

PSGSG2012 -13/028	Product Specification For <u>S.S ENCLOSURES</u>	Product	GVM36
		Rev	01
		Date	25.07.2017
1.0	<u>Application:</u> The stainless steel Enclosure assemblies to Drawing. Nos. BD2016DG050_1100, 2100, 3100 & 4100 are used for gas filled applications. The gas pressure in this metal enclosure is maintained at 1 to 1.5 bars. The enclosure assembly shall meet following specifications.		
2.0	<u>SPECIFICATIONS:</u>		
2.1	Material: Low Carbon Austenitic <u>stainless steel</u> confirming to AISI-304L.		
2.2	Standard seamless / ERW pipe in schedule is acceptable. The pipe shall be pulled out using hydraulic / spinning equipment for BD2016DG050_1111, 2111, 3111 AND 4101 as per desired sizes.		
2.3	The flanges shall be manufactured using H-Boring/CNC to drawings after <u>TIG</u> welding only. The flanges shall be machined as per instructions and maintaining parallelism of faces and perpendicularity as prescribed. To ensure parallelity, it is must to machine the components after welding all the sections as prescribed. The flange sealing surfaces shall be polished to RA 0.6/RA 0.8 or better and the bolting holes shall be machined fine, using jig borer/ CNC milling, and shall have uniform chamfer. The tolerances for parallelism, wherever not mentioned in the drawing, shall be within 0.1°. Any sharp corners shall be removed as per the drawing.		
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2.4	Weld splatter, if any, shall be removed by chipping or grinding on completion of the weld. Particular care should be taken to avoid any splatter on the inside of the chamber, at the joint or other locations.		
2.5	The welded structure shall be tested for Dye penetration test and report shall be generated and submitted to BHEL.		
2.6	The supplier shall stress relieve the tested component to ensure zero post supply deformation.		
2.7	The tested assembly should be cleaned, degreased and prepared for pressure test. The assembly shall be tested at 2.0 bar pressure for 4 hours and pressure drop shall be recorded and communicated to BHEL. In case of unallowable pressure drop (>0.5%), a coarse leak check shall be performed. The leak shall be rectified and the test repeated to satisfaction. Components indicating drop in pressure during this test will not be accepted. The arrangement shall be kept at 4 bar for 15 minutes prior to this test to verify pressure withstanding capabilities specified in drawing.		
2.8	The enclosure shall be electro-polished on the inside surface using moderate current densities.		
2.9	The assemblies further shall be sandblasted on the outer surface and powder coated (> 50 Micron) as specified in drawing. During this operation all flanges shall be masked at the sealing surfaces and at the rim.		
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2.10	The dimensional checks, Dye penetration test and the leak test shall be carried out in presence of BHEL inspector.		
2.11	<u>Following certificates shall be furnished for acceptance of the component:</u> 2.11.1 Material source certificate, 2.11.2 Material test certificate , 2.11.3 DP tests. 2.11.4 Pressure drop test and pressure withstand test Report. 2.11.5 Electro-polishing schedule		
2.12	A certified copy of above documents shall be sent along with the delivery note.		
3.0	<u>Packing :</u> The accepted component shall be packed in wooden boxes with suitable PVC covers on the flanges to prevent transit damages. A thick polyethylene cover shall be used to seal to component from ingress of moisture and water. For transit time higher than 2-weeks, adequate quantity of moisture absorbent shall also be placed with the component.		
4.0	<u>Qualification Requirements</u> : The supplier shall be of national / International reputed with proven record and should have supplied similar enclosures used in SF6 gas applications at least for last three years. The supplier must submit along with the quotation a few references to whom the supplier has supplied a similar material.		
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