



# 10 Itr Pressure Vessel

Model	P3113	P3123	P3133	P3115	P3125	P3135
Design pressure	100 bar	200 bar	350 bar	100 bar	200 bar	350 bar
Design temperature	300°C			500°C		
Material of Construction	SS316, SS316L, Hastelloy B/C, Inconel, Monel, Nickel, Titanium, Zirconium					
Vessel ID	185 mm					
Vessel internal height	400 mm					
Head mounting style	Removable head and vessel design					
Heating <sup>1</sup>	External electrical ceramic band heater with cladding & insulation. <sup>1</sup>					
External 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 &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 dia.</li> </ul> Note: All needle valves shall be ¼" NPT end connections					
Internal 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		
Closure Type	Split clamp with clamp bolts					
Control Panel	SS Control panel with programmable P.I.D temperature controller with high temperature alarm					
Power Supply	3φ, 416VAC 50 Hz					
Mounting	SS Trolley					
Auto Cooling System	Auto cooling system with water pump, for forced cooling SS tank & hose pipes for exothermic reactions & faster cooling.					

Note:

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



# Enquiry guide for customized 10 ltr models

Enquiry code model is **Standard Model no-B-C-D-F-H-I-J-K** where B, C, D, F, H, I, J, K options can be selected from the below tables. The below options will be in place of standard supply.

## Options

B Material of Construction			
Hastelloy C276	H6	Inconel 625	I6
Hastelloy C 22	H2	Nickel 200	N2
Hastelloy B	HB	Titanium Gr. 2	T2
Monel 400	M4	Zirconium 702	ZI
Inconel 600	I0	Tantalum lined	TN

C Head Mounting Style	
Fixed head with pneumatic vessel raising lowering	P
Fixed head with pneumatic vessel raising lowering & tilting	PT

D Heating Style	
Electrical Ex-Proof, IIB + H <sub>2</sub> certified	EA
Welded SS 304 jacket with insulation	JS
Electric Ceramic band heater	EC

F Valves & Fittings	
Serpentine Cooling Coil	SCC
Pressure Safety Valve	PSV

H Body & Head Sealing	
Split clamp bolt design	BVP

I Control Panel	
SS Control panel with programmable PID temperature controller & high temperature alarm	STD
Ex-Proof gas group IIC zone 1 certified	F2C
Touch Screen	TSP

K Certifications**	
CE-PED 2014 / 68 / EU for pressure vessels or ASME U stamp for Pressure Vessels	PED ASU
CE marked panel & electric parts or UL / CSA marked panel & electrical parts	ECE USC
ATEX certified electricals	ATP
ATEX certified system as per 2014 / 34 / EU	ATM

### Note:

- 1) Customer is advised to select best suited options for most optimized price & delivery.
- 2) All above options may not be available / possible with all models.
- 3) Customization of volume, material, pressure, temperature etc. may be possible on request
- 4) Different power supply options may be possible on request.
- 5) Overall dimensions are indicative, they may change depending on the optional accessories or specific design modifications opted.

\*\*Country specific certification like CRN for Canada, AS1210 for Australia & DOSH for Malaysia can be offered on request