

pH Box: pH Adjustment Systems

The pH Box system is a flexible design system that monitors and maintains a pH set point on a continuous basis from a wide variety of industrial, municipal and construction waste streams provided mounted in a secure treatment building or containerized housing to fit the installation.

The pH Box systems can be provided in a singular reaction tank design or multiple, parallel reactors to allow expansion or contraction of the flow rate based on site conditions.

The typical wastewater pH range for treatment is from 4-11. Effluent from the pH system is usually in the 6-9 pH range per most local POTW discharge limits.

The pH neutralization system configuration includes:

- HDPE, polypropylene, 304/316 SS tankage
- Full cover with vapor gasket and inspection hatch
- Mixer with TEFC motor
- 316 SS impeller shaft and axial flow impeller(s)
- Chemical metering pump(s)
- pH probe(s) with quick release assembly
- NEMA 4X control panel
- Unitronics Unistream PLC/HMI controls
- Intell-i-Touch control platform
- 115V/1pH/50/60Hz and 230/460V/3pH/50/60 Hz power

Systems are configurable to meet the standard continuous neutralization mode or optional manual and semi-automatic batch modes.

Options:

- Data logging
- Effluent verification tank and diversion valve
- AB or other PLC system
- Explosion proof design class 1 div 1 or 2
- Feed/effluent pumps
- Alternate tank construction: FRP, polypropylene, coated steel, 304/316 stainless steel.

