



500 ml Parallel Synthesizer

Description	M4 or M6					
Model	2113	2123	2133	2115	2125	2135
Design pressure	100 bar	200 bar	350 bar	100 bar	200 bar	350 bar
Design temperature	300°C			500°C		
Material of Construction	SS316, Hastelloy , Monel, Nickel, Titanium, Zirconium etc.					
Vessel ID	75 mm		65 mm	75 mm		65 mm
Vessel internal height	118 mm		158 mm	118 mm		158 mm
Minimum Stirrable volume	60 ml		50 ml	60 ml		50 ml
Head mounting style	Removable head and vessel design					
Heating ¹	External electrical ceramic band heater with cladding & insulation. ¹					
Motor & drive	¼ hp ex-proof gas group IIB motor (zone 1) with 100-1450 RPM					
Shaft sealing	Magnetic drive coupling, (M-40, Torque Capacity: 40 kg-cm) Material of Bush- carbon filled PTFE (CFT)					
Stirrer	2 Stage Solid Shaft with 6-bladed pitch blade turbine stirrer					
External fittings	<ul style="list-style-type: none"> Pressure gauge with vacuum protection Safety rupture disc (Inconel) with vacuum protection Gas inlet-valve & liquid sampling valve mounted on common dip tube Vent needle valve Note: All needle valves shall be ¼" NPT end connections					
Internal fittings	<ul style="list-style-type: none"> Helical Cooling coil Thermowell (with RTD PT100 temperature sensor) Dip tube 					
Gasket	PTFE Gasket			Spiral wound Grafoil Gasket		
Closure Type	Split clamp with clamp bolts					
Magnetic Drive Cooling System ²	Water Pump and 10Ltr. Tank with tubing for circulating water to cool the magnetic drive					
Auto Cooling System ²	Auto-cooling system with water pump, for forced cooling SS tank & hose pipes for exothermic reaction & faster cooling.					
Control Panel	SS Control panel with, <ul style="list-style-type: none"> Programmable P.I.D temperature controller with high temperature alarm Variable frequency drive for motor speed control 					
Power Supply	1 ϕ , 220VAC 50 Hz					
Mounting	SS Trolley / SS Tabletop					

Note:

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

2 - Only for trolley model systems