



INSPECTION & TEST PLAN

Zinc Anode

Client : IOOC Co.

Doc No : 5-FR-02

Date : 27/07/2016

Rev : 0

ITEM	TEST	REF.STANDARD	REQUIREMENTS	Test Frequency	type of inspection		
					1	2	3
1	Chemical composition after casting process	DNV-RP-B401	Al = 0.1-0.5 wt% max Cd < 0.07 wt% max Pb < 0.006 wt% max Fe < 0.005 wt% max Cu < 0.005 wt% max Zinc = Remainder	one samples per each 15 ton	H	R	R
2	Cracks Internal defect	DNV-RP-B401	_ no cracks visible to the naked eye are acceptable, cracks that are seen to penetrate to anode inserts are not accepted, within the section fully supported by anode inserts, cracks of a width greater than 2 mm are only accepted if the length is maximum 100 mm _ cut faces visually without magnification shall contain not more than: 2% of the sum of the area or 5% of any one surface as gas holes & porosity	one samples per each 15 ton	H	H	H
3	Closed Circuit Potential (V) Open Circuit Potential (V) Electrochemical Capacity (A-h/kg) Consumption Rate (kg/A-yr) after casting process	DNV-RP-B401	-1.00 (V) or more negative w.r.t Ag/AgCl -1.05 (V) or more negative w.r.t Ag/agCl 780 min (A-h/kg) 11.23 max (kg/A-yr)	one samples per each 15 ton	H	R	R
4	Cast galvanic anode identification	DNV-RP-B401	Each anode shall be cast or die-stamped with the following : Manufactures symbol	outer face of 10% of installed anodes	H	H	R
5	Dimensions & Straightness of anode	DNV-RP-B401	_ mean length shall be within $\pm 3\%$ nominal length or ± 25 mm whichever is smaller _ mean width & depth shall be $\pm 5\%$ of the nominal mean width and depth _ straightness shall not deviate more then 2% of anode nominal length from the longitudinal of anode.	10% of all anodes	H	H	R
6	Anode weight	DNV-RP-B401	for greater than 50 kg, each anode must be within $\pm 3\%$ of the nominal weight & for less than 50kg must be 2% _ The total contract weight shall be no more than 2% above and not below the nominal contract weight.	10% of all anodes	H	H	R
6	Final Book		_ Certificate _ Data Sheet _ Check List		H	R&A	R&A
Inspection groups		1.BORNA Godaz, 2. Third Part Inspection, 3. IOOC					

Approved	BORNA Godaz CO.
Signature	