



DATA SHEET							
HLL LIFECARE LIMITED, TRIVANDRUM							
		<b>Revival of BCG Vaccine Manufacturing Facility, BCGVL, Guindy, Chennai</b>					
		<b>BULK VESSEL</b>					
		PROJECT #:	110729				
		EQ. ID #:	FG-BLV 01				
		DOCUMENT #:	DS/FG-BLV 01				
<b>1</b>	<b>Process Steps</b>						
1.1	Bulk vessel shall be used in Bulk area as well for transferring of the final product to the filling area and the same shall be attached to the filling line. <b>Refer Annexure 1</b>						
<b>2</b>	<b>Technical Specifications</b>						
2.1	Model	cGMP					
2.2	Type	Bulk product vessel (SS 316L) for filling machine					
2.3	Capacity	12 L Geometric volume ( 10 L working volume)					
2.4	Quantity	1 no.					
<b>3</b>	<b>Material Of Construction</b>						
3.1	Vessel	SS 316L					
3.2	Design	Cylindrical with flat bottom (Vessel Quality Certification- ASME BPE)					
3.3	Gaskets/ O-rings	PTFE / PVDF / VITON.					
3.4	Surface finish	Internally Electro polished Ra≤0.6 microns, conforming to SFC4, according to ASME BPE(2009).					
		Externally Mechanically polished up to ≤1.2 Ra					
		Flexible hosing shall be used (FDA approved material)					
3.5	Nozzles or ports	SS 316 L					
3.6	Nuts - bolts (internal, external, insulation support)	SS 316 L					
<b>4</b>	<b>Requirements</b>						
4.1	<b>Nozzles Schedule :</b>						
	<b>Top Head Dish</b>						
	• Top lid will be of TC connection with minimum of 4 inches diameter.						
	• 1no. Port for product inlet with S2S connection (TC clamps with gasket and Serrated nipple) for vent filter (Disc type).						
	• 1no. Port for vent filter with S2S connection (TC connection and serrated nipple) for bulk addition.						
	• 1no. spare port.						
	<b>Bottom side wall</b>						
	• Vessel should have side bottom discharge through manuval diaphragm valve and S2S connection for connection to buffer tank of filling line.						
	4.2	• Fabrication of equipment and accessories should comply with the latest GMP standards.					
		• No sharp edges/Corners, crevices, pin holes should be there in the process wetted parts of the equipment.					
• All welded joints, internal or external, shall be buffed and smooth for easy cleanability.							
• Use of Asbestos is prohibited. Gasket material will be PTFE / PVDF / VITON.							
4.3	All nozzle pipes shall be seamless, unless otherwise specified.						
4.4	Flexible hosing/ tube shall be considered for transferring of the product, MOC: Silicone platinum cured						
4.5	Top lid shall be openable / flanged.						
4.6	Vessel to be designed to have minimum (< 0.5 %) dead volume.						
4.7	Vessel should have magnetic stirrer with magnetic bead (bar type). ( <i>Vendor scope</i> )						
4.8	Vessel should have one number autoclaveable disc filter. ( <i>Vendor scope</i> )						
4.9	The vessel shall be autoclaveable.						
4.10	Vendor to ensure 100 % drainability of the product.						
4.11	GA of the vessel and arrangement of the vessel shall be provided during the techno-commercial quotation.						
<b>5</b>	<b>Documents Required</b>						
5.1	DQ Document						
5.2	MOC certificates						
5.3	Test Certificate						
5.4	List of MAKE with certificate (to be used during fabrication of this unit)						
<b>NOTE:</b> Accurate size and technical specification need to be mentioned by the vendor.							
AFI Approved for Enquiry		AFO Approved for Ordering					
1	2013.05.02	BKSH	NVNG	<input type="checkbox"/>	<input type="checkbox"/>		
Rev	Date	Completed By	Checked By	AFI	AFO	Sheet 1/1	