



Direct CO₂ Gas Injection

The direct gas injection method of pH control is the traditional method for most water plants. The CO₂ gas is injected through a very fine bubble diffusion assembly which is located in a basin with a minimum water depth of 10 feet (3.05 m). Through a series of baffles in the basin, the CO₂ bubbles are kept in submergence as long as possible.

The use of a mechanical mixer located over a CO₂ diffusion system is another choice for the addition of CO₂ gas.

The recarbonation basin should be designed to allow for maximum CO₂ gas efficiency and accurate pH control.

The direct CO₂ gas feed pH control system is available in the following control configurations:

1. **Manual pH Control.** The CO₂ gas injection is controlled by a manual valve.
2. **Automatic pH Control.** The CO₂ gas injection is controlled by a backfeed pH signal.
3. **CO₂ Flow Paced Control.** The CO₂ gas injected based on a predetermined CO₂ per gallon requirement.
4. **Water Flow Paced Control.** Not recommended.

MODELS AVAILABLE

1. **Direct CO₂ Gas Injection**
2. **Pressurized Solution Feed (PSF)**

