Dissolved Oxygen Electrode Maintenance

Always rinse the electrode in distilled water between each test.

The membrane must be kept wet at all times. When not in use the probe should be stored with the tip in a beaker of deionized water or for longer periods (overnight) in the protective sheath supplied, with a sponge in the bottom of the cap soaked in deionized water.

Before use, or after replacing a membrane, ensure that the probe has been given sufficient time to polarize, refer to the Instruction Manual for the probe for details.

Membrane replacement and electrolyte replenishment/replacement is recommended if reading become sluggish or the electrode does not respond.

Cleaning: In normal use it should only be necessary to rinse the probe in deionized water between each determination, however when using the electrode in liquors, sludges, or polymers, etc., a coating may be deposited on the membrane causing slow response or drifting. This can be reduced by rinsing in deionized water. In such samples more frequent membrane replacement may be required.

When replacing membranes ensure that no air bubbles are trapped in the KCl (electrolyte) fill solution, and check visually to see that the membrane is not damaged or creased when screwed on.

If after some time the electrode response becomes sluggish or eratic even with a new membrane, it may be necessary to clean the cathode and anode to restore normal operation. To do this, remove the membrane assembly and discard it. Lay a very fine abrasive material (crocus paper) on a perfecly flat and smooth surface, hold the electrode vertically on the abrasive and make small circles to polish the surface of the (gold) cathode. Silver (anode) may be cleaned with a tooth brush dipped in a dilute ammonia solution. Rinse thoroughly with deionized water and reassemble with a new membrane (and electrolyte if required).

Dissolved Oxygen Operation: Due to the large inner metal electrodes and the huge volume of electrolyte the sensor has very long service intervals. The sensor stays operational for many months up to one year.