

Keeping Sensors Clean Automatically

EquipSolutions' Autoflush is an automatic cleaning system that can be added to dirty process water streams where fouling may occur. The Autoflush can be used with EquipSolutions' pH, ORP, free chlorine, total chlorine, ozone, chlorine dioxide, peracetic acid or hydrogen peroxide sensors (or a combination of sensors) and consists of a large flow cell that automatically empties on a user selectable time basis. Autoflush units are successfully installed in paper mills, food & beverage facilities, and other plants where keeping the sensors clean enhances sensor performance.

- Frequent flushing prevents build-up of solids
- Reduced maintenance
- Prolonged sensor life
- pH / ORP / Cl₂ / O₃ / ClO₂ / H₂O₂ / C₂H₄O₃
- User selectable flush duration
- User selectable flush frequency
- "Flush Now" facility
- Simple, infrequent maintenance

Principle of Operation

The idea is simple and effective . . . the user selects the interval and duration for sample cleaning. The sample drains away and the sensor and sensor housing are flushed with clean water. This water flushes the whole of the inside of the sensor housing taking away any buildup of solids to drain. The repeated flushing of the housing and sensor helps prevent the buildup of solids and prolongs the life of the sensor and reduces the maintenance. For waxy or fatty buildups, warm water can be used to flush the sensors. Optionally, heavy duty pinch valves ensure reduced maintenance over a long life even in applications containing fiber.

There are different versions available depending on the water quality of the application. The Standard Autoflush utilizes a large bore solenoid whereas the 'fiber' version utilizes pinch valves that are not affected by fibers in the sample. Each Autoflush system can accommodate up to two sensors.



Process Autoflush

Process Autoflush was designed for online batch processes that are turned on and off. Sensors are flushed at predetermined times that can be set during commissioning, the Process Autoflush takes a signal from the process that tells the Autoflush if the process is running or not. If the process is not running then the system will automatically go into a holding pattern where the sensor is held in flush water and flushed until the process restarts. This allows the membranes to remain wet and clean ready to control the process when it restarts.

Standard Autoflush

Standard Autoflush was designed for an online process that is running continuously, the sensors are flushed at predetermined times that can be set during commissioning.

Applications

The Autoflush is suitable for a number of applications including paper & paper mills, slurries, scrubbers, food & beverage disinfection, wastewater, food pasteurizers and prechlorination.