
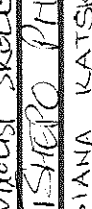





NOTES:



- 1.INSULATING JOINTS ARE TO BE HOUSED IN A WELL DRAINED AND VENTILATED CHAMBER WITH INSPECTION ACCESS.
- 2.FLANGES SHALL BE HYDRAULIC TESTED IN FACTORY TO 1.25 TIMES THE FLANGE CLASSIFICATION. THE TYPE 2 FLANGE SETS SHALL NOT LEAK AT FIELD TEST PRESSURE.
3. THE ASSEMBLED INSULATING JOINT SHALL BE TESTED AS FOLLOWS FOR ELECTRICAL DISCONTINUITY.
- A) PLACE A FREE FLOATING COMPASS ON TOP OF THE INSULATING FLANGE. THE NEEDLE WILL ALIGN PARALLEL TO THE PIPELINE
- I) BRIDGE THE TWO SIDES OF THE INSULATING JOINT WITH EITHER A 12 VOLT HEAVY DUTY CAR BATTERY OR WELDING GENERATOR. IF THE INSULATING FLANGE IS NOT FUNCTIONING THE COMPASS NEEDLE WILL DEFLECT TO A POSITION ORTHOGONAL TO PIPELINE. THE INSULATION DEFLECTS 90 DEGREES. THE NEEDLE INSULATION DEFLECTS 5 TO 20 DEGREES AND THE MAXIMUM CURRENT FLOWING ACROSS THE JOINT SHOULD NOT EXCEED 50 AMPS.
- II) SHOULD A FAULTY INSULATING JOINT BE LOCATED THEN THE FAULTY MATERIALS SHALL BE REPLACED AND THE JOINT SYSTEM RE-TESTED.
- III) IT IS RECOMMENDED THAT EACH BOLT BE TESTED FOR NON-CONTINUITY BEFORE TIGHTENING THEREOF. THE SAME MUST APPLY WHEN A JOINT IS TESTED AND FOUND TO BE CONTINUOUS. THE FAULTY BOLT'S MUST BE NOTED.
- B) THE FINAL DEFLECTED POSITION OF THE COMPASS NEEDLE TO BE NOTED. ie. THE STABILIZED POSITION AND NOT THE INITIAL MOVEMENTS
4. FLANGE MACHINING AND FINISHES TO RAND WATER DRG A11791
5. THE MATING FLANGES SHALL BE DRILLED IN PAIRS AND MARKED.
6. WHERE MATING FLANGES ARE TO BE WELDED ON SITE, THE FLANGES SHALL BE BOLTED UP WITH AT LEAST 3 FITTED BOLTS AND ALIGNED PROPERLY BEFORE WELDING.
7. INSPECTION OF INSULATING JOINTS : AFTER INSTALLATION, THE INSULATING JOINTS MUST BE INSPECTED TO ENSURE THEIR COMPLIANCE WITH THE SPECIFICATIONS AND DRAWINGS AND THEIR EFFECTIVELY TESTED FOR SATISFACTORY ELECTRICAL INSULATION (PARAGRAPH 3 ABOVE). THE INSPECTION SHALL BE WITNESSED BY THE ENGINEER OR AN ENGINEER REPRESENTATIVE OF THE DESIGNER OF THE CATHODIC PROTECTION INSTALLATION AND THE CONTRACTOR.
8. INSULATING SLEEVES : THE MAXIMUM GAP WIDTH BETWEEN INSIDE FACES OF STEEL WASHER AND ENDS OF INSULATING SLEEVE TO BE BETWEEN 2 TO 3 mm AT ANY END BEFORE TIGHTENING. A 1 mm GAP MAY BE LEFT BETWEEN THE SLEEVE END AND THE STEEL FLANGE WHERE STUDS ARE REQUIRED AT VALVE CONNECTIONS.

| REVISION CHECKED BY | | | |
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| NAME | DESIGNATION | SIGNATURE | DATE |
| Mandy Skals | CWE |  | 04/08/2015 |
| TSHEPO PHISOA | SPT |  | 04/08/2015 |
| DIANA KATSHI | S.G.T |  | 04/08/15 |
| Thabane Mademah | M.B.E.F |  | 05/10/15 |
| C. Mesmer | SUNE |  | 05/10/15 |
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| REVISIONS | | | |
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| No | DATE | CHECKED | DESCRIPTION |
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