

# α-S450iB

## Mechanical specifications



Clamping unit					
Clamping mechanism		Double toggle			
Tonnage	kN   tonf	4500   450 / Increased (5000   500)			
Maximum and minimum die height Single platen	mm	1000-350			
Clamping stroke	mm	900			
Locating ring diameter	mm	Ø 200			
Tie bar spacing, HxV	mm	920 x 920			
Platen size, HxV	mm	1300 x 1300			
Minimum mould size, HxV *1	mm	535 x 535			
Maximum mould weight Single platen (Moving-Stationary) *2	kg	4500-4500			
Ejector stroke	mm	250			
Maximum ejector force	kN   tonf	150   15.0			
Injection unit					
Screw diameter	mm	64	68	72	80
Injection stroke	mm	280	300	320	320
Max. injection volume	cm <sup>3</sup>	901	1090	1303	1608
Nozzle touch force *6	kN   tonf	30   3.0 / Increased (50   5.0)			
<b>Max. Injection Speed mm/s *4</b>	<b>mm/s</b>	<b>160</b>			
Max. injection & Hold Pressure 1 *3 *6	MPa	220	200	185	150
Max. injection & Hold Pressure 2 *3 *7	MPa	220	200	185	150
Max. injection rate *4	cm <sup>3</sup> /s	514	581	651	804
Max. screw rotation speed	min <sup>-1</sup>	400		300	200
Machine weight Double platen   Single platen *9	t	25.9			
Screw and Barrel					
Number of heater zones	Barrel	Nozzle adaptor 1 + Barrel 4			
Number of pyrometers	Nozzle	1			
Total heater wattage	kW	28.9	29.5	30.9	30.9

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

- \*1) Smaller mold than this size may limit clamp force.
- \*2) If the weight of a mold exceeds maximum mold weight, the molding condition may be limited.
- \*3) Maximum injection pressure and maximum hold pressure are the output of the injection unit, not the resin pressure.
  - Maximum injection pressure and maximum hold pressure are the maximum values that can be set.
- \*4) 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.
- \*5) The maximum injection pressure setting at high pressure filling mode option.
  - There is a limitation in injection time setting and pack time setting, when high pressure filling mode option is selected. (Contact sales for detail)
- \*6) Maximum injection pressure 1 and maximum hold pressure 1 are the values when the wear-resistant and anti-corrosion cylinder etc. is installed.
  - Maximum injection pressure and maximum hold pressure may vary depends on the installed screw and cylinder specifications.
- \*7) Maximum injection pressure 2 and maximum hold pressure 2 are the values when the general purpose cylinder etc. is installed.
  - Maximum injection pressure and maximum hold pressure may vary depends on the installed screw and cylinder specifications.
- \*8) Sprue break cannot be used with increased nozzle touch force option.
- \*9) The machine without option.
- \*10) The pressure conversion is 1MPa=10kgf/cm<sup>2</sup>.
- \*11) The molding condition might be limited by the resin. (Contact sales for detail)
- \*12) In case of the replacement to different screw diameter after shipment, some covers may be needed to replace. (Contact sales for detail)

