



Oxidation Ditch Type Treatment Process

Industry: Water/Wastewater
Product: Dissolved Oxygen

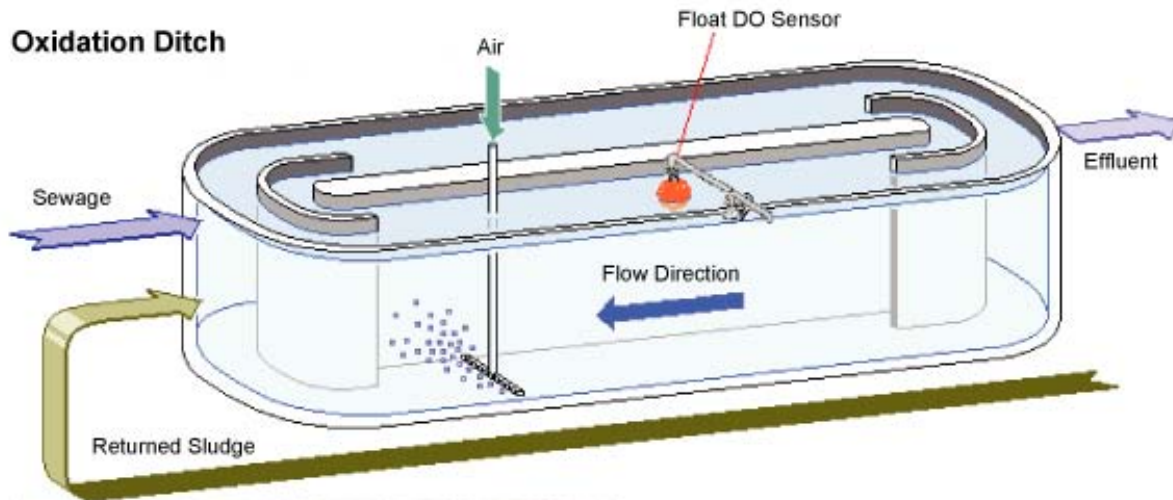
Introduction

The detectors used to perform dissolved oxygen (DO) measurement in oxidation ditch type sewage treatment plants tend to become dirty quickly and require frequent cleaning. It has been difficult to remedy this problem inexpensively. One solution that significantly reduces the sensor maintenance workload is the use of float holders. A field test using float holders on the detectors in the DO402 dissolved oxygen analyzer system has demonstrated that the sensors could be kept free of heavy dirt accumulation, eliminating the need for maintenance and enabling continuous measurement for long periods of time.

Application

An oxidation ditch is a large circular basin equipped with aerators that is used to remove organic matter and pollutants from sewage through the processes of adsorption, oxidation, and decomposition.

- * Ensures stable, continuous dissolved oxygen measurement
- * Reduces operating costs
- * Eliminates the need for manual cleaning



The sensor head is free from dirt even through a large amount of dirt floats on the surface of the sewage.



Angled Float Holder

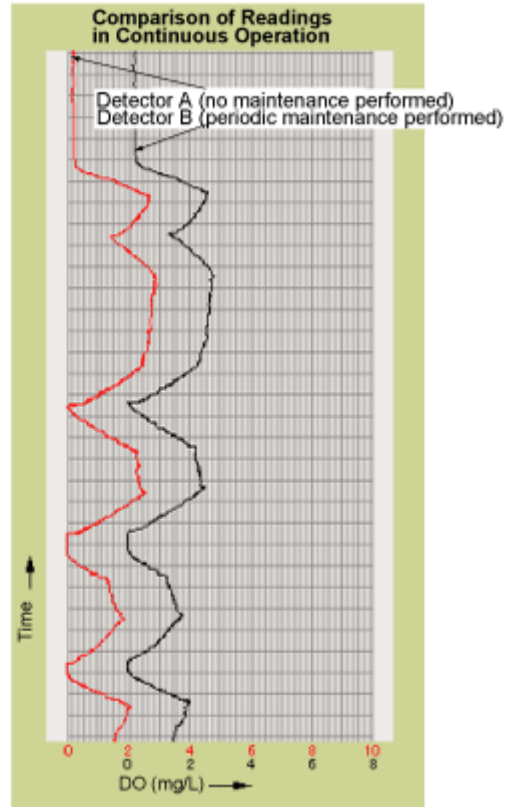
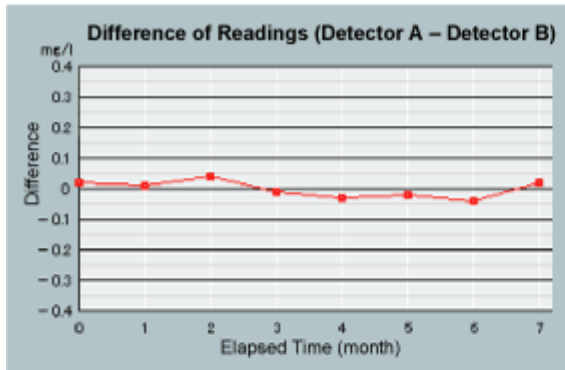


Product Recommendations

Detector: DO30
 Float holders: FD30
 PB30
 Converter: DO202
 DO402



Field Data



For the field test, two detectors were mounted in PB350G angled float holders. One sensor received no maintenance and the other was cleaned every two weeks and calibrated once a month. This test showed that the readings from the two sensors were nearly identical over a six month period.

Notes:

* For more information contact your local Yokogawa Analytical Marketing Department.