

FACT SHEET

AUTO CHEMICAL DOSING

METHODS

Automatic dosing, of chlorine in particular, can basically be achieved by either of the following two methods. Erosion tablet or stick feeders, and electronically controlled liquid chlorine feeders. The latter may use either peristaltic or diaphragm pumps, or suction solenoids to control the injection of chlorine.

EROSION FEEDERS

Erosion feeders in their simplest form are a floating canister, which is usually a cone shaped plastic container, with large numbers of holes in the body. They will normally have a screw on, or clip on lid to allow chlorine or bromine tablets to be placed into the body of the container.

When the container (feeder) is placed onto the pool or spa, water enters through all the holes, slowly eroding the tablets, and depositing chlorine or bromine into the water.

The type and number of tablets that are used will also determine how often they will need to be refilled. There is little or no control over the rate at which the tablets dissolve.

There are however, more sophisticated erosion feeders. These products usually consist of a moulded canister designed to hold either chlorine tablets or bromine sticks, and are mounted in the return to pool line. They are usually fitted with barrel unions at aid installation.

Most commonly they will be fitted with some type of adjustment, to regulate water flow through the canister. This controls the rate of erosion of the tablets or sticks, and thereby the amount of chlorine/bromine in the pool. Some erosion feeders are fitted with electrically operated solenoids and can be controlled electronically.

ELECTRONIC CONTROLLED FEEDERS

Electronically controlled feeders utilise either small peristaltic or diaphragm pumps, or suction solenoids to feed liquid chlorine or hydrochloric acid from a storage drum, into the pool.

The most basic of these feeders can be adjusted to add small amounts of the desired chemical to the pool at regular intervals. They may also be coupled with time clocks to operate only at specific times.

More sophisticated versions may include probes to sense and control chlorine levels in the pool and automatically adjust the amount of chlorine being added to the water.

Some units also incorporate a probe to test and control the pH of the water. These units incorporate a second pump to automatically add acid.

Top of the range models may include many extra items, such as digital readouts, warning lights and/or buzzers to indicate low chlorine levels, transformers for lights, time clocks, and some even provide printed data sheets to record the unit's operation.

No matter which unit you choose, remember that liquid chlorine loses its effectiveness the longer it is stored. Make sure the storage drum has a properly fitting lid, and the size of the drum allows for reasonably short turnover times, say 30 to 60 days.

It should be pointed out that any of these feeder pumps should only operate when the filtration pump is running.

If the chemical doser is to be used in conjunction with a gas heater, it is important that the injection point be located downstream of the heater in accordance with AS 5601.

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Always follow the manufacturer's instruction when installing your automatic chemical feeder, or have it installed by a SPASA WA accredited technician.

Remember that while these systems are automated, maintenance and checking of water quality parameters is still required.

WARNING!

NEVER MIX CHEMICALS - EVEN DIFFERENT TYPES OF CHLORINE SHOULD NEVER BE MIXED.

STORE CHEMICALS AWAY FROM DIRECT SUNLIGHT AND PETROLEUM BASED PRODUCTS.

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