

# α-S150iA Mechanical specifications



Clamping unit						
Clamping mechanism	Double toggle					
Tonnage [kN   tonf]	1500   150 (1800   180)					
Maximum and minimum die height Doubleplaten [mm]	500-200 (600-200)					
Maximum and minimum die height Singleplaten [mm]	575-275 (675-275)					
Clamping stroke [mm]	440					
Locating ring diameter [mm]	∅ 160					
Tie bar spacing, HxV [mm]	560 x 510					
Platen size, HxV [mm]	800 x 750					
Minimum mould size, HxV [mm] *1	325 x300					
Ejector stroke [mm]	150					
Maximum ejector force [kN   tonf]	35   3.5					
Injection unit						
Screw diameter [mm]	32	36	40	44	48	52
Injection stroke [mm]	150	150	150	176	176	208
Max. injection volume [cm <sup>3</sup> ]	121	153	188	268	318	442
Nozzle touch force [kN   tonf]	30   3.0					
<b>Max. Injection Speed mm/s</b> *3	<b>200</b>					
Max. injection pressure (high-pressure filling mode) [MPa] *2 *4	-	-	-	-	-	-
Max. injection pressure [MPa] *2	280	280	260	220	190	160*7
Max. pack pressure [MPa] *2	280	280	220	190	160	130*7
Max. injection rate [cm <sup>3</sup> /s] *3	160	203	251	304	361	424
Max. screw rotation speed [min <sup>-1</sup> ]	300					
Machine weight Doubleplaten   Singleplaten [t] *5	7.05   ≈ 6.8					
<b>Max. Injection Speed mm/s</b> *3	<b>330</b>					
Max. injection pressure (high-pressure filling mode) [MPa] *2 *4	380	345	280	-	-	-
Max. injection pressure [MPa] *2	280	280	260	220	190	160
Max. pack pressure [MPa] *2	280	280	260	220	190	160
Max. injection rate [cm <sup>3</sup> /s] *3	265	335	414	501	597	700
Max. screw rotation speed [min <sup>-1</sup> ]	400					
Machine weight Doubleplaten   Singleplaten [t] *5	7.2   ≈ 6.95					
Screw and Barrel						
Number of heater [Barrel]	3					
Number of heater [Nozzle]	1					
Total heater wattage [kW]	12.0	13.0	14.9	15.9	17.9	20.2

● 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 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)  
 - High pressure resistance barrel and nozzle are necessary, when high pressure filling option is selected. (Contact sales for detail)

\*5) The machine without option.

\*6) The pressure conversion is 1MPa=10kgf/cm<sup>2</sup>.

\*7) The moulding condition might be limited by the resin. (Contact sales for detail)

# α-S150iA Dimensions

