## CATHODIC PROTECTION DATA SHEET

**Material/Equipment**
Permanent Cu-CuSO₄, Reference Electrode

**Doc. No.:** CP-DSH-PRECu  
**Rev.:** D2

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### HALF CELL TYPE
Permanent copper/ copper sulphate

### RELEVANT STANDARDS
- IPS-I-TP-820/Appendix A

### SIZE & SHAPE
- **Terra cotta**, 150 mm SQUARE * 240 mm LENGTH

### WEIGHT
- Bag dimensions: 240 mm dia., Height: 400 mm, Weight: approx. 10 kg without cable

### TEMPERATURE RANGE
- 0°C to 55°C

### CABLE
- 1*16 mm² single cores, standard soft annealed copper conductor, with CU/XLPE/PVC insulation

### CABLE TO CELL CONNECTION
- Anode lead to anode connection shall be fully sealed to prevent water intrusion by application of an epoxy compound. Finally, an internally mastic lined heat shrink cap which covers the connection zone

### HALF CELL BACKFILL
- 75% Bentonite  
- 5% Sodium Sulphate  
- 20% Bentonite

### POTENTIAL REFERING TO H₂ ELECTRODE
- + 0.32 V

### Stability
- ± 5 mV

### INSPECTION & TEST
- Visual Inspection against any defects  
- Cell to cable resistance test  
- Potential Test
<table>
<thead>
<tr>
<th>FEATURES</th>
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<tr>
<td>Reference electrode Model CU-SC consists of high purity copper spiral wire in a saturated copper sulphate solution (liquid) contained in a single chamber (pot) of terra cotta material. Reference electrode Model CU-DC is similar to model CU-SC but has a double chamber of terra cotta material.</td>
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