

FACT SHEET No. 17

AUTOMATIC 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 into the pool or spa, water enters through all the holes, slowly eroding the tablets, and depositing chlorine or bromine into the water.

The size and shape of the containers can vary. This will dictate the size and number of tablets that can be used, and 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 to 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.

NOTE: NEVER MIX DIFFERENT TYPES OF CHLORINE IN EROSION FEEDERS

ELECTRONICALLY CONTROLLED FEEDERS

Electronically controlled feeders utilise either small peristaltic or diaphragm pumps, or suction solenoids to feed liquid chlorine, bromine 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 or bromine levels in the pool and automatically adjust the amount of chlorine or bromine being added to the water.

Some units also incorporate a probe to test and control the pH level of the pool. 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 units operation.

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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 the Gas Installation Code, AG 601.

Always follow the manufacturers instructions when installing your automatic chemical feeder, or have it installed by a SPASA accredited technician.

WARNING!

NEVER MIX CHEMICALS. EVEN DIFFERENT TYPES OF CHLORINE SHOULD NOT BE MIXED. STORE CHEMICALS AWAY FROM DIRECT SUNLIGHT AND PETROLEUM BASED PRODUCTS. HANDLE CHEMICALS WITH CARE AND WEAR PROTECTIVE CLOTHING.

For more information on sanitising and maintenance of your pool or spa see the following;

- Fact Sheet No.1 Water Balance
- Fact Sheet No.4 Sanitising The Pool
- Fact Sheet No.8 Ozone
- Fact Sheet No.9 Ionisers
- Fact Sheet No.10 Spa Pool Maintenance
- Fact Sheet No.12 Salt Chlorinators

For further information on building, renovating or maintaining a pool, contact;

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