

Oxygen Flow Controller - Automated (OFC)

The OFC provides automated oxygen flow control to maintain a user-set dissolved oxygen level in an aeration basin.

Dissolved oxygen concentration measurements are taken using a luminescent dissolved oxygen sensor. This high tech sensor is unaffected by pH, hydrogen sulfide, heavy metals, wastewater chemicals, and organic buildup. Periodic wiping of the sensor face is all that is required for accurate operation. Frequent calibration is not required. The dissolved oxygen level is transmitted to the process controller which compares the current dissolved oxygen level to a user preset level, and adjusts the output signal to the proportional flow control regulator. This regulator controls the flow of pure oxygen to the aerator in the aeration basin, thus adjusting the dissolved oxygen level to the set point. An inline flow meter can be used to monitor the oxygen usage rate.



Standard Features:

- In Tank Diffuser (If needed)
- Dissolved Oxygen probe
- SC-100 Oxygen Controller
- Oxygen cleaned Regulator and Flow meter

In Tank Diffuser



O₂ Controller



D.O. Probe



Specifications:

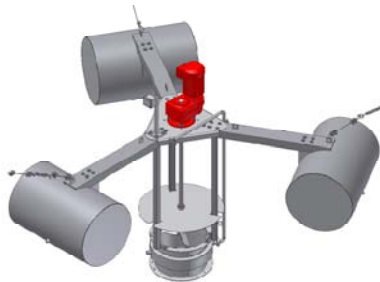
- Unit and all components cleaned for oxygen service per CGA-4.1.
- Bronze/Brass/Aluminum/Stainless, components
- Type 304 Stainless Steel pipe
- Strut framework allows variable height installation of flow control piping
- Frame can be customized according to specific needs.
- Dissolved oxygen sensor is luminescent, non-flowing and stable.
- Digital sensor allows long-placing dissolved oxygen sensor up to 1,000' from controller
- Nema 4X fiberglass enclosure with polycarbonate and stainless window kit.
- Oxygen process controller protected behind a polycarbonate window, extending life of controller
- Proportional oxygen flow control based on operator set
- Oxygen flow is controlled through built in PID or Linier control loops
- Manual override with direct proportional flow control
- Multi pressure variable area oxygen flow meter. Multiple flow rates available (see below)
- Indexed flow control valve for controlling maximum flow and span.
- Built in electronic data logger.
- Data can be retrieved wirelessly using infrared communication through window.
- Two separate inputs and outputs.
- Can be used for pH measurement along with dissolved oxygen levels, or to independently control the flow to two separate aerators from the same controller.
- 110 VAC 2 amp service required
- Flow ranges: 3-25 CFM, 10-100 CFM, or 25-250 CFM



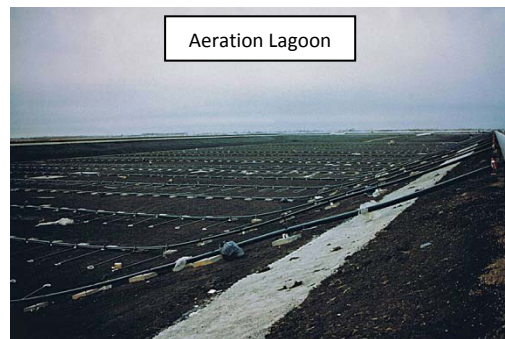
Typical Applications:

- Biological wastewater systems (Municipal and Industrial)
 - Diffusers in lagoons
 - Aerators in tanks
 - RAS (transferring “bugs” throughout treatment facility)
- Custom wastewater treatment equipment:
 - Downdraft Oxygenator (D.D.O.)
 - Self Aspirating Aerator (S.A.A.)

D.D.O.



S.A.A.



Optional Features:

- Gas Diffuser Plate (RAS)
- pH probe
- additional diffusers and probes
- Stainless Steel Frame
- Chart recorder
- RS238 or 484 transmitter (transfer data via infrared to external computer)



Gas Diffuser Plate

Gas Diffuser Plate:

- Used for RAS or any inline aeration
- State of the art engineering
- Spectacular results
- Available in many sizes and materials

Chart Recorder:

- Track your D.O. levels or pH
- Ensure pH compliance
- Charts available with a variety of increments
- Hardcopy Data Logger

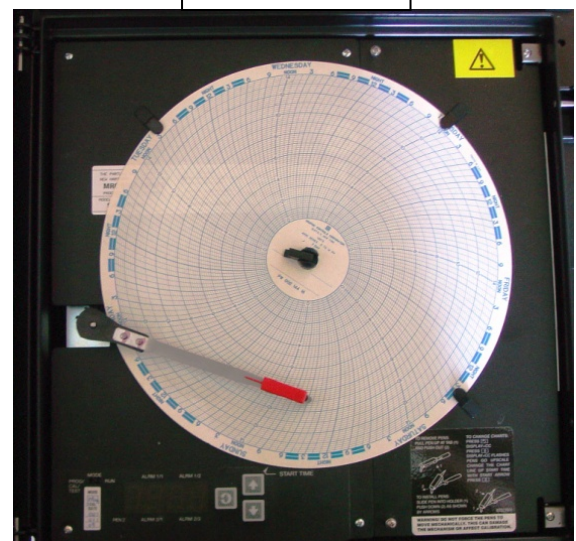


Chart Recorder