

# 5 ltr Pressure Vessel





## 5 ltr Pressure Vessel

Model	P2513	P2523	P2533	P2515	P2525	P2535
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	149 mm	134 mm		149 mm	134 mm	
Vessel internal height	310 mm	360 mm		310 mm	360 mm	
Head mounting style	Removable head and vessel design					
Heating <sup>1</sup>	External electrical ceramic band heater with cladding & insulation.					
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>Flush Bottom Valve</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> </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					
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 5 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	
Ball valve powder inlet		CS
Flush bottom valve		CT

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