

α-S450iA (small capacity injection) Mechanical specifications



Clamping unit				
Clamping mechanism	Double toggle ●			
Tonnage [kN tonf]	4500 450 (Option 5000 500)			
Maximum and minimum die height Doubleplaten [mm]	1000/350			
Maximum and minimum die height Singleplaten [mm]	-			
Clamping stroke [mm]	900			
Locating ring diameter [mm]	φ200			
Tie bar spacing, H×V [mm]	920×920			
Platen size, H×V [mm]	1300×1300			
Minimum mould size, H×V [mm] *1	535×535			
Ejector stroke [mm]	250			
Maximum ejector force [kN tonf]	150 15.0			
Injection unit				
Screw diameter [mm]	56	64	68	72*6
Injection stroke [mm]	260	260	260	260
Max. injection volume [cm ³]	640	836	944	1059
Nozzle touch force [kN tonf]	30 3.0			
Max. Injection Speed mm/s *3	200 (High duty) *7			
Max. injection pressure [MPa] *2	225	175	155	135
Max. pack pressure [MPa]*2	195	150	130	120
Max. injection rate [cm ³ /s] *3	493	643	726	814
Max. screw rotation speed [min ⁻¹]	400			300
Max. Injection Speed mm/s *3	240			
Max. injection pressure [MPa]*2	225	175	155	135
Max. pack pressure [MPa] *2	195	150	130	120
Max. injection rate [cm ³ /s] *3	591	772	872	977
Max. screw rotation speed [min ⁻¹]	400			300
Screw and Barrel				
Number of heater [Barrel]	4			
Number of heater [Nozzle]	1			
Total heater wattage [kW]	23.9	27.2	27.8	27.2
Machine weight (t) *4	≈ 24			

● standard - not available () with hardware and/or software option

*1) Smaller mould than this size may limit clamp force.

*2) The maximum injection pressure and maximum pack pressure is not melt pressure but injection unit output.

- The maximum injection pressure and maximum pack pressure is the maximum value can be set.

- The maximum injection pressure and maximum pack pressure might be limited depending on the moulding condition.

*3) Maximum injection rate and maximum injection speed is a theoretical value.

- Maximum injection rate and maximum injection speed can not be guaranteed when the injection pressure is maximum.

*4) The machine without option.

*5) The pressure conversion is 1MPa=10kgf/cm².

*6) The moulding condition might be limited by the resin. Contact sales for detail.

*7) 200mm/s specification (High duty) is recommended for high viscosity resin molding or longer injection/pack process molding. Please contact sales for details.

α -S450iA (small capacity injection) Dimensions

