



# 10 Itr Stirred Autoclave

Model	A3113	A3115	A3123	A3125	A3133	A3135
Design pressure	100 bar		200 bar		350 bar	
Design temperature	300°C	500°C	300°C	500°C	300°C	500°C
Material of Construction	SS316 L wetted parts					
Vessel ID	185 mm					
Vessel internal height	420 mm					
Minimum Stirrable volume	1 ltr					
Head mounting style	Removable head and vessel design					
Heating <sup>1</sup>	External electrical ceramic band heater with cladding & insulation.			External electrical ceramic band heater with cladding & insulation & heater temperature control.		
Motor & drive	½ hp AC motor / ½ hp ex-proof gas group IIB motor (zone 1) with 750 RPM					
Shaft sealing	Zero leakage Magnetic drive coupling, (M-80, Torque Capacity: 80 kg-cm) Material of Bush- carbon filled PTFE (CFT)					
Stirrer	2 Stage Solid Shaft with 6-bladed pitch blade turbine stirrer					
External Standard fittings	<ul style="list-style-type: none"> <li>Pressure gauge with vacuum protection</li> <li>Safety rupture disc (Inconel) with vacuum protection</li> <li>Gas inlet-valve &amp; liquid sampling valve mounted on common dip tube</li> <li>Vent needle valve</li> <li>¾" ball valve for powder / liquid inlet with funnel,</li> <li>Flush bottom valve 15mm</li> </ul> <b>Note:</b> All needle valves shall be ¼" NPT end connections					
Internal Standard fittings	<ul style="list-style-type: none"> <li>Helical Cooling coil</li> <li>Thermowell (with RTD PT100 temperature sensor)</li> <li>Dip tube</li> <li>Removable Baffles</li> </ul>					
Gasket	PTFE Gasket			Grafoil Gasket		
Lifting Arrangement	Mechanical chain pulley arrangement for lifting the head, vessel, etc.					
Magnetic Drive Cooling System	Water Pump and 10Ltr. Tank with tubing for circulating water to cool the magnetic drive					
Auto Cooling System	Auto-cooling system with water pump, for forced cooling SS tank & hose pipes for exothermic reaction & faster cooling.					
Water pump & 10 ltr tank	With tubing to cool the magnetic drive, pressure sensor, etc.					
Control Panel	SS Control panel with, <ul style="list-style-type: none"> <li>Programmable P.I.D temperature controller with high temperature alarm</li> <li>Variable frequency drive for motor speed control</li> </ul>					
Power Supply	3φ, 440VAC, 25 Amp, 50 / 60 Hz					
Mounting	SS Trolley					

Note:

1- Cascade temperature controller shall be provided for 500°C