electrochemical devices, inc.



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Bagged Underground Reference Electrodes

These instructions apply to all EDI bagged underground reference electrodes including Models UL, UR and UL50 with gelled copper/copper sulfate (Cu/CuSO₄, model code CUG) or gelled silver/silver chloride (Ag/AgCI, model code AGG) elements. Be sure to follow the correct procedures. Failure to follow these procedures will significantly shorten the life of the product.

1. Remove bagged electrode from carton and record the serial number and QC test potential; these are located on the yellow tag attached to the lead wire. Place into bore hole or excavation as directed by the responsible Corrosion Engineer. This electrode may be oriented vertically or horizontally.

2. **If installing the electrode in a borehole,** sift fine backfill into the hole. Fill to about 2 inches (5 centimeters) above top of bag.

If installing the electrode in an excavation, pile the soil up to form a berm around the electrode. The berm should be about 6 inches (15 centimeters) higher than the top of the bag and completely surround it.

3. Slowly pour about 5 gallons (20 liters) of water onto the bag thoroughly saturating it.

For copper/copper sulfate (model code CUG) electrodes, use potable or distilled water.

For silver/silver chloride (model code AGG) electrodes, use clean seawater. If clean seawater is not available, use potable water to which about 5 lbs (2 kg) non-iodized table salt (canning salt) has been added.

DO NOT attempt to lift the electrode by pulling the lead wire. This will permanently damage the electrode.

4. Measure and record the potential of the permanent reference electrode using a recently calibrated portable reference electrode. When making this measurement, place the portable reference as close as possible to the bag of the permanent reference.

5. The balance of the hole or excavation can then be filled with normal backfill.

When backfilling, extra care must be taken to ensure that no sharp objects are pressing against the lead wire.

WHEN QUALITY COUNTS ...

At EDI, we design all our products to meet the needs of the corrosion industry. Our products are easy to install and provide consistent quality and value to the purchaser.

Every gelled reference electrode we produce has a unique serial number and is individually tested to ensure proper operation. The serial number and the QC test result are recorded on the yellow tag attached to the wire. Detach the tag and keep it with other installation records for this job.

Installation instructions for this product are on the other side of this page. Please review them and follow them carefully to ensure that you receive the long-term reliable performance we have designed into this reference electrode. Thank you for selecting reference electrodes by Electrochemical Devices, Inc.



Get a maintenance-free portable reference electrode from the leader in reference electrode technology.



Model IT - Permanent Portable Reference Electrode

- Maintenance-free construction never needs rebuilding
- Eliminates need for hazardous liquid waste disposal
- End-grain wood membrane resists clogging and dry-out.
- For further information and ordering, visit our web site:

www.edi-cp.com

Eliminate IR Drop error from potential measurements.

EDI's Cathodic Protection Coupon uses patented advanced concentric CP coupon technology to eliminate up to 100% of the soil IR drop error in current-on measurements



Model UC – Underground Concentric CP Coupon

- Easily fitted to the base of a test station riser
- Potential measurements can be made with either portable or permanent reference electrodes
- For further information, visit

www.edi-cp.com/uc2.htm