	MPa	267	230	187	148	267	230	230	188	148	230	230	216	188	148	267	230	187	148	267	230	230	188	148	230
Theoretical injection capacity	CT-6 STD (High-rotation)	329	406	510	645	329	406	562	711	902	406	561	773	982	1246	329	406	510	645	329	406	562	711	902	406
	High-capacity mode	365	510	640	810	365	510	714	904	1148	510	714	977	1266	1608	365	510	640	810	365	510	714	904	1148	510
Injection weight (GPPS)	CT-6 STD (High-rotation)	316	390	489	619	316	390	539	682	866	390	539	742	943	1196	316	390	489	619	316	390	539	682	866	390
	High-capacity mode	350	490	614	778	350	490	685	867	1102	490	685	957	1216	1544	350	490	614	778	350	490	685	867	1102	490
Plasticizing rate *3	CT-6 STD (High-rotation)	149	202	246	290	134	182	246	290	327	162	219	290	327	343	149	202	246	290	134	182	246	290	327	162
	High-capacity mode	93	126	171	227	93	126	171	227	234	126	171	227	234	275	93	126	171	227	93	126	171	227	234	126
Injection rate	cm³/s	493	608	763	966	493	608	763	966	1227	608	763	966	1227	1558	493	608	763	966	493	608	763	966	1227	1558
Screw stroke	CT-6 STD (High-rotation)	207	207	207	207	228	207	228	248	207	207	207	207	228	207	228	207	207	207	207	228	207	228	248	207
	High-capacity mode	230	260	230	260	290	260	290	320	230	260	230	260	290	260	290	260	290	260	290	260	290	320	260	290
Injection speed (max.)	mm/s	310				310				310				310				310				310			
Screw speed (max.)	CT-6 STD (High-rotation)	400	360	320	360	320	280	320	280	250	400	360	320	360	320	280	320	280	250	400	360	320	360	320	280
	High-capacity mode	250	250	250	250	250	200	250	200	200	250	250	250	250	200	200	250	250	250	250	200	200	250	200	200
Number of temperature control zone		6				6				6				6				6				6			
Heater capacity	kW	22.1	25.0	29.4	35.3	22.1	25.0	29.4	35.3	40.6	25.1	29.5	35.3	40.6	43.8	22.1	25.0	29.4	35.3	22.1	25.0	29.4	35.3	40.6	43.8
Nozzle contact force	kN	58				58				58				58				58				58			
Injection unit moving stroke	mm	450				450				450				450				450				450			
Nozzle protrusion	mm	65				65				65				65				65				65			
Hopper capacity (When the standard hopper is selected)	L	(100)				(100)				(100)				(100)				(100)				(100)			

■Machine dimensions and weight

Machine dimensions (LxWxH) *4	mm	7446 x 2072 x 2192				7546 x 2072 x 2192			
(Mold height extension 100 mm)		(7546 x 2072 x 2192)				(7646 x 2072 x 2192)			
(Mold height extension 200 mm)		(7646 x 2072 x 2192)				—			
(Dust prevention cover above toggle (Fixed type))		(7446 x 2072 x 2225)				(7546 x 2072 x 2225)			
(Dust prevention cover above toggle (Slide type))		(7446 x 2072 x 2375)				(7546 x 2072 x 2375)			
(Safety door wide expansion)		(7446 x 2172 x 2192)				(7546 x 2172 x 2192)			
Machine weight	t	17.6				17.7			

*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 The plasticizing rate is shown for a machine equipped with SM Screw.
*4 The total length of the machine is to the front end of the injection unit when mounting the screw of the smallest diameter.
*5 Extended linear guides are installed.

Model	SE450EV-S+HD	SE500EV-S+HD
Use application	CT-6 spec.	CT-6 spec.

■Clamping unit

Clamping system		Double toggle (5 points)		Double toggle (5 points)	
Clamping force (max.)	kN	4500		5000	
Clearance between tie-bars (HxV)	mm	920 x 920		920 x 920	
Platen size (HxV)	mm	1300 x 1300		1300 x 1300	
Daylight	mm	1625		1675	
(Mold height extension 100 mm)		(1725)		(1775)	
(Mold height extension 200 mm)		(1825)		—	
Mold opening stroke	mm	825		875	
Platen speed max.	mm/s	1109		1167	
Mold height (min. - max.)	mm	350～800		350～800	
(Mold height extension 100 mm)		(350～900)		(350～900)	
(Mold height extension 200 mm)		(350～1000)		—	
Locating hole diameter	mm	φ150		φ150	
(Locating ring inner diameter φ120 mm)		(φ120)		(φ120)	
(Locating ring inner diameter φ100 mm)		(φ100)		(φ100)	
Ejector system (ejecting points)		21 points		21 points	
Ejector ejection force	kN	100		100	
(When ejector force power up is selected)		(150)		(150)	
Ejector speed (max.)	mm/s	267		267	
Ejector stroke	mm	220		220	
Mold weight (max.)	kg	7500		7500	
(Moving side (max.))		(5000)		(5000)	

■Injection unit

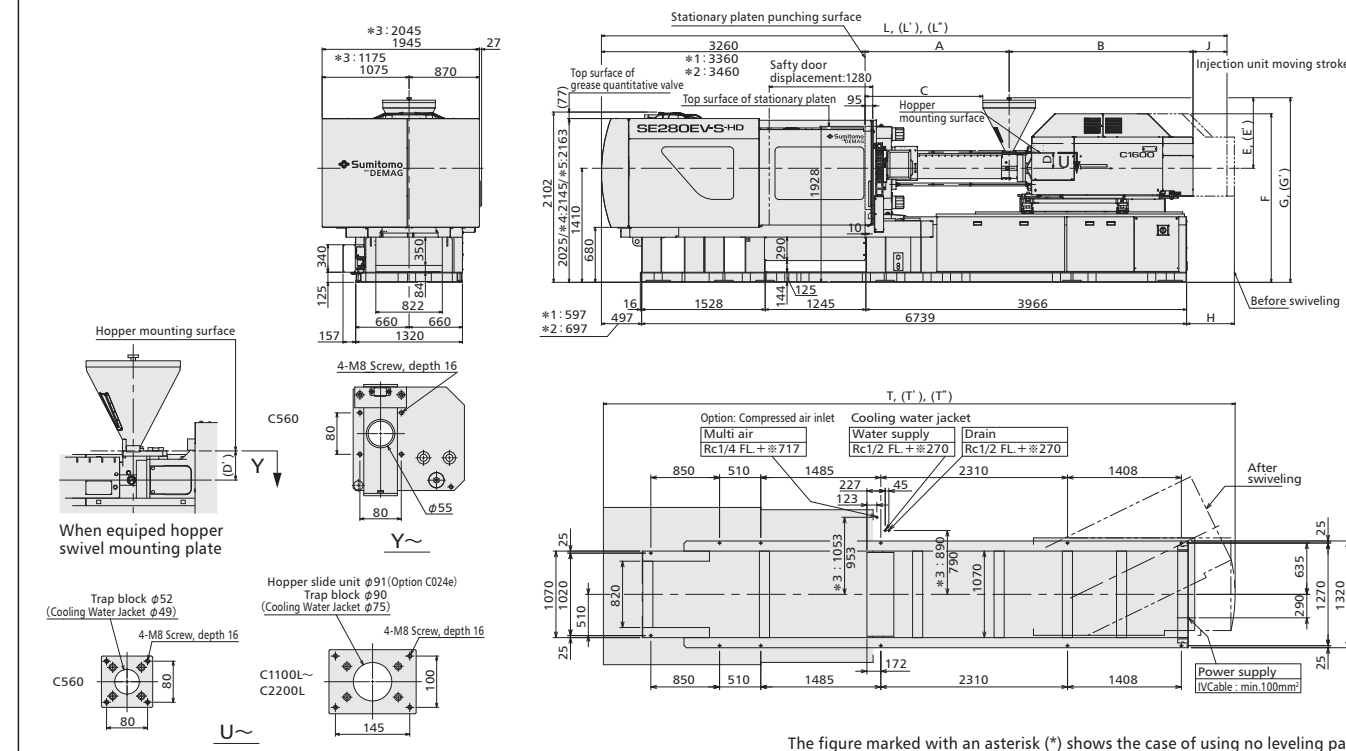
		C2200						C3000			C2200					C3000				
		L						L			L					L				
Screw diameter		mm	50 ^{*5}	56 ^{*5}	63	71	80	63	71	80	50 ^{*5}	56 ^{*5}	63	71	80	63	71	80		
Injection pressure (max.) *1,*2		MPa	230	230	216	188	148	216	216	187	230	230	216	188	148	216	216	187		
Holding pressure (max.) *1,*2		MPa	230	230	216	188	148	216	216	187	230	230	216	188	148	216	216	187		
Theoretical injection capacity	CT-6 STD (High-rotation)	cm ³	406	561	773	982	1246	773	1140	1448	406	561	773	982	1246	773	1140	1448		
	High-capacity mode		510	714	997	1266	1608	997	1425	1809	510	714	997	1266	1608	997	1425	1809		
Injection weight (GPPS)	CT-6 STD (High-rotation)	g	390	539	742	943	1196	742	1095	1390	390	539	742	943	1196	742	1095	1390		
	High-capacity mode		490	685	957	1216	1544	957	1368	1737	490	685	957	1216	1544	957	1368	1737		
Plasticizing rate*3	CT-6 STD (High-rotation)	kg/h	162	219	290	327	343	254	327	343	162	219	290	327	343	254	327	343		
	High-capacity mode		126	171	227	234	275	181	234	275	126	171	227	234	275	181	234	275		
Injection rate		cm ³ /s	608	763	966	1227	1558	685	871	1105	608	763	966	1227	1558	685	871	1105		
Screw stroke	CT-6 STD (High-rotation)	mm	207	228	248			248	288		207	228	248			248	288			
	High-capacity mode		260	290	320			320	360		260	290	320			320	360			
Injection speed (max.)		mm/s	310						220			310					220			
Screw speed (max.)	CT-6 STD (High-rotation)	min ⁻¹	320			280	250	280		250	320			280	250	280		250		
	High-capacity mode		250			200	200	200		200	250			200	200	200		200		
Number of temperature control zone			6									6								
Heater capacity		kW	25.1	29.5	35.3	40.6	43.8	35.3	40.6	43.8	25.1	29.5	35.3	40.6	43.8	35.3	40.6	43.8		
Nozzle contact force		kN	58									58								
Injection unit moving stroke		mm	495									495								
Nozzle protrusion		mm	65									65								
Hopper capacity (When the standard hopper is selected)		L	(100)									(100)								

The following drawing's dimensions are Japanese specification.

- *1,(L⁺),(T⁺): Equipped with mold space extension 100mm
- *2,(L⁻),(T⁻): Equipped with mold space extension 200mm
- *3: Equipped with safety door wide expansion (100mm) opposite to operation side
- *4: Equipped with dust prevention cover above toggle (Fixed type)
- *5: Equipped with dust prevention cover above toggle (Slide type)

Injection unit	Screw Diameter	A	B	C	D	(D')	E	(E')	F	G	(G')	H	J	L	(L')	T	(T')	(T'')
C560	32 HP	75	—	428	—	—	—	—	—	—	—	—	—	6259	6359	6459	—	—
	36 HP	800	1854	533	—	—	—	—	—	—	—	—	—	6334	6434	6534	—	—
	28 O	709	—	442	—	—	—	—	—	—	—	—	—	6243	6343	6443	—	—
	32 O	799	—	532	—	—	—	—	—	—	—	—	—	6243	6343	6443	—	—
	36 O	889	—	622	155	140	711	696	1718	2121	2106	148	420	6333	6433	6533	7111	7211
	40 O	979	1764	712	—	—	—	—	—	—	—	—	—	6423	6523	6623	7311	7411
	45 O	1069	—	802	—	—	—	—	—	—	—	—	—	6513	6613	6713	—	—
	50 O	1159	—	892	—	—	—	—	—	—	—	—	—	6603	6703	6803	—	—
	45 OR	1122	—	795	—	—	—	—	—	—	—	—	—	6846	6946	7046	—	—
	50 NR 56 OR	1252	2044	925	189	—	872	—	2080	2282	—	367	420	6976	7076	7176	7660	7760
C1100L	50 NR 56 OR	1412	—	1085	—	—	—	—	—	—	—	—	—	7136	7236	7336	7860	7960
	56 NR	1572	—	1245	—	—	—	—	—	—	—	—	—	7296	7396	7496	—	—
	63 OR	1622	2114	1292	—	—	—	—	—	—	—	—	—	7416	7516	7616	—	—
	45 OR	1122	—	795	—	—	—	—	—	—	—	—	—	7006	7106	7206	—	—
C1600L	45 NR 50 OR	1252	2204	925	189	—	872	—	2080	2282	—	527	420	7136	7236	7336	7815	7915
	50 NR 56 OR	1412	—	1085	—	—	—	—	—	—	—	—	—	7296	7396	7496	8015	8115
	56 NR	1572	—	1245	—	—	—	—	—	—	—	—	—	7456	7556	7656	—	—
	63 OR	1622	2274	1292	—	—	—	—	—	—	—	—	—	7576	7676	7776	—	—
C2200L	63 NR 71 OR	1782	2327	1455	189	—	872	—	2066	2282	—	740	420	7736	7836	7936	8036	8136
	50 OR	1252	—	925	—	—	—	—	—	—	—	—	—	7189	7289	7389	—	—
	50 NR 56 OR	1412	2257	1085	—	—	—	—	—	—	—	—	—	7349	7449	7549	—	—
	56 NR	1572	—	1245	—	—	—	—	—	—	—	—	—	7509	7609	7709	8036	8136
	63 OR	1622	2327	1292	—	—	—	—	—	—	—	—	—	7629	7729	7829	8236	8336
	63 NR 71 OR	1782	—	1455	—	—	—	—	—	—	—	—	—	7789	7889	7989	—	—
	71 NR 80 OR	1942	—	1615	—	—	—	—	—	—	—	—	—	7949	8049	8149	—	—

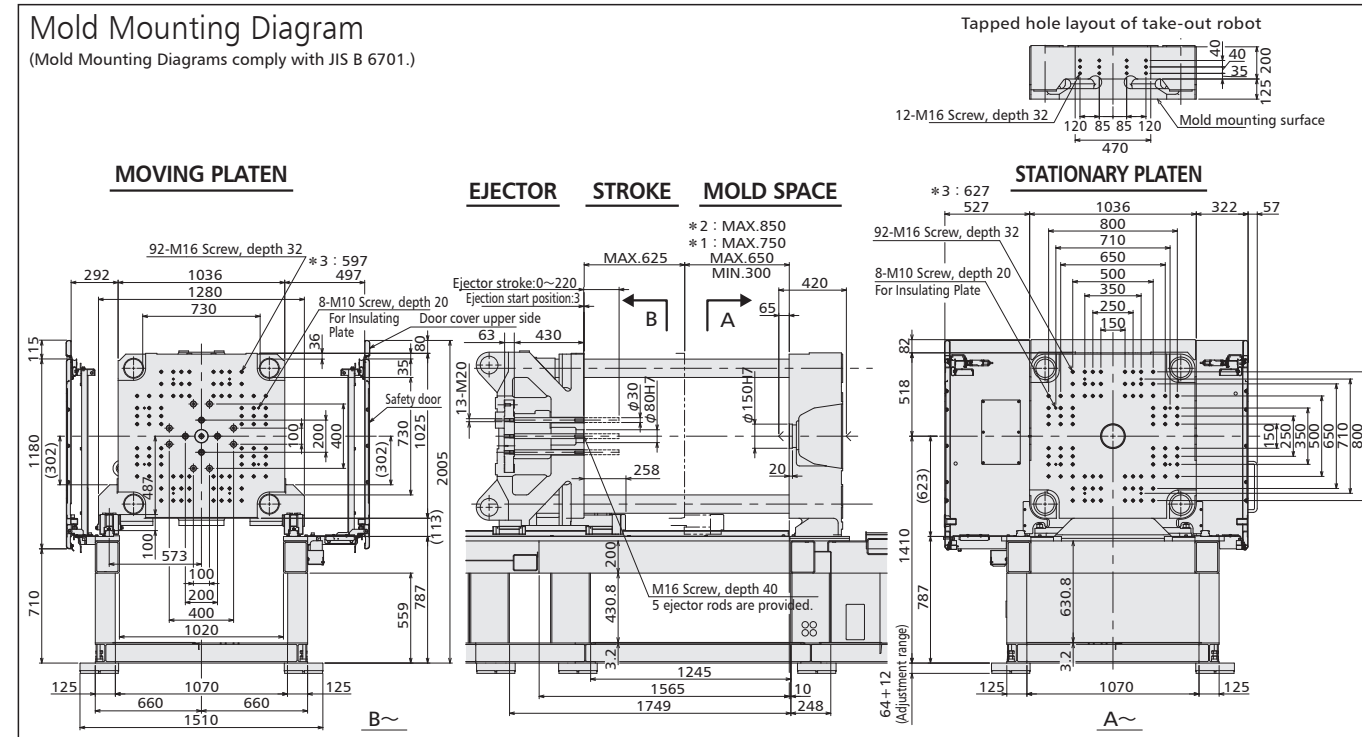
HP: Super high pressure screw (Open) O: Standard screw (Open) OR: Open type NR: Needle valve type



The figure marked with an asterisk (*) shows the case of using no leveling pad.

Mold Mounting Diagram

(Mold Mounting Diagrams comply with JIS B 6701.)

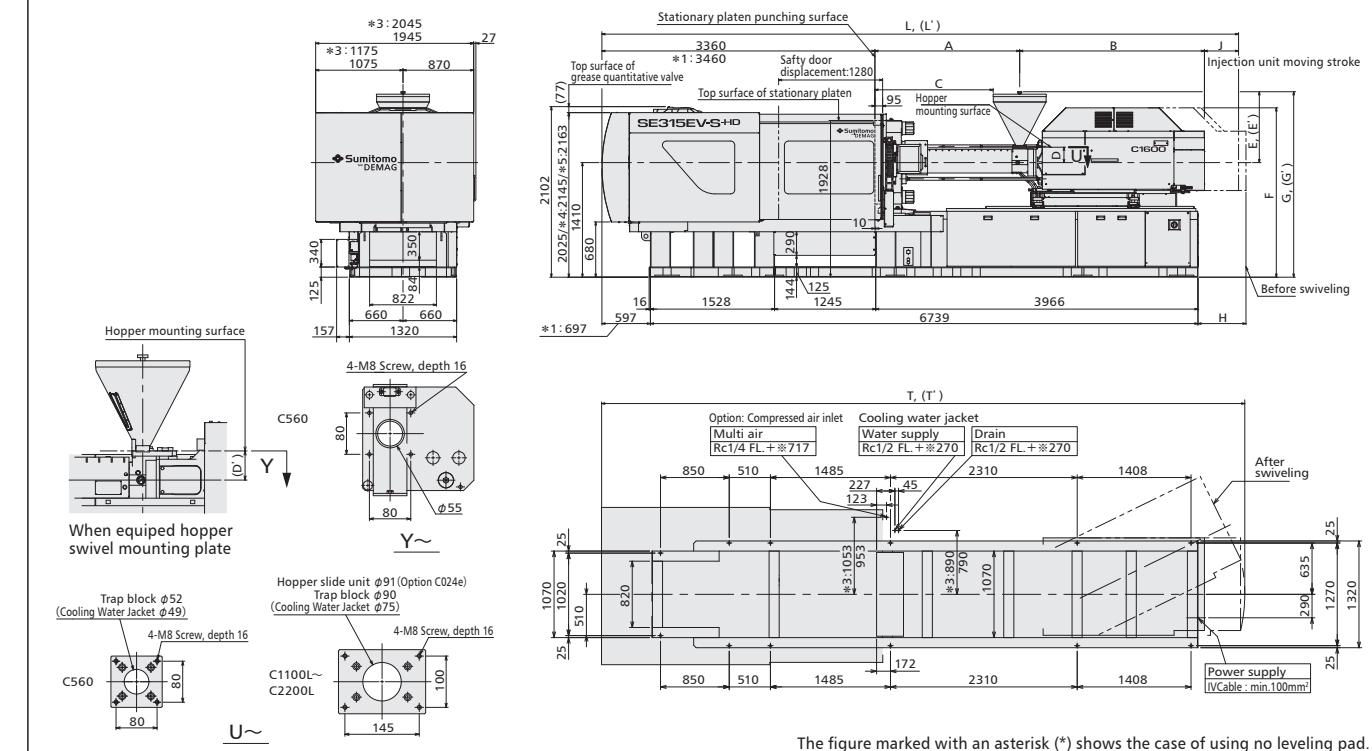


The following drawing's dimensions are Japanese specification.

- *1,(L'),(T') : Equipped with mold space extension 100mm
- *3 : Equipped with safety door wide expansion (100mm) opposite to operation side
- *4 : Equipped with dust prevention cover above toggle (Fixed type)
- *5 : Equipped with dust prevention cover above toggle (Slide type)

Injection unit	Screw Diameter	A	B	C	D	(D')	E	(E')	F	G	(G')	H	J	(J')	T	(T')
C560	32 HP	775	438													
	36 HP	800	533													
	28 O	709	442													
	32 O	799	532													
	36 O	893	622		155	140	711	696	1718	2121	2106	—	420		7211	7311
	40 O	979	764													
	45 O	1069	802													
	50 O	1159	892													
C1100L	45 NR	1122	795													
	45 NR 50 OR	1252	925													
	50 NR 56 OR	1412	1085		189	—	872	—	2080	2282	—	347	420		7740	7840
	56 NR	1572	1245													
	63 OR	1622	2114	1292												
	45 OR	1122	795													
	45 NR 50 OR	1252	925													
	50 NR 56 OR	1412	1085		189	—	872	—	2080	2282	—	507	420		7895	7995
C1600L	56 NR	1572	1245													
	63 OR	1622	2274	1292												
	63 NR 71 OR	1782	1455													
	50 OR	1252	925													
	50 NR 56 OR	1412	1085													
	56 NR	1572	1245													
	63 OR	1622	2274	1292												
	63 NR 71 OR	1782	1455													
C2200L	50 OR	1252	925													
	50 NR 56 OR	1412	1085													
	56 NR	1572	1245		189	—	872	—	2066	2282	—	720	420		8116	8216
	63 OR	1622	2327	1292												
	63 NR 71 OR	1782	1455													
	71 NR 80 OR	1942	1615													
	50 OR	1252	925													
	50 NR 56 OR	1412	1085													

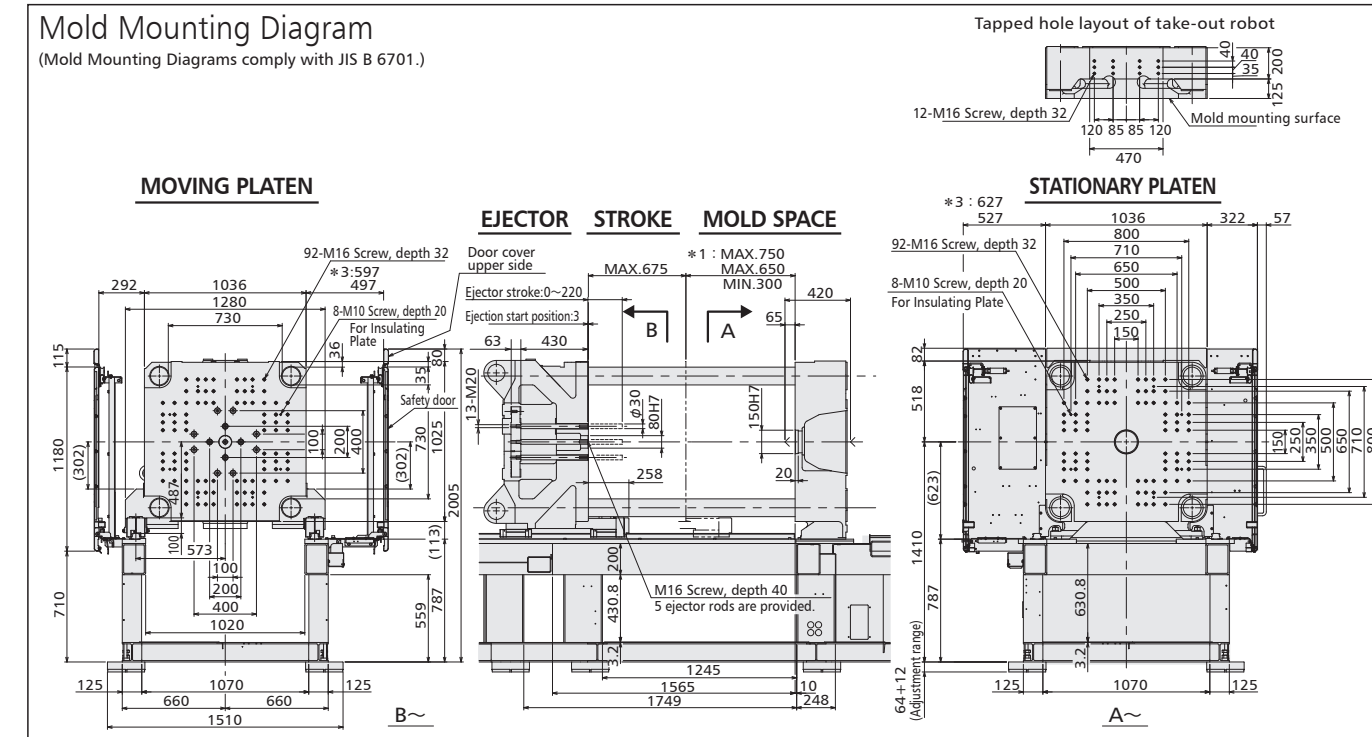
HP: Super high pressure screw (Open) O: Standard screw (Open) OR: Open type NR: Needle valve type



The figure marked with an asterisk (*) shows the case of using no leveling pad.

Mold Mounting Diagram

(Mold Mounting Diagrams comply with JIS B 6701.)



SE350EV-S-HD

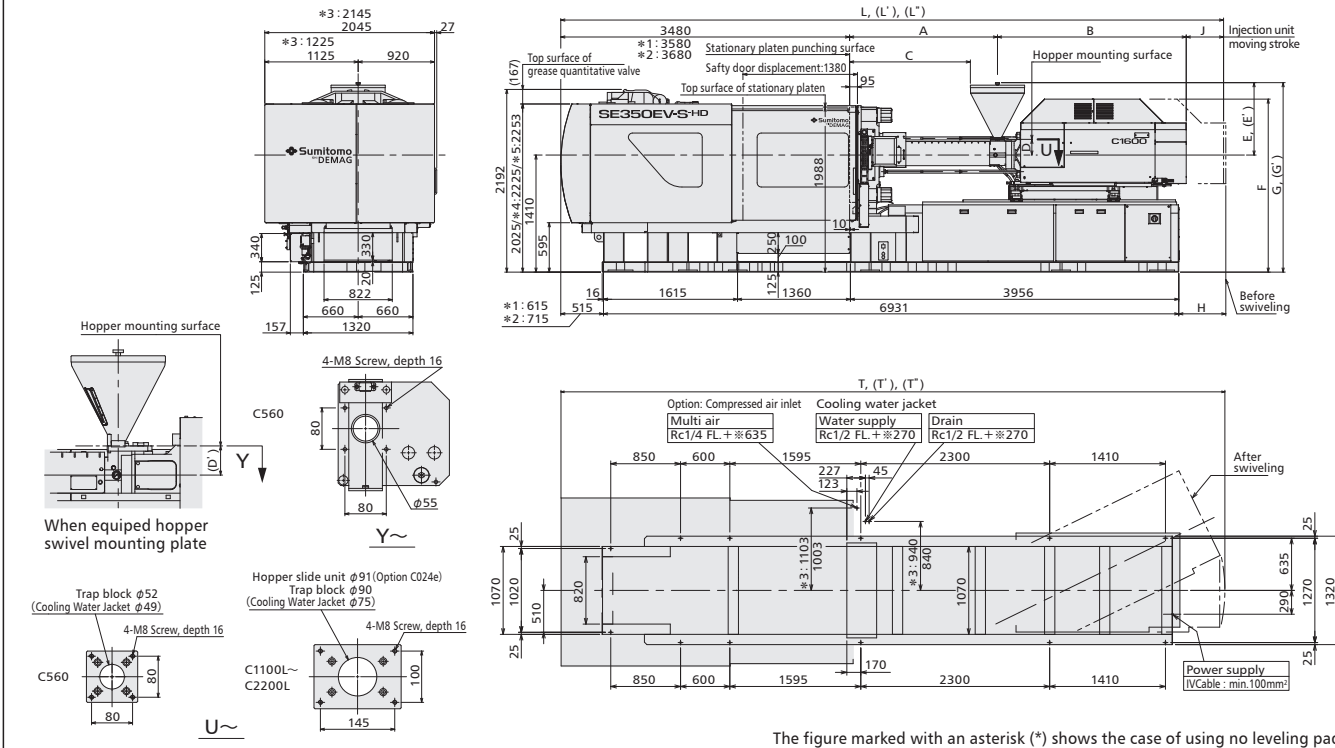
Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.

- *1,(L'),(T') : Equipped with mold space extension 100mm
- *2,(L''),(T'') : Equipped with mold space extension 200mm
- *3 : Equipped with safety door wide expansion (100mm) opposite to operation side
- *4 : Equipped with dust prevention cover above toggle (Fixed type)
- *5 : Equipped with dust prevention cover above toggle (Slide type)

Injection unit	Screw Diameter	A	B	C	D	(D')	E	(E')	F	G	(G')	H	J	L	(L')	(L'')	T	(T')	(T'')
C560	32 HP	725	458											6509	6609	6709			
	36 HP	800	533											6584	6684	6784			
	28 O	709	442											6493	6593	6693			
	32 O	799	532											6593	6693	6793			
	36 O	889	622		155	140	711	696	1718	2121	2106	—	450	6583	6683	6783	7361	7461	7561
	40 O	979	712											6673	6773	6873			
	45 O	1069	802											6763	6863	6963			
	50 O	1159	892											6853	6953	7053			
	45 OR	1122	795											7096	7196	7296			
	50 NR	1252	925											7226	7326	7426			
C1100L	50 NR	1412	1085		189	—	872	—	2080	2282	—	387	450	7386	7486	7586	7890	7990	8090
	56 NR	1572	1245											7546	7646	7746			
	63 OR	1622	1292											7666	7766	7866			
	45 OR	1122	795											7256	7356	7456			
	50 NR	1252	925											7386	7486	7586			
	50 NR	1412	1085		189	—	872	—	2080	2282	—	547	450	7546	7646	7746	8045	8145	8245
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			
C1600L	50 NR	1412	1085		189	—	872	—	2080	2282	—	547	450	7546	7646	7746			
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			
	50 NR	1412	1085		189	—	872	—	2080	2282	—	547	450	7546	7646	7746	8045	8145	8245
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			
C2200L	50 NR	1412	1085		189	—	872	—	2066	2282	—	760	450	7546	7646	7746	8266	8366	8466
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			
	50 NR	1412	1085		189	—	872	—	2066	2282	—	760	450	7546	7646	7746	8266	8366	8466
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			

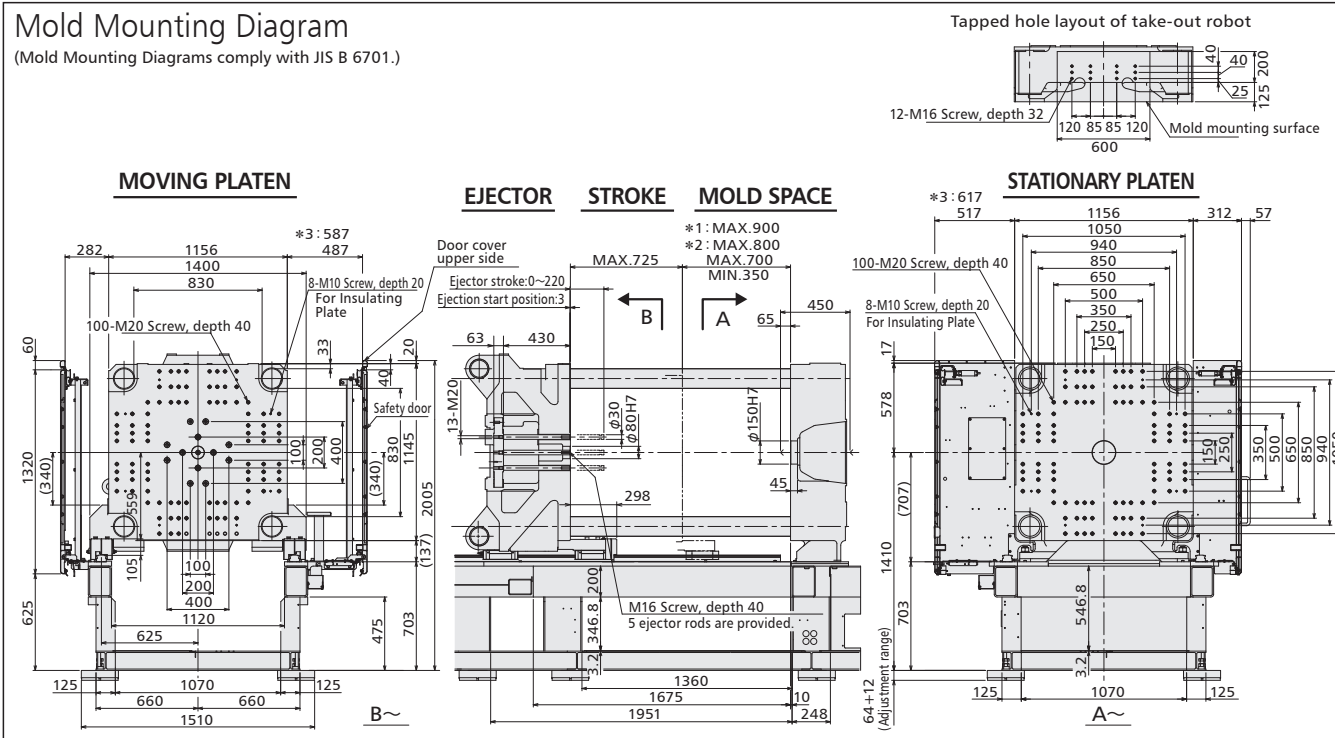
HP: Super high pressure screw (Open) O: Standard screw (Open) OR: Open type NR: Needle valve type



The figure marked with an asterisk (*) shows the case of using no leveling pad.

Mold Mounting Diagram

(Mold Mounting Diagrams comply with JIS B 6701.)



SE385EV-S-HD

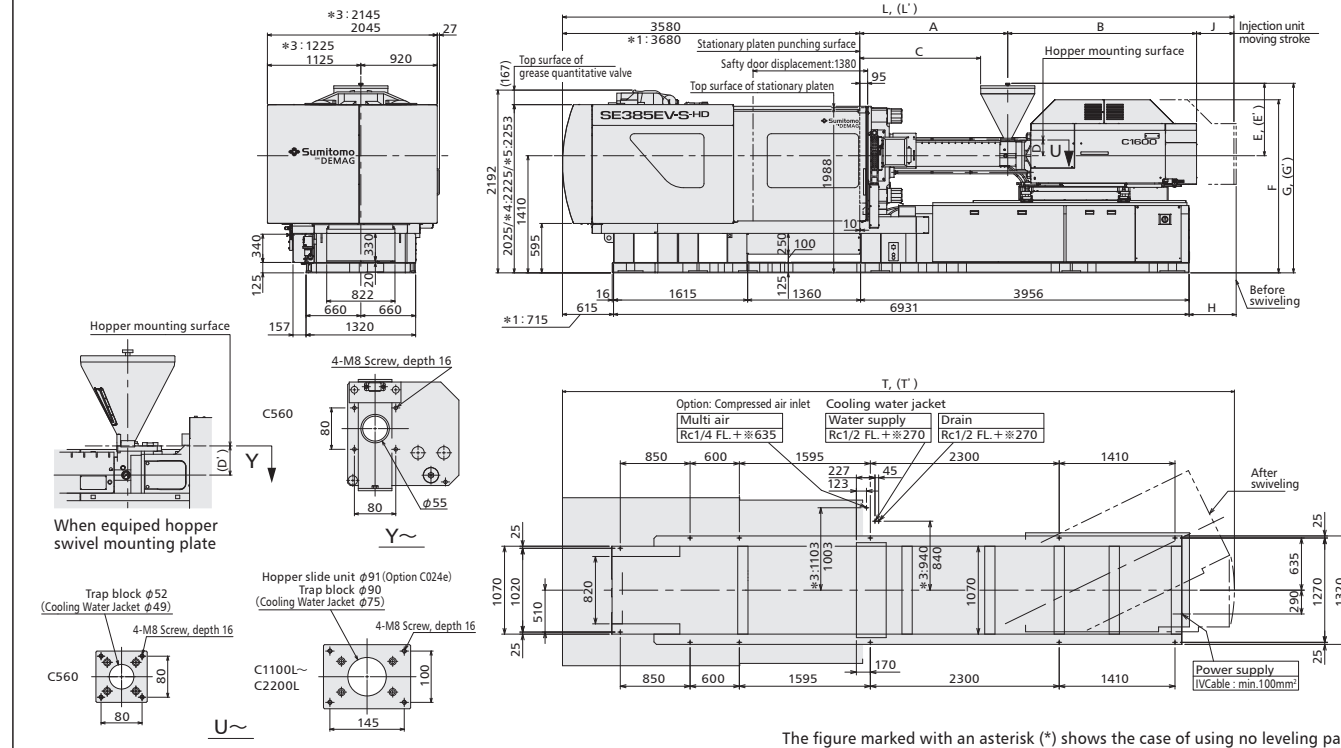
Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.

- *1,(L'),(T') : Equipped with mold space extension 100mm
- *3 : Equipped with safety door wide expansion (100mm) opposite to operation side
- *4 : Equipped with dust prevention cover above toggle (Fixed type)
- *5 : Equipped with dust prevention cover above toggle (Slide type)

Injection unit	Screw Diameter	A	B	C	D	(D')	E	(E')	F	G	(G')	H	J	L	(L')	(L'')	T	(T')	(T'')
C560	32 HP	725	458											6609	6709				
	36 HP	800	533											6684	6784				
	28 O	709	442											6593	6693				
	32 O	799	532											6593	6693				
	36 O	889	622		155	140	711	696	1718	2121	2106	—	450	6583	6683	6783	7461	7561	
	40 O	979	712											6773	6873				
	45 O	1069	802											6863	6963				
	50 O	1159	892											6953	7053				
	45 OR	1122	795											7196	7296				
	50 NR	1252	925											7326	7426				
C1100L	50 NR	1412	1085		189	—	872	—	2080	2282	—	387	450	7386	7486	7586	7990	8090	
	56 NR	1572	1245											7546	7646	7746			
	63 OR	1622	1292											7666	7766	7866			
	45 OR	1122	795											7256	7356	7456			
	50 NR	1252	925											7386	7486	7586			
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	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			
C1600L	50 NR	1412	1085		189	—	872	—	2080	2282	—	547	450	7546	7646	7746			
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			
	50 NR	1412	1085		189	—	872	—	2080	2282	—	547	450	7546	7646	7746	8145	8245	
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			
C2200L	50 NR	1412	1085		189	—	872	—	2066	2282	—	760	450	7546	7646	7746	8366	8466	
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			
	50 NR	1412	1085		189	—	872	—	2066	2282	—	760	450	7546	7646	7746	8366	8466	
	56 NR	1572	1245											7706	7806	7906			
	63 OR	1622	1292											7826	7926	8026			
	63 NR	1718	1386											7986	8086	8186			
	50 OR	1252	925											7439	7539	7639			

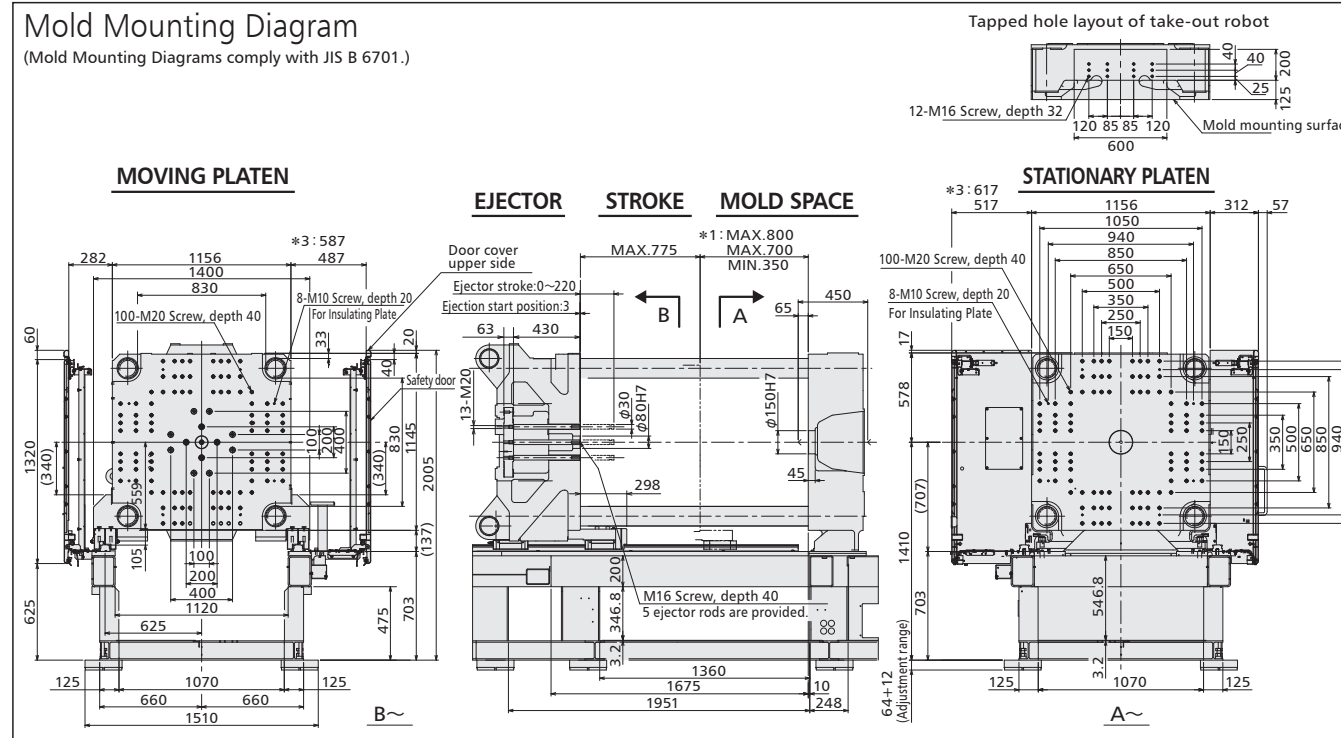
HP: Super high pressure screw (Open) O: Standard screw (Open) OR: Open type NR: Needle valve type



The figure marked with an asterisk (*) shows the case of using no leveling pad.

Mold Mounting Diagram

(Mold Mounting Diagrams comply with JIS B 6701.)



SE450EV-S-HD

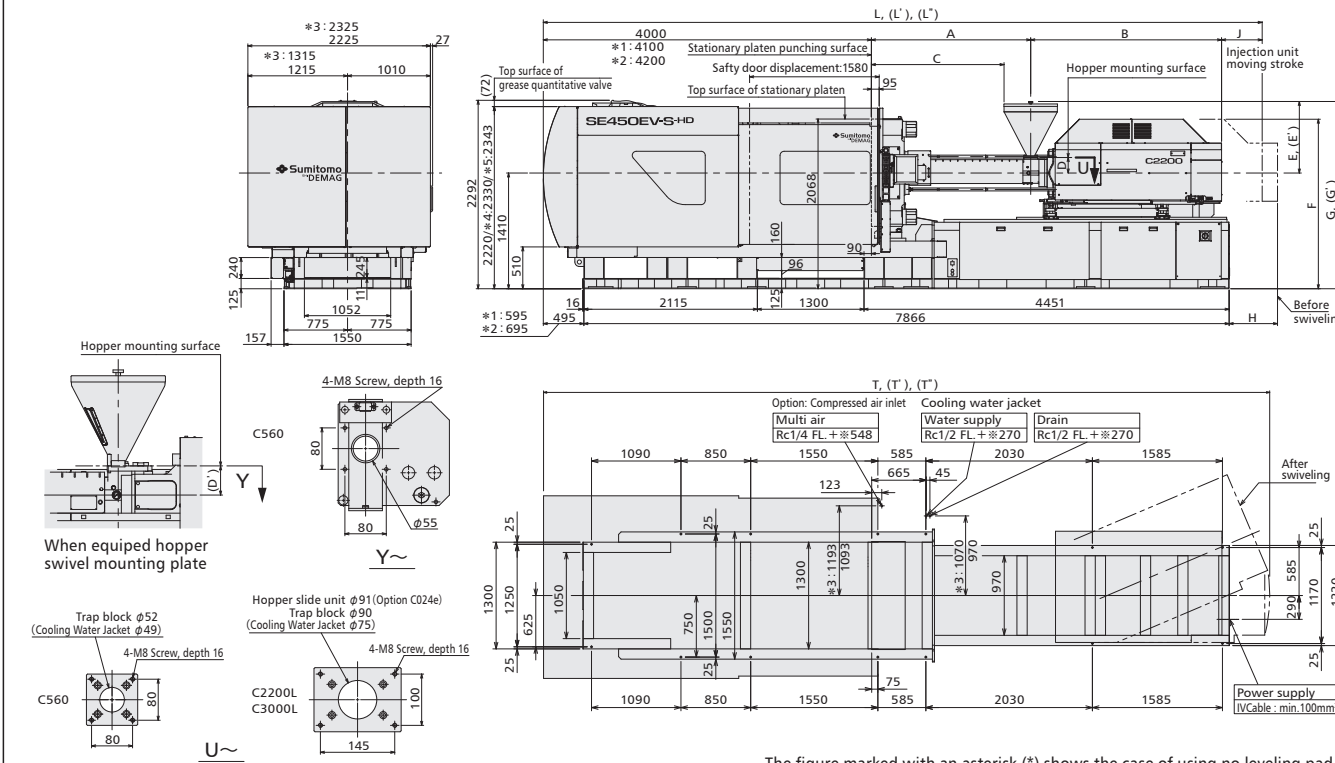
Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.

- *1,(L'),(T') : Equipped with mold space extension 100mm
- *2,(L''),(T'') : Equipped with mold space extension 200mm
- *3 : Equipped with safety door wide expansion (100mm) opposite to operation side
- *4 : Equipped with dust prevention cover above toggle (Fixed type)
- *5 : Equipped with dust prevention cover above toggle (Slide type)

Injection unit	Screw Diameter	A	B	C	D (D')	E (E')	F	G (G')	H	J	L (L')	L' (L'')	T (T')	T' (T'')
C560	32 HP	725		458							7074	7174	7274	
	36 HP	800	1854	533							7149	7249	7349	
	28 O	709		442							7058	7158	7258	
	32 O	789		532							7148	7248	7348	
	36 O	889		622	155	140	711	696	1718	2121	2106			8016
	40 O	979	1764	712						495				8116
	45 O	1069		802										8216
	50 O	1159		892										
	50 OR	1287		960										
	50 NR/56 OR	1447	2257	1120										
C2200L	56 NR	1607		1280	189	—	872	—	2066	2282	—	590	495	
	63 OR	1622		1295										9011
	63 NR/71 OR	1782	2327	1455										9111
	71 NR/80 OR	1942		1615										9211
	63 OR	1622		1295										
	63 NR	1782		1455										
	71 OR	1782	2527	1455	189	—	872	—	2091	2282	—	790	495	
	71 NR/80 OR	1942		1615										9205
	80 NR/90 OR	2102		1775										9305
														9405

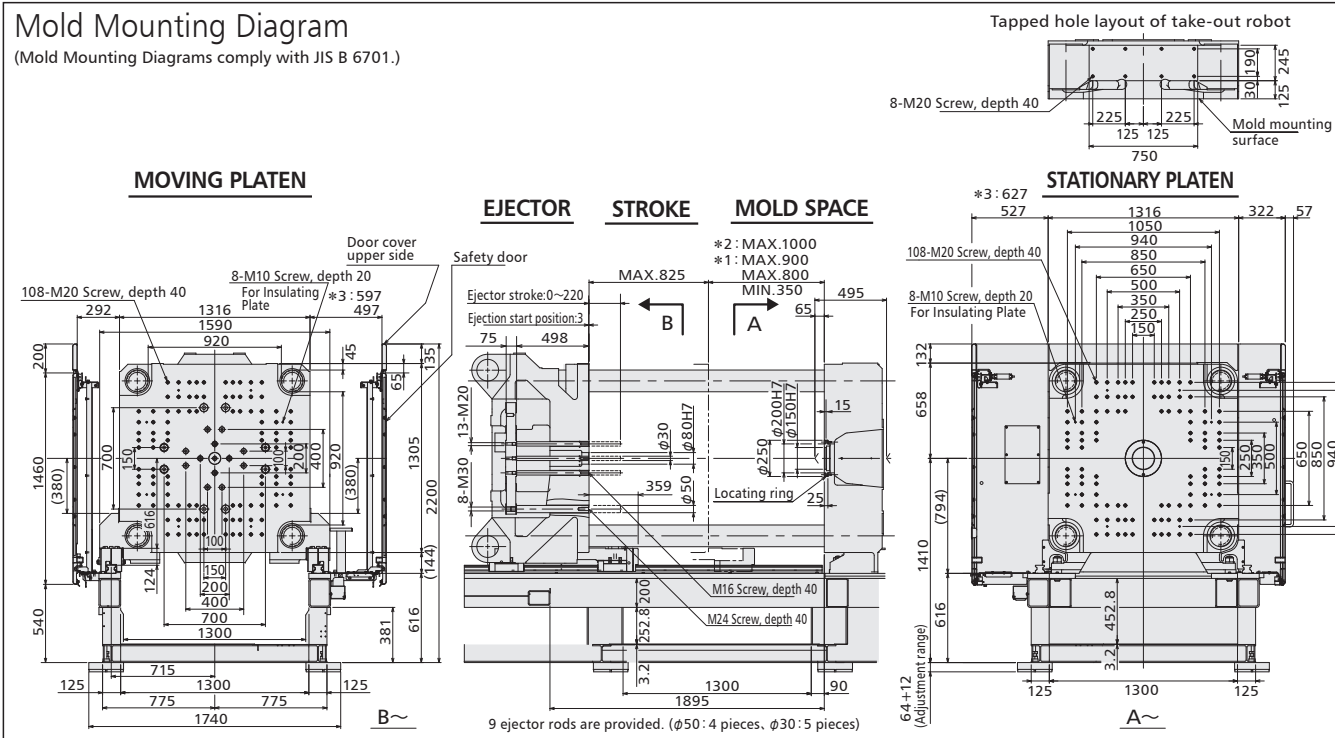
HP: Super high pressure screw (Open) O: Standard screw (Open) OR: Open type NR: Needle valve type



The figure marked with an asterisk (*) shows the case of using no leveling pad.

Mold Mounting Diagram

(Mold Mounting Diagrams comply with JIS B 6701.)



SE500EV-S-HD

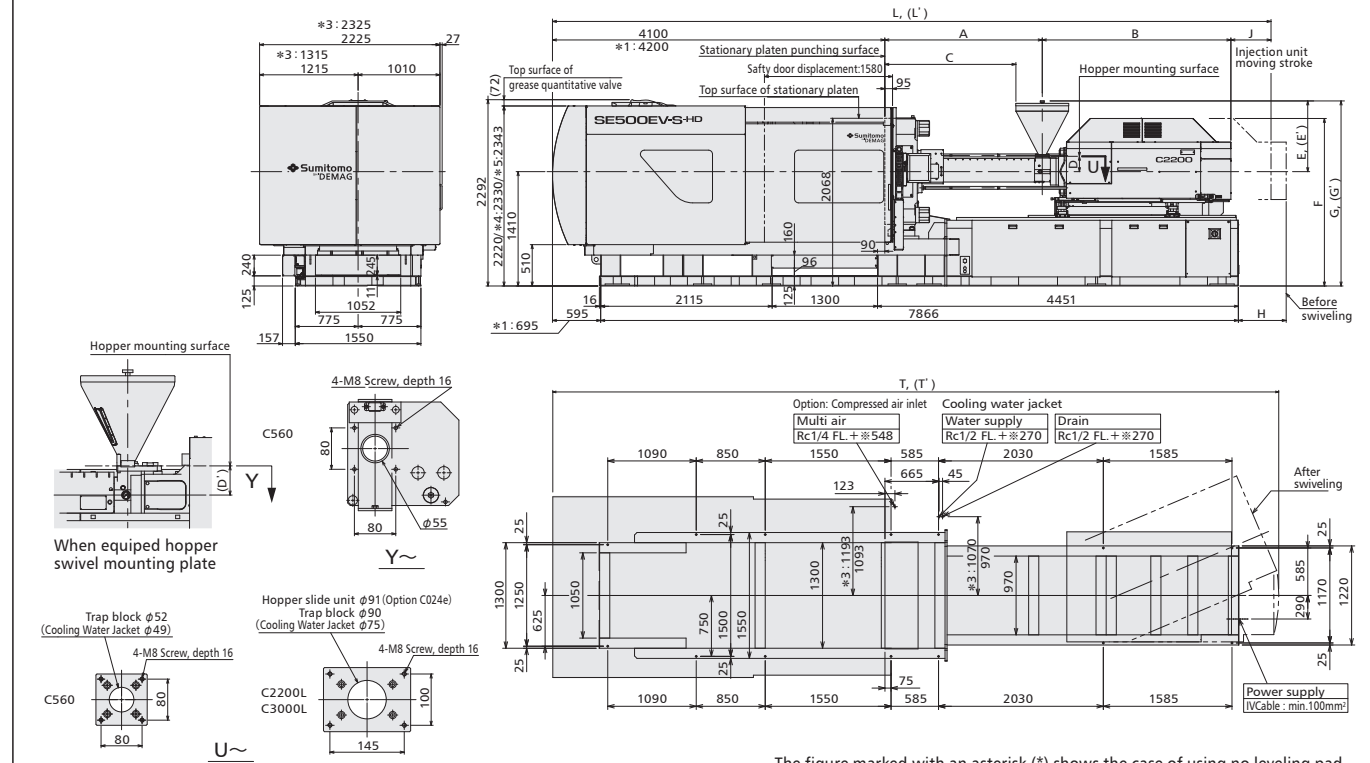
Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.

- *1,(L'),(T') : Equipped with mold space extension 100mm
- *3 : Equipped with safety door wide expansion (100mm) opposite to operation side
- *4 : Equipped with dust prevention cover above toggle (Fixed type)
- *5 : Equipped with dust prevention cover above toggle (Slide type)

Injection unit	Screw Diameter	A	B	C	D (D')	E (E')	F	G (G')	H	J	L (L')	L' (L'')	T (T')	T' (T'')
C560	32 HP	725		458							7174	7274		
	36 HP	800	1854	533							7249	7349		
	28 O	709		442							7158	7258		
	32 O	789		532							7248	7348		
	36 O	889		622	155	140	711	696	1718	2121	2106			8016
	40 O	979	1764	712						495				8116
	45 O	1069		802										8216
	50 O	1159		892										
	50 OR	1287		960										
	50 NR/56 OR	1447	2257	1120										
C2200L	56 NR	1607		1280	189	—	872	—	2066	2282	—	590	495	
	63 OR	1622		1295										9111
	63 NR/71 OR	1782	2327	1455										9211
	71 NR/80 OR	1942		1615										
	63 OR	1622		1295										
	63 NR	1782		1455										
	71 OR	1782	2527	1455	189	—	872	—	2091	2282	—	790	495	
	71 NR/80 OR	1942		1615										9305
	80 NR/90 OR	2102		1775										9405

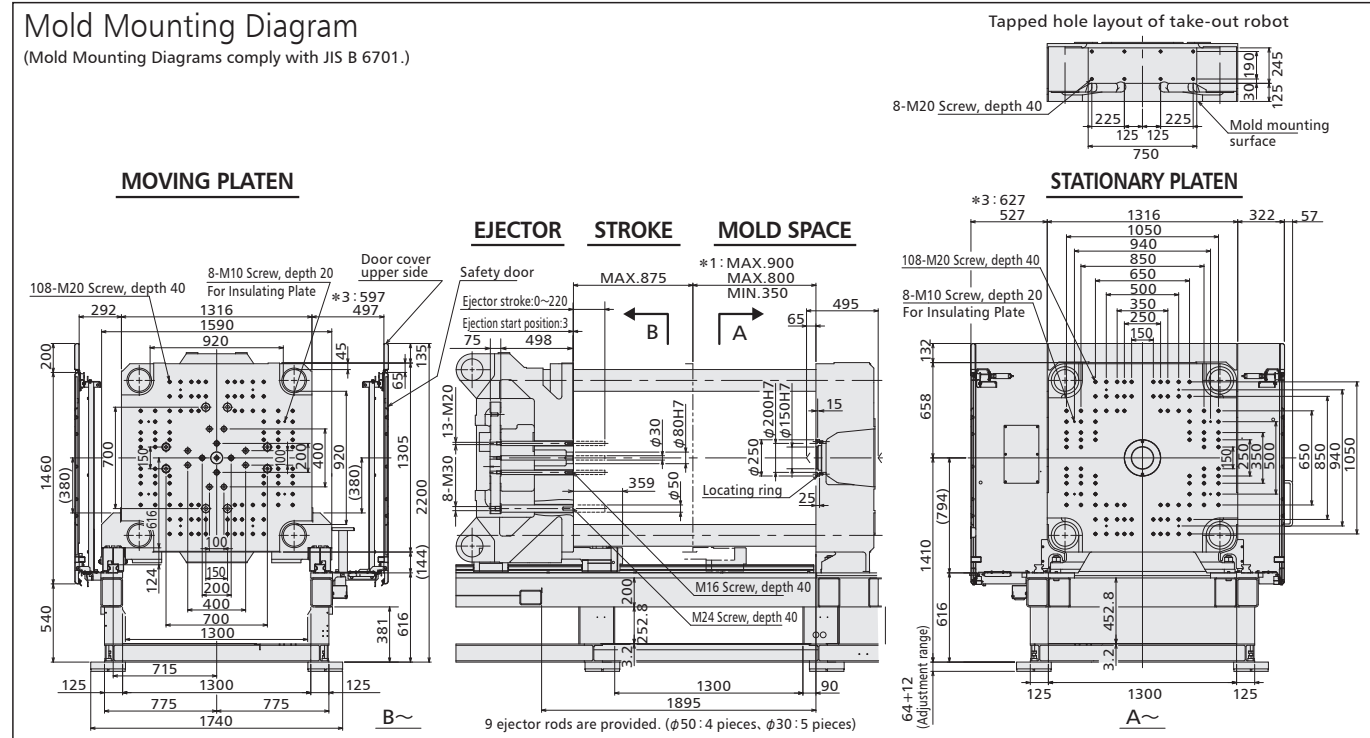
HP: Super high pressure screw (Open) O: Standard screw (Open) OR: Open type NR: Needle valve type



The figure marked with an asterisk (*) shows the case of using no leveling pad.

Mold Mounting Diagram

(Mold Mounting Diagrams comply with JIS B 6701.)



Standard Equipment

Plasticizing and injection unit
1. Injection program control function (Multi-stage control)
2. Holding pressure program control function (Multi-stage control)
3. Screw pull back function (Before starting dosing/After dosing is completed)
4. Digital display function of screw position (0.01 mm setting)
5. Holding time 0.01 seconds setting function
6. V-P switchover function (Pressure/Position)
7. Filling delay timer function
8. Pursing device with interlock (Select the position where the interlock function is unused or the injection device is retracted)
9. Heating cylinder temperature control 6 zones *2
10. Standard capacity heater
11. Heating cylinder temperature switching function (Molding/Lowered temperature/Pursing)
12. Screw cold start prevention function (With variable interlock timer and minimum melting time display)
13. Remote setting function for sprue break stroke (Reverse timing selection with delay timer, Nozzle contact detection, Movement time setting)
14. Screw rotation speed digital display function
15. Purging cover device (With limit switch)
16. Injection unit swivel device (With nozzle alignment adjustment mechanism)
17. Remaining cooling time display function
18. Dosing start delay timer function
19. Injection speed/Holding pressure rise speed selection function (10 modes)
20. Screw forward speed setting function during holding pressure
21. Screw pull back delay control function
22. Synchro dosing function
23. Screw reverse rotation control function
24. Independent temperature control device of nozzle
25. Standard energy saving heating cylinder cover (Two-layer structure)
26. Water cooling jacket temperature control device
27. Mold open operation function during dosing (Shut off nozzle drive control)
28. Filling pressure multi-stage control function
29. Resin retention prevention function
30. One-touch manual dosing function
31. High-precision, high-pressure nozzle contact device (Nozzle contact force 3-step variable)

Control unit
1. 15 inch TFT color LCD screen
2. Touch panel type setting input device
3. Molding condition storage function
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 device *1
9. Screen switching function in up to 15 languages
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) *1
12. Process display function
13. SSR heater drive circuit device
14. Industrial unit input function (Speed, Position, Pressure, Rotation speed)
15. Molding machine status output signal (5 ch) *1
16. USB connection circuit device (Memory)
17. Protection function of saved conditions
18. Abnormal processing selection function
19. Initial reject/short stop reject function
20. Change screen color scheme function
21. Numerical and character input keypad layout change function (Select from 2 types)
22. Takeout robot entry permission signal
23. OPC UA server

Zero-molding features	
1. Zero-molding main screen: Simple process setting	18. Zero-molding: Clamp force feed back function
2. Zero-molding main screen : Production monitor (Production number/Process/Abnormality/Actual results)	19. Clamp force multi-stage control function (Cross-head position control)
3. Specifications/Function confirmation screen (Standard functions/Optional functions/Abnormality handling/Specification list/Monitoring device)	20. Zero-molding: Molding condition support monitor function (Peak clamp force, Pack pressure, Status display)
4. Minimum mold clamp force detection function (Automatic measurement)	21. Actual value monitor switching function (Actual/Process/Power/Waveform/Temperature graph)
5. Setup support: Mold installation screen (Mold height, Mold contact, Clamp force, Mold open/close in preparations, Ejector setting)	22. Monitoring setting: Function to automatically set all at once
6. Setup support: Mold condition setting screen (Open/close, Ejector multi-stage setting)	23. Molding condition access restriction function (Condition range, Screen display, Password function)
7. Setup support: Mold opening limit/Ejector protrusion position teaching function (Current value input)	24. Automatic condition change function for molding start (By short shot method)
8. Setup support: Protection setting screen (Mold protection, Ejector protection)	25. Protection: Screw protection function
9. Setup support: Multi-purging function (Gate purging, Resin replacement purging, Slight time stop purging, Low-viscosity resin purging, Resin viscosity measurement)	26. Energy saving mode function of holding pressure (with automatic energy saving control function)
10. Setup support: Temperature condition reference/Calling function	27. Waveform display function: Simple display by process (Injection, Holding pressure, Dosing, Mold opening, Mold closing, Ejector, Mold height)
11. Setup support: Resin residence alarm/Monitoring function	28. Waveform display function: Waveform save completion message
12. Setup support: Nozzle/Heating cylinder temperature rise mode function (Step/Nozzle delay/Process temperature control)	29. Waveform display function: Automatic waveform save function (Always/Trigger/Abnormal)
13. Zero-molding Molding condition setting screen: Z-Screen (Filling, Holding pressure, Dosing, time, Temperature, Mold clamp force)	30. Quality control function: Waveform monitoring function
14. Zero-molding: FFC control (with guidance function)	31. Quality control function: Molding process monitor logging function (Temperature, Temperature control output, Peak clamp force, Pack pressure)
15. Zero-molding: FFC control, mode setting function	32. Production control function: Function to set the number of cavities and manage the number of products
16. Zero-molding: Function to check the filling position and short shot position by flow front check	33. Production control function: Operation status management function (operating time, motor load factor, power consumption monitor)
17. Screw reversal decompression control function	

*1 All input and output signals are no-voltage contact signals. Power is not supplied with output signals.
*2 The number of zone varies depending on the screw diameter and screw type.
*3 The max. injection speed differs as follows; C750 - C2200: 280 mm/s, C3000: 220 mm/s. Standard injection speed applies to C560.
*4 The extended distance is added to the machine dimensions. Please refer to the drawing of machines.
*5 The max. width is 1000 mm for SE350EV-S-HD - SE500EV-S-HD.
● Specifications are subject to change without notice for performance improvement.
● Standard specification models of the SE-EV-S-HD series comply with the safety standards of Japan, China and the nations of Southeast Asia.
They can also be modified to comply with the safety standards of Korea (KCs Mark), USA, Brazil, the nations of Oceania and Canada. For more information, contact us.

Optional Equipment

Plasticizing selection
1. Ion-nitride screw assembly
2. Hard chromium plating screw assembly
3. Wear/corrosion resistant screw assembly (Except for C560, C750)
4. Wear and corrosion resistant A screw assembly
5. Wear and corrosion resistant B screw assembly
6. Wear and corrosion resistant C screw assembly (For C560 only)
7. High-temperature screw assembly (Max. temp. 450 °C) (For C560 only)
8. SD Screw assembly
9. SM Screw assembly
10. Screw tip set - Rotation type
11. Screw tip set - Rotation type, TiN coating (For C560 only)
12. Screw tip Corrosion and wear resistant A - Non-rotation type
13. Screw tip Corrosion and wear resistant B - Non-rotation type (For C560 only)
14. Screw tip Corrosion and wear resistant C - Non-rotation type
15. Open type nozzle (Except for C560, C750)
16. Needle valve shut off nozzle (Air type nozzle open/close cylinder) (Except for C560, C750)
17. Open nozzle (Only for C560, C750)
18. Needle valve shut off nozzle (Air type nozzle open/close cylinder) (For C750 only)
19. Cylinder nozzle (Except for C560)
20. Zone 1 high capacity heater
21. High capacity heater (For C560 only)
22. Extension nozzle
23. High insulated cylinder cover (For C560 only)

Plasticizing and injection unit
1. Resin temperature sensing device (Only when needle valve nozzle is equipped)
2. Standard type hopper
3. V/P switchover by mold cavity pressure
4. Needle valve nozzle drive circuit
5. Hopper slide device (The hopper swivel mounting plate is applied to the C560)
6. Plating resin inlet of cooling water jacket
7. Circulation air assist device for injection unit (Except for C560, C750)
8. Purge resin receiving tray (Stainless steel)
9. Heater for PA (Nylon) resin (Except for C560)
10. High filling specification *3
11. Power module for thick-wall molding (Except for C560)

Control and monitor unit
1. Leak circuit breaker (AC 200 V, 220 V 3ø3W+E) (Japan and Asia only)
2. Mold temperature monitor (Type K)
3. Mold temperature monitor (Type J)
4. Mold automatic temperature adjuster
5. Automatic starting system (Heater, Water supply, External output signal) *1
6. Revolving alarm lamp
7. High function 3-color LED signal tower
8. Closed circuit type cooling water pipe 1 system 4 branches
9. Closed circuit type cooling water pipe 1 system 2 branches
10. Closed circuit type cooling water pipe 2 systems 10 branches
11. Personal computer connection circuit (Ethernet)
12. Electric power supply socket
13. Power source outlet for tools
14. Name plate: Blue
15. Motion07
16. MotionGB
17. Addition of motor breaker
18. Emergency stop interlock (Unloader, Cart) *1
19. DC 24 V power for external signal equipped (Power source only)

List of Preparation Items (Summary)

Main breaker capacity	
Machine	Main breaker capacity
SE220EV-S-HD~SE385EV-S-HD	225A
SE450EV-S-HD~SE500EV-S-HD	250A

- 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, & grounding cable.

Primary side in-line size, grounding cable size

Machine	Primary side power cable size	Primary side power terminal screw size	Grounding cable size	Grounding cable terminal screw size
SE220EV-S-HD~SE500EV-S-HD	100mm ²	M8	50mm ²	M8

- The size of electric cables listed above is based on the allowable current when the ambient temperature of piping of a single core polyvinyl chloride 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 to auxiliary 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 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.

Screw Assembly

Suitable resins		Non-abrasive (wear) and corrosive resins	Resins may burn, resins with poor thermal stability	Resins with less than 30% GF	Resins with less than 30% GF, flame retardant resins	Resin with more than 30% GF, resins with large amount of filler (GB, CF, MR)
Wear resistance		★	★	★★	★★	★★★
Corrosion resistance		★	★	★	★★	★★★
Specifications		Nitrided	Chrome plated	Wear resistant	Wear and corrosion resistant A	Wear and corrosion resistant B
Material	Screw	Nitrided	Chrome plated	Wear and corrosion resistant A	Wear and corrosion resistant A	Wear and corrosion resistant B
	Cylinder	Wear resistant	Wear resistant	Wear resistant	Wear and corrosion resistant A	Wear and corrosion resistant B
	Screw tip (set)	Rotating type	Rotating type	Wear and corrosion resistant A Non-rotating type headset	Wear and corrosion resistant A Non-rotating type headset	Wear and corrosion resistant C Non-rotating type headset
Screw type	SD Screw	○	○	○	○	○
	SM Screw	—	○	○	○	—

★★★ Most suitable ★★ Suitable ★ Usable

C560 High filling spec can select SE-EV-S screw assembly and ultra-high pressure spec screw assembly, can not select the above specs.

Clamp unit
1. Hydraulic core pull hydraulic pipe
2. Hydraulic core pull control circuit
3. Pneumatic core pull
4. Pneumatic core pull circuit
5. Core rotation control circuit
6. SPI take-out robot connection circuit
7. SPI AN-146/EUROMAP67 product unloader connection circuit
8. High precision heat insulating plate (5 mm/10 mm, Cross type) *5
9. Die Clamp control unit
10. Valve gate drive circuit
11. Valve gate control circuit
12. Locate diameter 100 mm (Applied to screw dia. ø45 - ø56)
13. Full metallic toggle cover
14. Hydraulic package
15. SPI pattern platen
16. EUROMAP pattern platen
17. Locating ring (Cooling fit, Bolted)
18. Safety door automatic open/close device (Operation side)
19. Safety door automatic open/close device (Non-operation side)
20. Mold space extension 100 mm *4
21. Mold space extension 200 mm *4
22. T groove platen
23. Slide core return check *1
24. Hydraulic drive circuit (Built-in)
25. Dust prevention cover above toggle (Fixed type) *4
26. Dust prevention cover above toggle (Slide type) *4
27. Hydraulic drive circuit (Separate type)
28. Increased ejector force
29. Multi air
30. Mold clamp connection circuit *1
31. Magnet clamp connection circuit *1
32. Safety door release specification control circuit
33. Safety door wide expansion (100 mm) opposite to operation side *4
34. Cooling water pipe 2 systems 8 branches

Spare parts and accessories
1. Spare parts A (Mechanical parts: Mechanical stopper, Lub. parts)
2. Spare parts A (Electrical parts: Thermocouple)
3. Spare parts for export (Encoder, Limit switch, Inductive proximity sensors)
4. Leveling pads (For one machine)
5. Anchor bolts (For one machine)
6. Locating ring (Transition fit)
7. Mechanical parts and hook for hosting machine
8. Tool A (Tools, Tool box, Rocol paste)
9. Ejector rods
10. Grease gun
11. Grease cartridge for automatic lub (700 cc)
12. Grease cartridge for manual lub (400 cc)
13. Injection unit turning handle (Except for C560)
14. Tool for disassembly screw tip set (Except for C560)
15. High precision heat insulating plate (5 mm/10 mm, Cross type) *5
16. Easy camp

Spare sockets (Optional)

The increased number of power sockets are available for auxiliary equipment such as auto loader and mold temperature controller to flexibly meet the requirement for customer's molding systems, to which a necessary number of sockets can be added to connect their peripheral equipment.

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

Calculated values (ref. values) of cooling water

Cooling water line of water jacket			
Machine	Band heater capacity	Required cooling water	
C560 ø50	12.6kW	2.9L/min	
C750 ø50	12.2kW	2.8L/min	
C1100 ø63	28.4kW	6.6L/min	
C1600 ø71	30.5kW	7.1L/min	
C2200 ø80	34.6kW	8.0L/min	
C3000 ø90	35.0kW	8.1L/min	

Mold cooling water line	
*Cooling water required for 1 line is approx 5L/min.	
Machine	Total cooling water required for 2 lines.
SE220EV-S-HD~SE500EV-S-HD	10L/min