



IF3 Feeding System

Dry Calcium Hypochlorite For Food Safety & Industrial Applications



The
smarter
way
to
water
quality

PATENTED
SPRAY
TECHNOLOGY



DELIVERS
UNPARALLELED
CONSISTENT RESULTS





The IF3 Dry Calcium Hypochlorite Feeding System

The **IF3 Dry Calcium Hypochlorite Feeding System** features patented spray technology to prepare and automatically deliver a consistently accurate dose of liquid available chlorine for disinfection applications. Highly customizable and requiring only a minimal capital investment, the **IF3 system** is able to deliver up to 120 lbs. AvCl per day without the storage and handling issues associate with liquid bleach or chlorine gas. In addition, the **IF3 system** can be configured to feed through venturi or gravity installations. And, because the unit operates at normal atmospheric pressure, it is readily serviceable for refilling and cleaning while in operation. With a footprint of less than 20" in diameter, and no requirement for storage tanks or secondary containment, the **IF3 system** is the perfect answer for a variety of food safety and industrial applications.

Arch's calcium hypochlorite briquettes provide the chlorine source for the **IF3 feeder** and are available in two different formulations; **Constant Chlor® Plus** or **Dry Tec® FG**, depending on the required application.

FEATURES

- Multiple Installation Options
 - Venturi feed
 - Gravity feed
 - Controlled manually, by timer or by controller
- Unit constructed of high impact LLDPE; all wetted areas internal fittings and level controls constructed of suitable plastics or other non-metallic material
- Automatic solution tank refill
- Mechanical overflow-prevention valve
- Nested configuration makes it easy to disassemble for installation and maintenance
- Large 62 lb. capacity briquette hopper
- Optional: 3/4 HP booster pump for venturi feed installations



BENEFITS

- Cost effective
- Customizable, convenient and easy to use
- Effective alternative to gas and liquid hypochlorite
- Efficiencies in bulk storage and man hours
- Consistent and reliable chlorine solutions
- Operates at normal atmospheric pressure and is readily serviceable for refilling and cleaning while in operation
- Eliminates metering pump air locks due to off-gassing
- Eliminates transfer spills
- Delivers up to 120 lbs. AvCL per day
- Requires no storage tanks or secondary containment
- Minimizes man hours for maintenance and shut downs

Specifications

Inlet pressure (Range)	17-45 psi	Tubing	1/2" O.D. PE	Dry Chemical Capacity*
Outlet vacuum	5-29" Hg.	Chlorinator diameter	19"	62 lbs.
Operating Temperature	40-130°F	Chlorinator height	33"	Feed Rate*
Inlet flow	1.6-gpm	Chlorinator weight (full)	125 lbs.	1.0-120 lbs. of available
Outlet flow (Min)	1.7-gpm	Chlorinator weight (empty)	27 lbs.	chlorine per day.

*Constant Chlor® Plus or DryTec® FG Dry Chlorinator Briquettes (equivalent to 40 lbs. available chlorine per day). DryTec® FG Briquettes for use with food grade sanitation applications.

Patented Spray Technology

Patented Spray Technology + Constant Chlor® Plus Briquettes = Consistently Accurate Hypochlorite Solution

How it Works

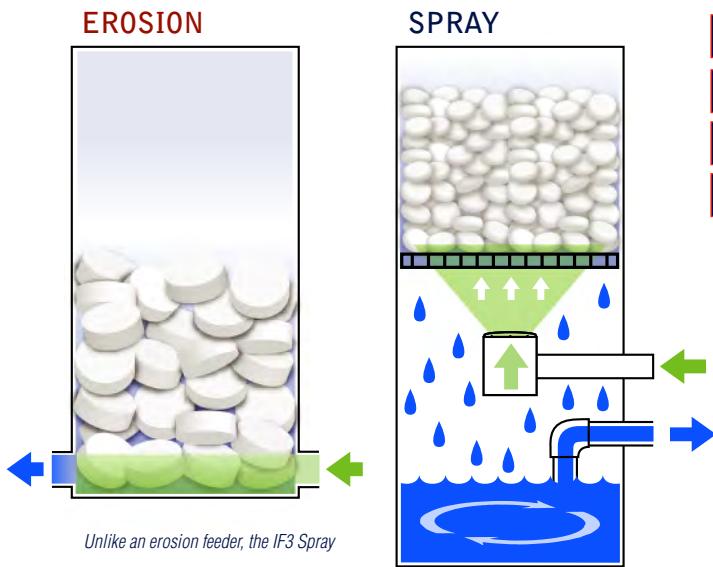
Supply water injected into the unit sprays upward into a bed of briquettes; this short intermittent spray cycle contacts the entire bottom of the bed evenly, not just the material resting on the grid.

Specifically designed for use in both the IF3 and Constant Chlor® Plus Spray Technology feed systems, the briquettes are relatively small, smooth and “pillow shaped”, for maintaining optimum packing in the spray bed.

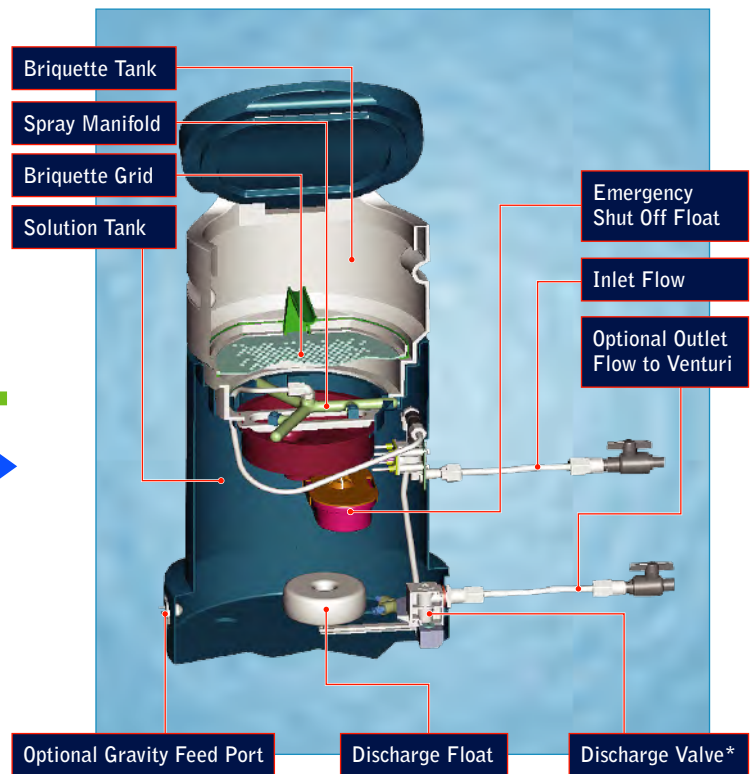
Maintaining a well-packed bed of briquettes significantly

reduces the potential for large voids in the spray surface that can result in inconsistent residual concentration in the final solution.

Hypochlorite solution produced by the unit’s short intermittent spray cycle is collected in a lower 7.5-gallon solution tank. The solution can then be fed by gravity or through a venturi system, depending on the application.



Unlike an erosion feeder, the IF3 Spray Technology feed system sprays upward to a well packed bed of briquettes, contacting the entire bottom of the bed evenly. The chlorinated solution flows to the lower reservoir where it is stored until needed in the disinfection application. Due to the consistency of the chemical solution concentration, operator dosage adjustment is minimal.



NOT AN EROSION FEEDER

The IF3 spray feed system is markedly different from erosion feeders currently on the market.

An erosion process dissolves material from the bottom of a tablet bed. The standard tablets, or “pill” shaped calcium hypochlorite media, are relatively large and have sharp edges, leaving large spaces or gaps, which can result in solution inconsistency and an uneven feed rate.

*valve is removed for gravity feed applications

Food Safety Applications

The **IF3 Feeder**, in combination with **Constant Chlor® Plus** or **Dry Tec® FG** calcium hypochlorite briquettes, is a versatile, effective and cost efficient tool for disinfecting and sanitizing both for the food industry and industrial applications.

Pre-Harvest Applications

- Sanitization of irrigation lines
- Well treatment
- Prevention and elimination of bio-fouling in irrigation emitters
- Impoundment treatment
- Seed treatment

Post-Harvest Applications

- Disinfection of process water
- Packing sanitization
- Post-harvest washing of:
 - Apples
 - Peaches
 - Citrus Fruits
 - Asparagus
 - Mushrooms
 - Melons
 - Bean sprouts
 - Nectarines
 - Pears
 - Carrots
 - Nuts
 - Peppers
 - Cherries
 - Potatoes
 - Tomatoes

Meat processing

- Poultry
- Red Meat



Industrial Applications

- Bottling Plant Process Water
- Algae Control
- Hot Pack Water
- Foam Control
- Chemical Scrubbing
- Reclaimed Water
- Super Chlorination

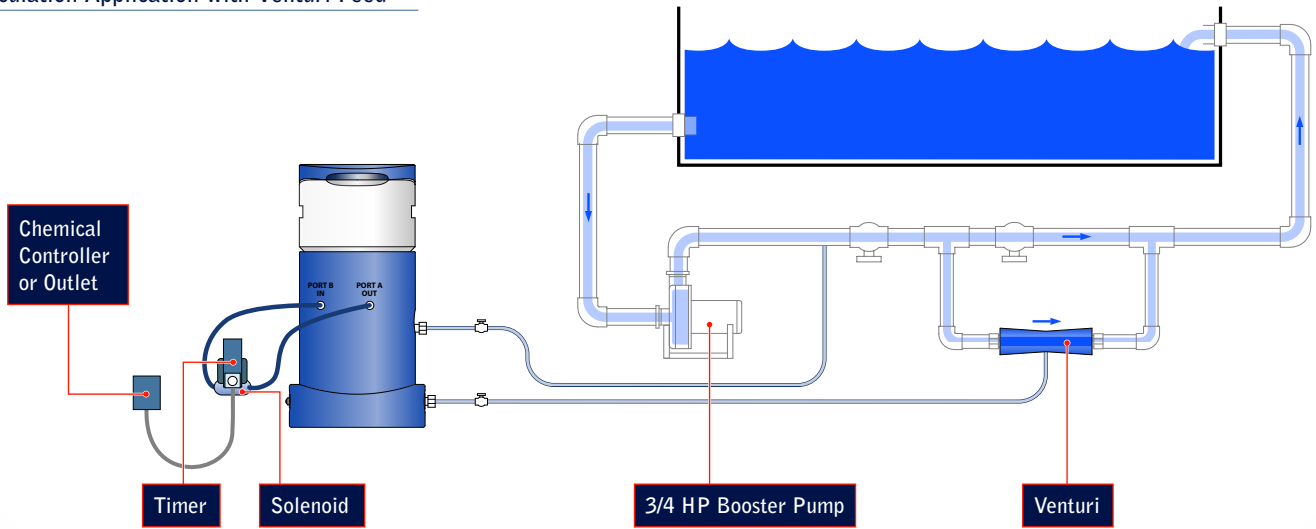


Installation Options

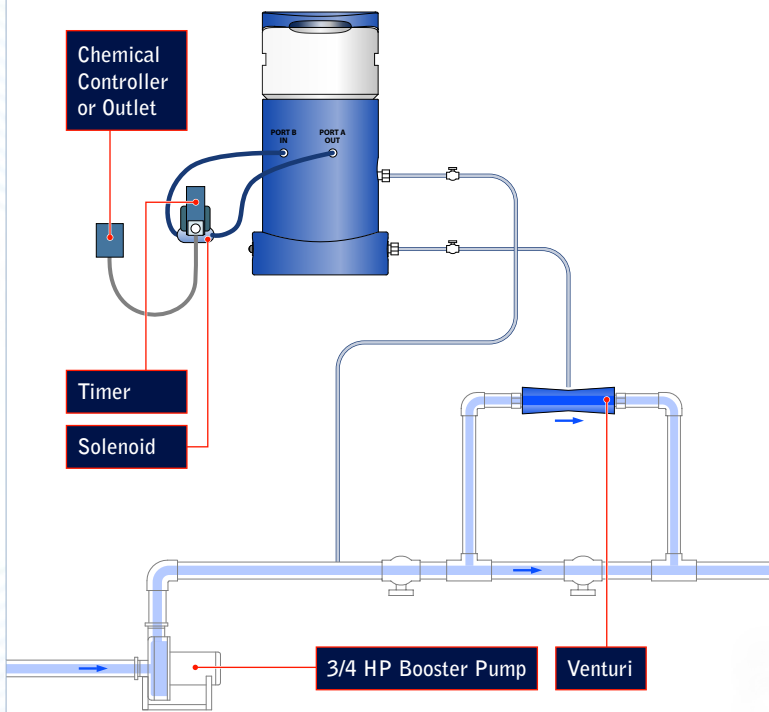
For All Installations it is critical to conduct an appropriate site assessment prior to installing the IF3 Feeder System, including determining:

- the effluent pressure of the system
- the physical location of the system
- the power source of the system
- the fill/tap water source and type of pH control

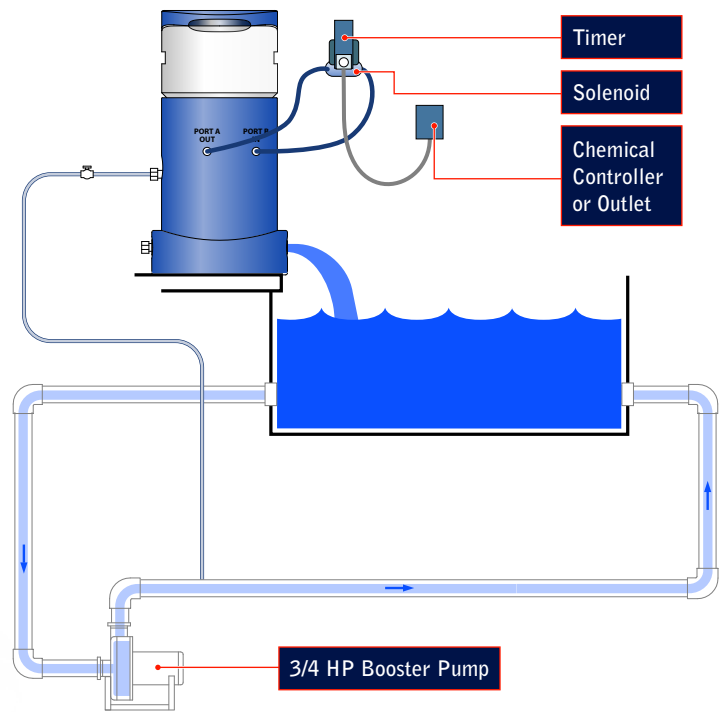
Recirculation Application with Venturi Feed



Open Loop Application with Venturi Feed



Gravity Feed Application



Product Stewardship



Arch is committed to maintaining and improving our leadership in Product Stewardship – from manufacture, marketing, distribution, use, recycling and disposal. Successful implementation includes educating all involved of their responsibilities to address society's interest in a healthy environment and in products that can be used safely. We are each responsible for providing a safe workplace, and all who use and handle products must follow safe and environmentally sound practices.

Constant Chlor® Plus Briquettes

Constant Chlor® Plus Briquettes are designed for use in both the IF3 and Constant Chlor® Plus Chlorinator. The briquettes provide chlorine solution for use in many applications including industrial process water, pre-harvest food safety and well treatment.

These patented, pillow-shaped briquettes contain a scale inhibitor designed to reduce maintenance and improve reliability of the feeder system.



FEATURES

- Dry Solid Product
 - Longer shelf life than liquid bleach
 - Occupies much less space than liquid bleach
 - Less hazardous than liquid bleach or gas chlorine
 - Easier to handle than liquid bleach or gas chlorine

SCALE INHIBITED

- Patented formulation
- Reduces maintenance of equipment

REGULATORY

- EPA No. 1258-1179
- NSF Standard 60, Drinking Water Additives
- Meets AWWA Standard B300

PROPERTIES

- Available Chlorine (wt%) 65% minimum
- Scale Inhibitor (wt%) 0.5%
- Weight 0.25 oz. (7 grams)
- Dimensions 1-1/4 in. X 3/4 in. X 1/2 in.
- Appearance Pillow Shaped Briquettes

PACKAGING

Constant Chlor® Plus Dry Chlorinator Briquettes are available in 50 lb. plastic pails



Arch also produces Dry Tec® FG Briquettes (Food Grade) for use with the IF3 and Constant Chlor® Plus feeder. Dry Tec® FG contains an anti scale formulation for food industry applications.

Distributed by:

Chemical Systems, Inc.

Industrial and Municipal Water Treatment
7950 Georgetown Road Suite 300
Indianapolis, IN 46268
Phone 317-870-0178 Fax 317-870-0179
<http://www.chemicalsystemsinc.com>



Arch Chemicals, Inc.

1955 Lake Park Drive
Suite 100
Smyrna, GA 30080
1-800-478-5727