

Chemical Feeders

Swimming pool chemical feeders are devices used to precisely control the amount of chlorine, bromine or pH control chemical dispensed into the pool. Both inground and above ground pools benefit from consistent chemical levels; automatic chlorinators and pH chemical feeders help pool owners avoid peaks and valleys in sanitation and pH control.

Depending on the pool chemical that you wish to use, there are a variety of chemical feeders used; tablet feeders, liquid feeders, and granular feeders.

Chlorine & Bromine Tablet Feeders

3" chlorine tablets or sticks are made to slowly dissolve, and were designed to be used in tablet feeders, not in the pool skimmer, which can damage pipes and pool equipment. When the pump shuts off for several hours, tablets in the skimmer continue to leach, filling the skimmer and pipes with highly chlorinated water. This spills over the wall of the skimmer, staining plaster and puckering vinyl over time. When the pump turns on, the caustic water is sucked through the system, and can damage pump and valve seals, filter elements and pool heater exchangers.

Bromine tablets can be used in most automatic chlorine feeders and floaters mentioned below, but only if the feeder has never been used for chlorine tablets. Never mix chlorine and bromine, and never add a granular chlorine product to a tablet feeder. Hayward has an automatic brominator, model [CL220BR](#), with greater flow, optimized for use with bromine tabs.

Floating Chlorinators: An inexpensive option to using the skimmer as a chlorine feeder, a floating chlorinator can be used in any pool by simply filling it with chlorine or bromine tablets and adjusting the openings to allow the pool water to flow through the tablet chamber. Pool chlorine floaters are easy to buy and easy to use, but they do need to be monitored so they don't spill their contents, or come to rest on a step or ladder. Floating chlorinators should be removed from the pool during use, and if used as a winter pool floater, tied off so they remain in the center of the pool.

The standard blue & white [floating chlorinators](#) are available in 3 sizes, and in 2 styles that pop-up or flip over when the tablets or sticks have depleted, to give you a visual cue to refill the floater. Also available are large pool tablet floaters with fun and colorful tops in the form of water loving animals, such as ducks, alligators and sharks.

In-Line Automatic Chlorinators: Plumbed into a horizontal return line pipe near the ground, and after the filter and any heater, in-line pool chlorinators are available to match any pool size. In-line chlorinators tend to have fewer problems, because they have fewer parts, than their off-

line cousins, below. But not every pool plumbing arrangement has a good location or enough space on the pipe for installing an in-line chlorinator.

Hayward CL-200 In-line chlorinators require 10" of clear pipe for installation, Sani-King 920 feeders need 8" of clearance, and the slender cylinder of the in-line Pentair 320 needs 5" of space on the pipe for installation. In-Line chlorinators must be installed last on the line, after the filter and heater, on a horizontal return pipe, near ground level. Installing a chlorinator before the filter, or at the same level as a gas heater could cause damage to your equipment. Check valves can be installed between an in-line tablet feeder and other equipment to help avoid problems with chlorine gas or liquid backing up while the pump is not running.

Above ground pools using in-line automatic chlorinators can use threaded hose adapters to connect to flexible hose, or when plumbing with hard PVC, unions or threaded pipe adapters can be used.

Hayward Automatic Chlorinators are the standard pool tablet feeder, the model [CL-200](#) holds up to 9 lbs of tablets for pools up to 40,000 gallons. Other popular In-Line automatic chlorinators include the Sani-King [Perform-Max](#) 920 In-Line chemical feeder, which holds 7 lbs of tablets, and the Pentair Rainbow [Model 320](#), which holds 5 lbs of 3" chlorine tablets.

Another style of in-line automatic chlorinator worth mention combines mineral sanitation with chlorination. The patented Pool Frog system has a Mineral Reservoir and a chlorine cartridge, called the Bac Pac, that nest neatly inside of the 8" wide Cyclor, Model 6100. The [Pool Frog](#) system of low chlorine + copper and silver minerals, in one feeder, is unique and easy to use, and is the only chlorinator with chlorine cartridges, so you never have to touch or breathe chlorine.

Off-Line Automatic Chlorinators: Where no room exists to plumb an in-line chlorinator in place properly or conveniently, [Off-Line Automatic Chlorinators](#) are installed easily. Two hose sections are used; one hose is attached after the pump to bring water into the feeder, and another hose injects chlorinated water directly into the return pipe, after the filter and any other equipment. The feeder base should be screwed into the concrete, or into a long board, to hold it steady when removing the feeder lid or cap.

Off-line chlorine feeders allow you to situate the chlorinator in the most accessible location, and inject the chlorine directly into the pipe, well after any other equipment on the line. The only drawback to off-line chlorinators is that the tiny injection fittings and check valves can become clogged, and the hoses deteriorate in the sun over time. A new hose and fitting pack may be needed every 3-5 years.

The Hayward 9 lb capacity [CL-220](#) is the standard, and the first off-line pool chlorinator, soon followed by a smaller 4.2 lb [CL110ABG](#), for above ground pools and spas. Other popular off-line pool chlorinators include the Pentair Rainbow [Model 300](#), which comes in 3 sizes; 5 lb, 9 lb and

13 lb tablet capacity. For very large pools, Pentair also makes a line of High Capacity Off-Line feeders, the [HC3315](#) holds 15 lbs, and the [HC3330](#) holds 30 lbs of chlorine tablets.

Another style of off-line chlorine feeder worth mention uses Cal Hypo tablets, the [CCH feeder](#) holds 27 Calcium Hypochlorite CCH tablets in 4 refillable cartridges. Tablets are sprayed with water, and a venturi draws the chlorinated water out of the base, controlled by a dial valve. Cal Hypo feeders do not work with Trichlor tablets, but are an option for pools that have a problem with cyanuric acid build-up, from use of stabilized Trichlor. [CCH tablets](#) are a proprietary D shaped blue tablet, used only with the CCH feeder (also known as the Pulsar and PoolLife feeders). They contain anti-scale additives to help control the additional calcium that is added to the pool.

Liquid Pool Chemical Feeders

Liquid chlorine, or sodium hypochlorite is the most often used liquid pool chemical, pumped out of large vats with peristaltic chemical pumps, and injected directly into the return line. Muriatic acid can also be pumped directly into a return line, to lower pH and Alkalinity.

Rola-Chem and Blue-White are two manufacturers of chemical pumps, which are mounted on the wall or a shelf above the chemical [feed tanks](#). Two chemical resistant feed hoses are used, one to pull the chemical out of the feed tank (vat or drum), and the second to push the chemical into the return pipe. Chlorine pumps use a Tygon Pinch Tube, and for pumping acids, a Norprene Pinch Tube is used.

Chemical pumps of different sizes are available to match the chemical demand of the pool, from the small [RC252](#) model which pumps 1 gpd (gallons per day) up to the [RC503](#) model, capable of 77 gpd. A dial and 3-way switch on the front of the chemical pump allows further control, to set a delay on the pumping action. It runs continuously when the 3-way switch is set to ON, or when set to TIMER, you can control the amount of run-time during a 9-minute cycle by adjusting the dial.

Liquid Automation Systems: Taking liquid chemical pumping to another level, automation systems combine a digital ORP/pH controller with two chemical pumps, one for liquid chlorine and one for muriatic acid. Using a pH sensor and an ORP sensor, the controller is able to automatically add a precise amount of chlorine and pH/Alkalinity control. ORP (Oxidation Reduction Potential) also determines if the pool needs to be shocked, and if so, the system can do so automatically.

In addition to the complete liquid chemical [Digital Automation System](#) with ORP control, there is also a [pH/Alkalinity Automation System](#) with a single pump, pH probe and controller. Liquid chemical controllers are not typically installed on residential pools, but primarily on large public pools to monitor and meet required water standards.

Granular Pool Chemical Feeders

Granular pool products are generally meant to be broadcast over the pool surface, for control of pH, alkalinity, calcium hardness and cyanuric acid levels, or when shocking the pool.

The Jandy (Polaris/Watermatic) Dichlor Feeder is an exception however. Filled with granular [Dichlor](#), a concentrated and stabilized form of granular chlorine that is pH neutral, it's the one and only granular pool chemical feeder. The Dichlor chlorine is slowly dissolved and dispensed with the control of a dial valve.

Dichlor Automation Systems: Coupled with any of the numerous Polaris Watermatic ORP and/or pH Digital Controllers, the Jandy Dichlor feeder becomes an automation system, controlling oxidation, pH and alkalinity levels, automatically.