

MixRite Water Driven Injectors Training



MixRite Installation Jordan Valley, Israel



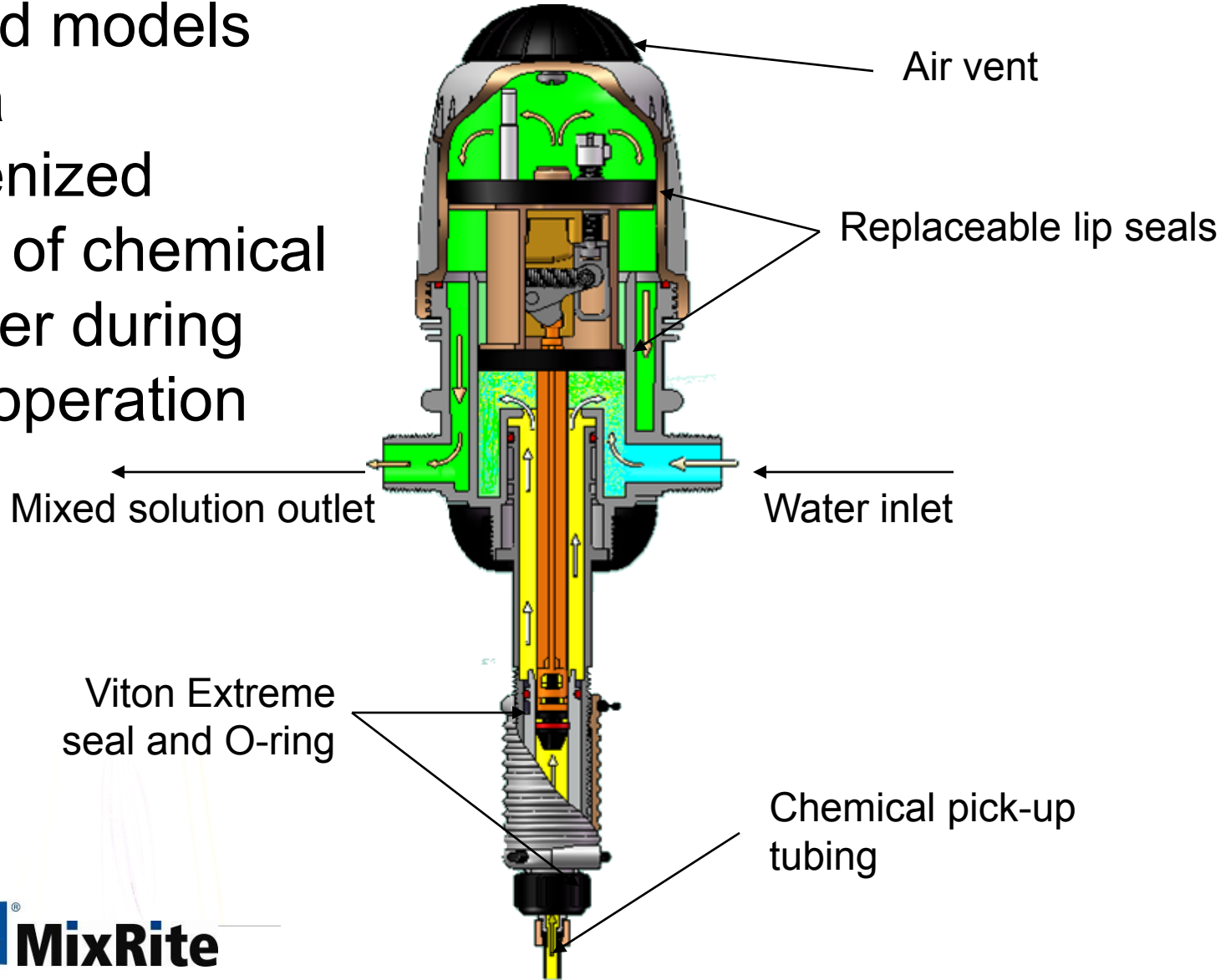
MixRite

Water Driven Injectors

- Operate without electricity using water pressure as the power source.
- Inject a proportional amount of fertilizer or additive into the water line regardless of pressure variations
- Maximum dilution variance is less than 10%
- Extremely low pressure loss compared to other systems
 - 2.5 / 500 Series, maximum loss 15 PSI
 - TF5, 10 and 25 – maximum loss 11.5 PSI
- 10 to 25% more flow than competitive models

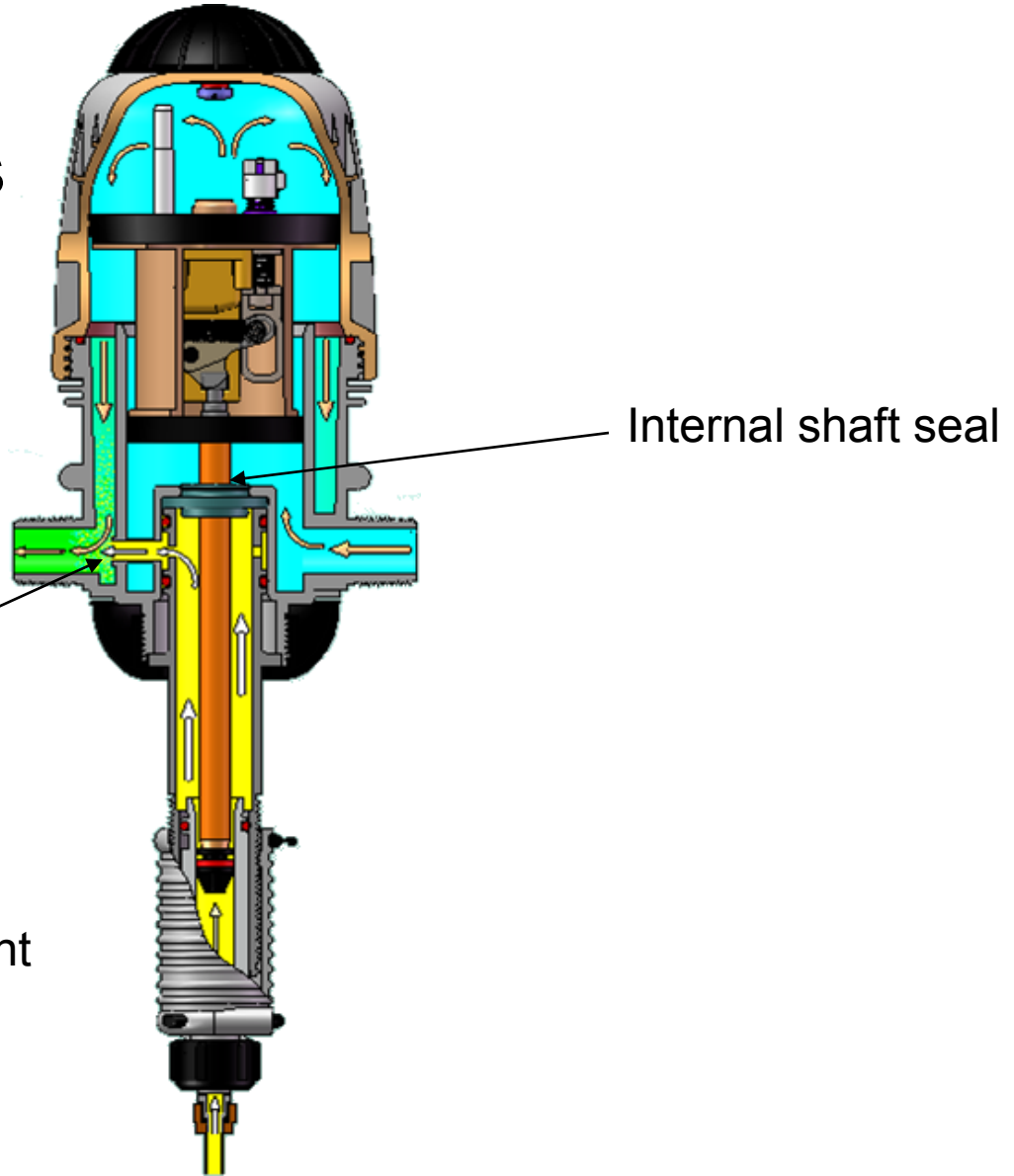
MixRite 500 Series

Standard models create a homogenized solution of chemical and water during normal operation



MixRite 500 Series Internal Bypass

Used for the most aggressive chemicals that attack springs, screws, o-rings and other vulnerable materials



Chemical injection point

Water and chemical are **not** a homogenized solution at this point

Additional Benefits & Selling Features

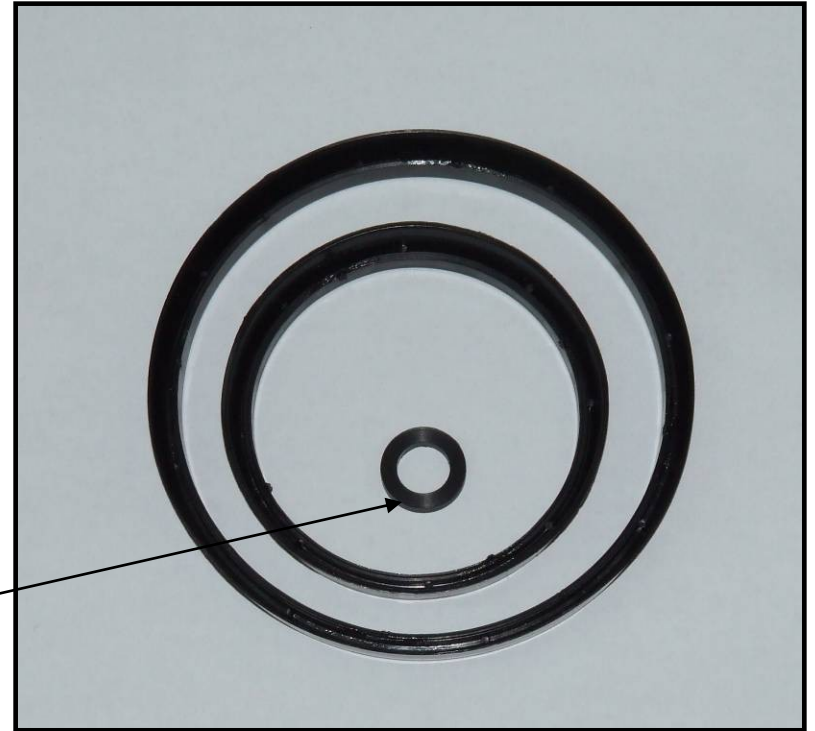
- Manual or electric ON/OFF available on all systems
- Internal bypass on the engine system
- PulseRite cycle counter
- Units manufactured and designed with components for high chemical resistance
 - PVDF models for sulfuric acid and other very aggressive chemicals
 - Purple sleeve models for chlorine and mild acids
 - Bypass units minimize chemical contact with pump components

Additional Benefits & Selling Features

- Durable body and cover made from Nylon12 reinforced with 30% Fiberglass
- Suction seal made from Viton Extreme rubber
- Engine lip seals made from Nylon12 + Teflon
- Hastelloy springs in suction check valve for special models
- Suction cylinder made from HDPE
- Built-in ribs in the suction cylinder avoids over-dosing damage
- Suction filter made from chemical resistant Polypropylene
- Bigger additive openings in the suction check valve

Lip Seal Kit





All units ship with a free lip seal kit and chemical piston seal



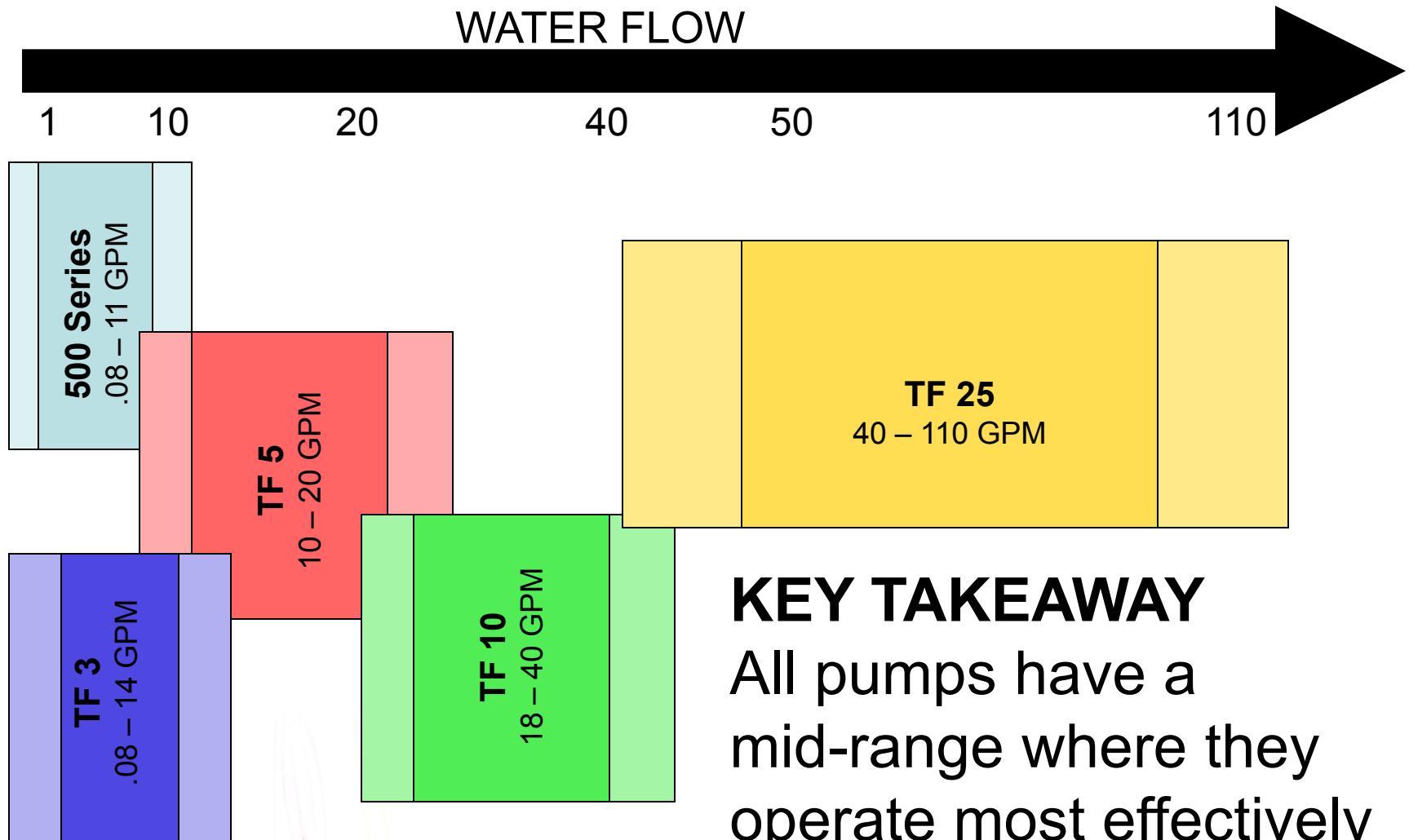
All you need to do to select a MixRite is answer three questions

1. What is the water flow and pressure through the system?
2. What percentage of chemical do you want?
3. Is the chemical corrosive?

MixRite Model Range

	Model	Chemical Injection Rate	Water Pressure	Water Flow
	2.5 / 500 Series & TF3	0.1 – 10%	3 – 120 PSI	0.08 – 14 GPM
	TF5	0.1 – 5%	15 – 120 PSI	0.9 – 22 GPM
	TF10	0.1 – 5%	15 – 120 PSI	2.2 – 44 GPM
	TF25	0.1 – 5%	15 – 120 PSI	2.2 – 44 GPM

Choosing the Rite MixRite



KEY TAKEAWAY

All pumps have a mid-range where they operate most effectively

MixRite 500 CW Series

- Delivers 2.5 cubic meters per hour or approx. 11 GPM
- Operates most efficiently at 1 to 10 GPM
- Has 3/4" thread connections
- Chemical injection rates
 - .1% to 1%, .3% to 2%, .4%
to 4% and 3% to 10%
- Special models for harsh chemicals



MixRite 500 CL Series

- CL models identified by purple sleeve
- Designed to withstand chlorine and mild acids
- All upper seals made from Viton Extreme
- Check Valve seals made from Aflas
- All Hastelloy Springs



MixRite 500 PVDF Series PVDF

- PVDF models have white body
- Designed to eliminate potential chemical attack of body from sulfuric acid
- All upper seals made from Viton Extreme
- Check Valve seals made from Aflas
- All Hastelloy Springs and PVDF components



MixRite 3 14 Series Units

- Capacity up to 16 GPM, ¾" thread connections
- Increased Chemical Compatibility
 - Aflas O-rings through unit
 - Hastalloy and plastic engine springs for improved chemical compatibility
- Easy to read chemical adjustment sleeve
- Models:
 - 14.CW.05 – 1-5% injection
 - 1410A/M – 1-10% injection
 - 1402A/M - .2-2% injection (available 2014)



MixRite TF3

- New product introduced at Irrigation Association Show Dec, 2009
- Developed from customer request for the greenhouse market
 - Used extensively in landscaping
- Identical to 2.5 models except with 1" pipe threads
 - Most greenhouses have 1" piping and want added water flow



MixRite TF 5

- Delivers 5 cubic meters per hour or approx. 22 GPM
- Operates most efficiently at 10 to 20 GPM
- Has 1" thread connections
- Chemical injection rates
 - .1% to 1%, .2% to 2%, and 1% to 5%

TF 1% units available with updated seals for use with harsher chemicals



MixRite TF 10

- Delivers 10 cubic meters per hour or approx. 45 GPM
- Operates most efficiently at 18 to 40 GPM
- Has 1.5" thread connections
- Chemical injection rates
 - .1% to 1%, .2% to 2%, and 1% to 5%

TF 1% units available with updated seals for use with harsher chemicals



MixRite TF 25

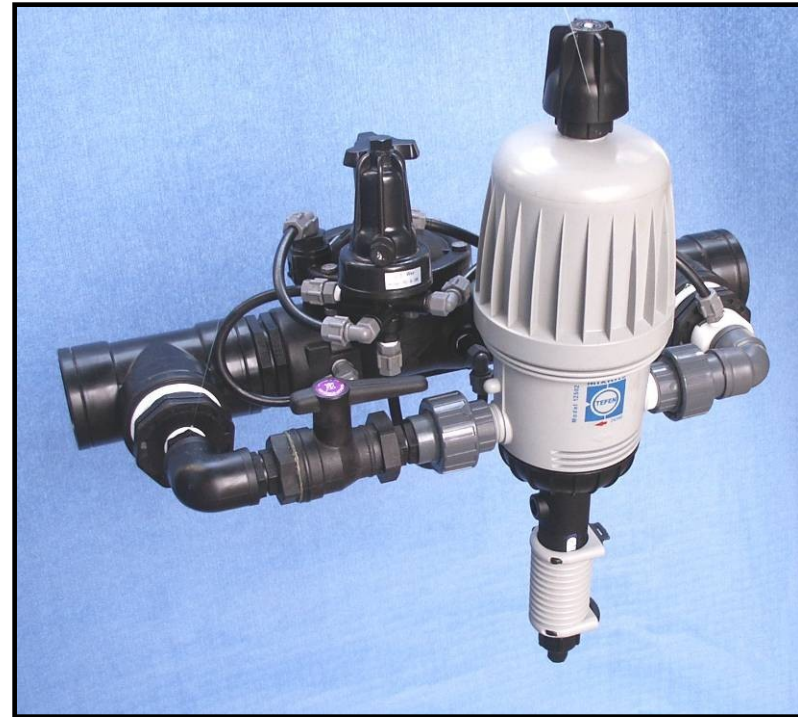
- Delivers 25 cubic meters per hour or approx. 110 GPM
- Operates most efficiently at 40 to 110 GPM
- Has 2" thread connections
- Chemical injection rates
 - .1% to 1%, .3% to 2.5%, and 1% to 5.5%

TF 1% units available with updated seals for use with harsher chemicals



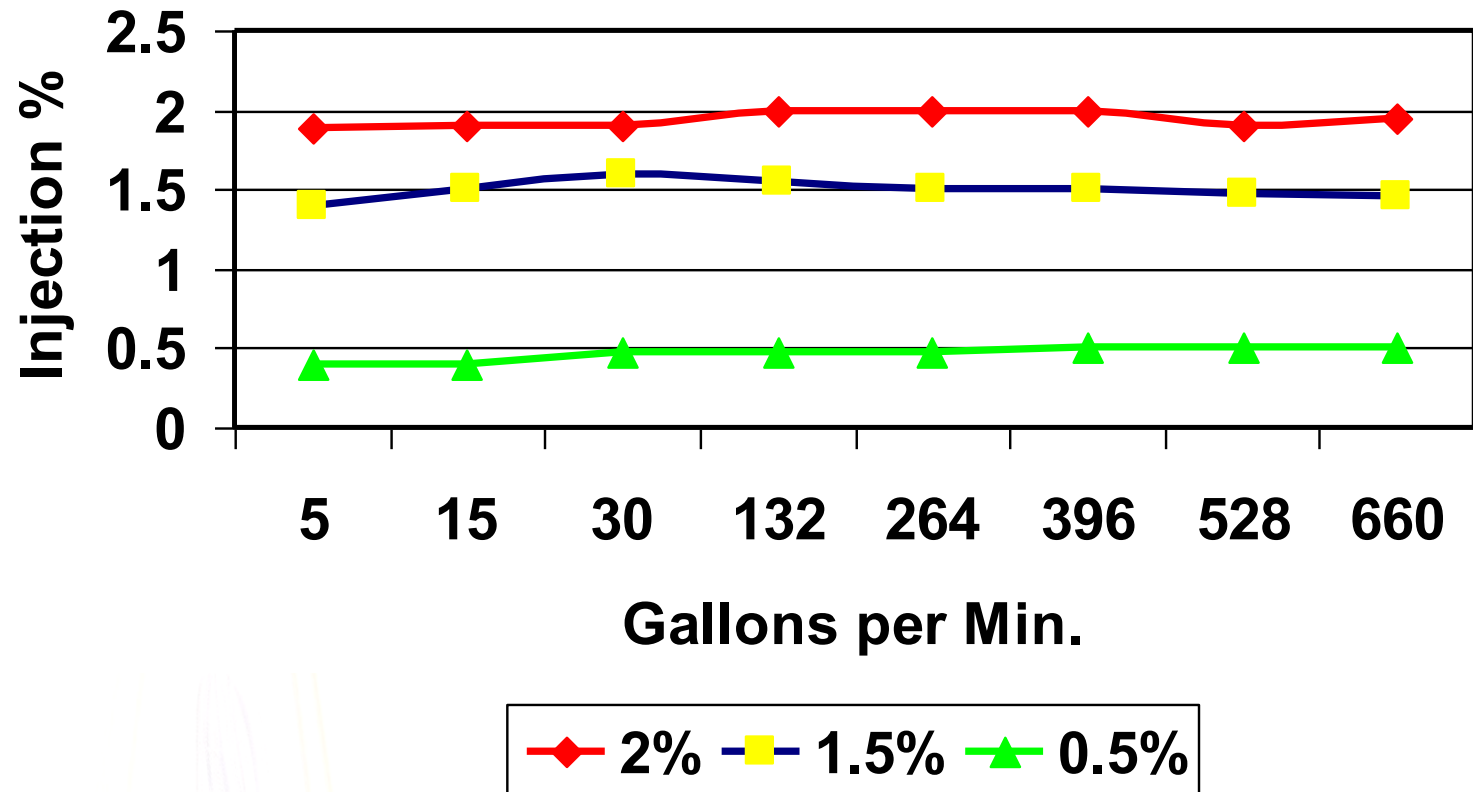
MixRite AgroRite

- Water treatment unit designed for aggressive additives
 - For acid **or** chlorine **or** hydrogen peroxide
- Delivers 25 cubic meters per hour or approx. 110 GPM
- Operates with minimum flow of 23 GPM and maximum 110 GPM
- Has 2" thread connections
- Chemical injection rates
 - .1% to 1%, .3% to 2%, .4%
to 4%, and 3% to 10%



Injection % Across Varying Water Flow

570 / 571 Injection Rates



Comparison To Other Injector Types

	Electric Req.	Price	Operation	Accuracy	Installation	Comments
MixRite	No	Moderate	Simple	Good	Simple	Proportional
Non-proportional Hydraulic Injectors	No	Moderate	Simple	Poor	Medium	Water is wasted
Venturi	No	Low	Simple	Poor	Simple	High pressure loss
Venturi + Electronic Controller	Yes	High	Difficult to operate	Good	Difficult	Expensive

Competitive Review

**Compared to Dosatron and
Dosamatic, MixRite's are**

- Easier to maintain & operate
- Better chemical resistance
- Better U.V resistance
- Better value for the price
- Lower spare parts pricing

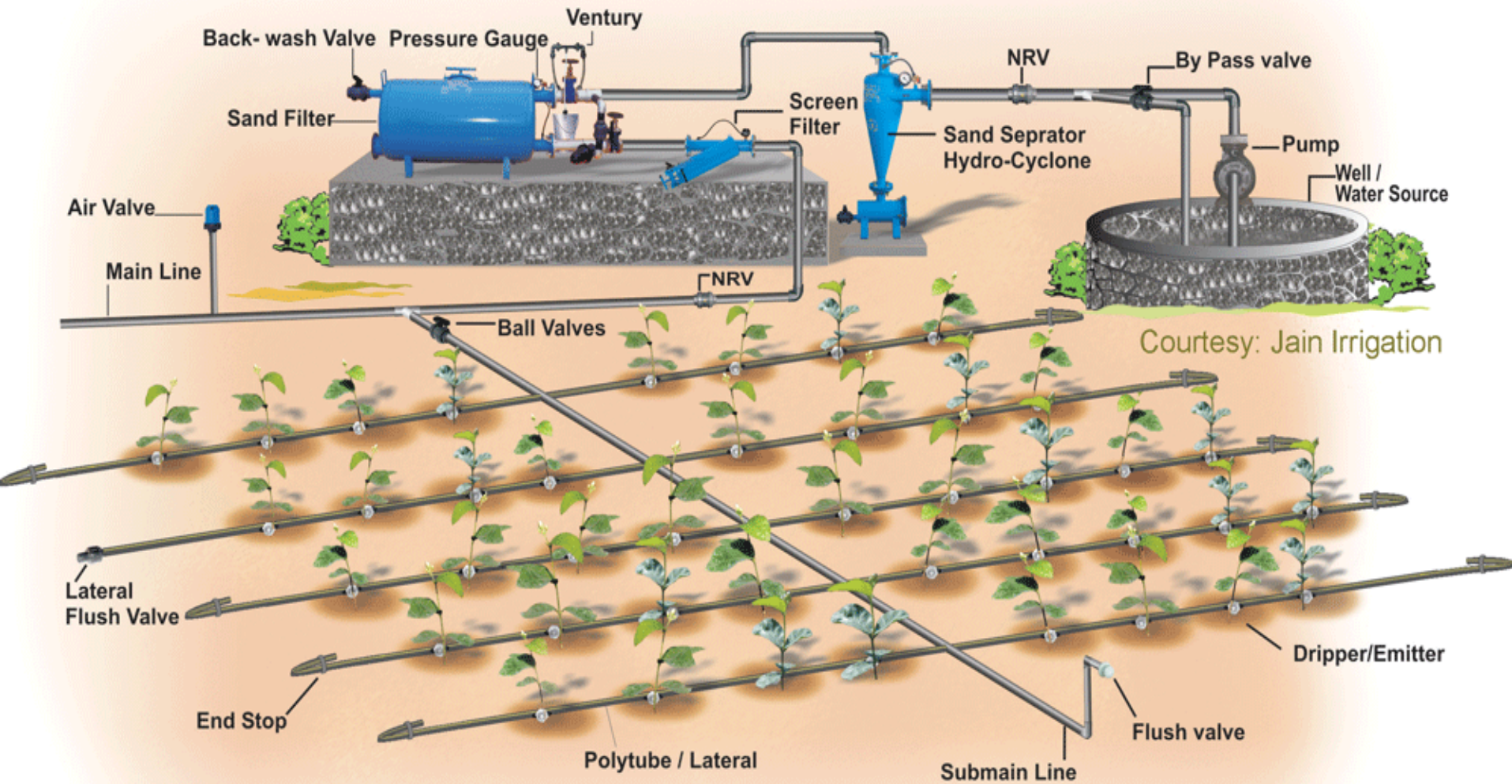


Installations

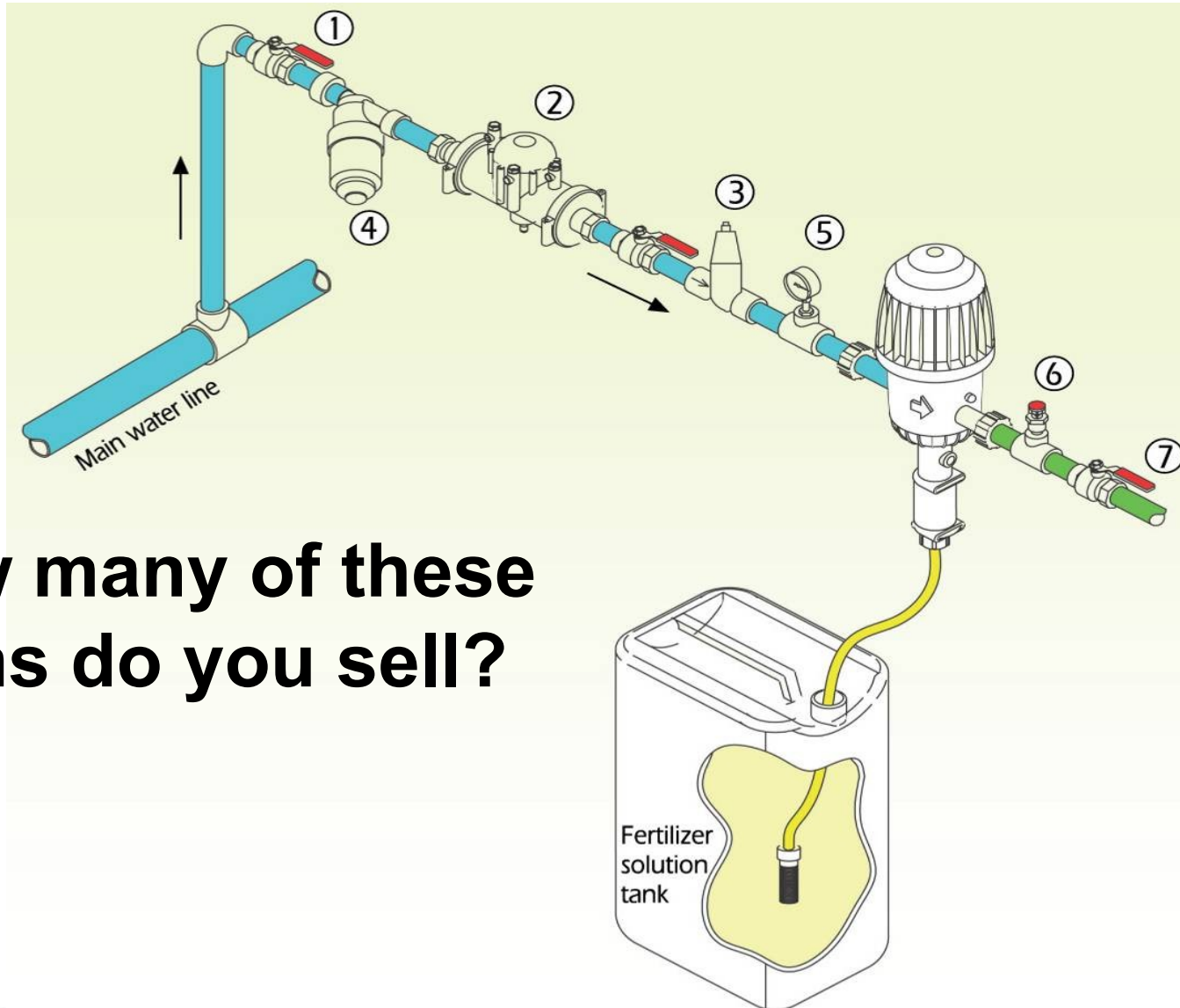
What does an installation look like and what's important to understand.



Drip Irrigation Installation

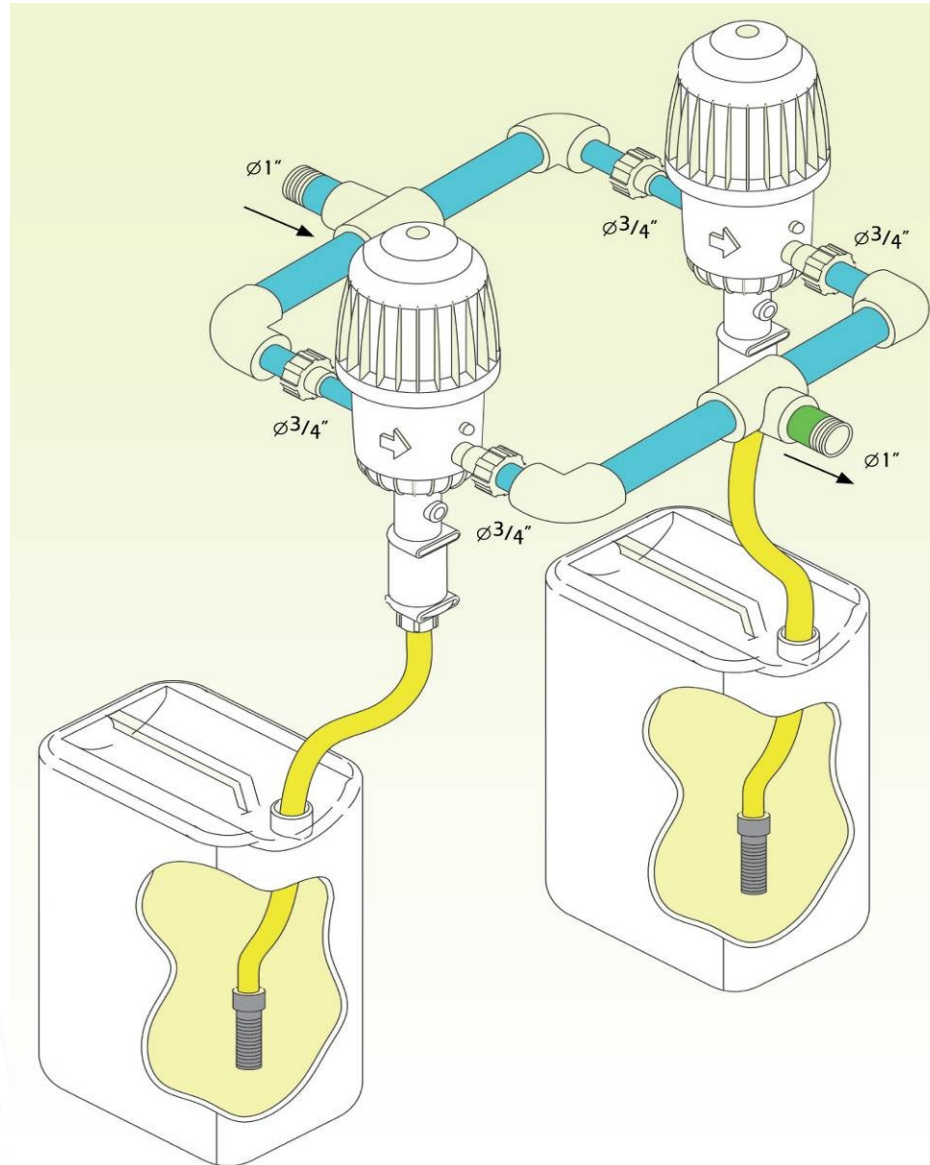


Typical In-line Installation

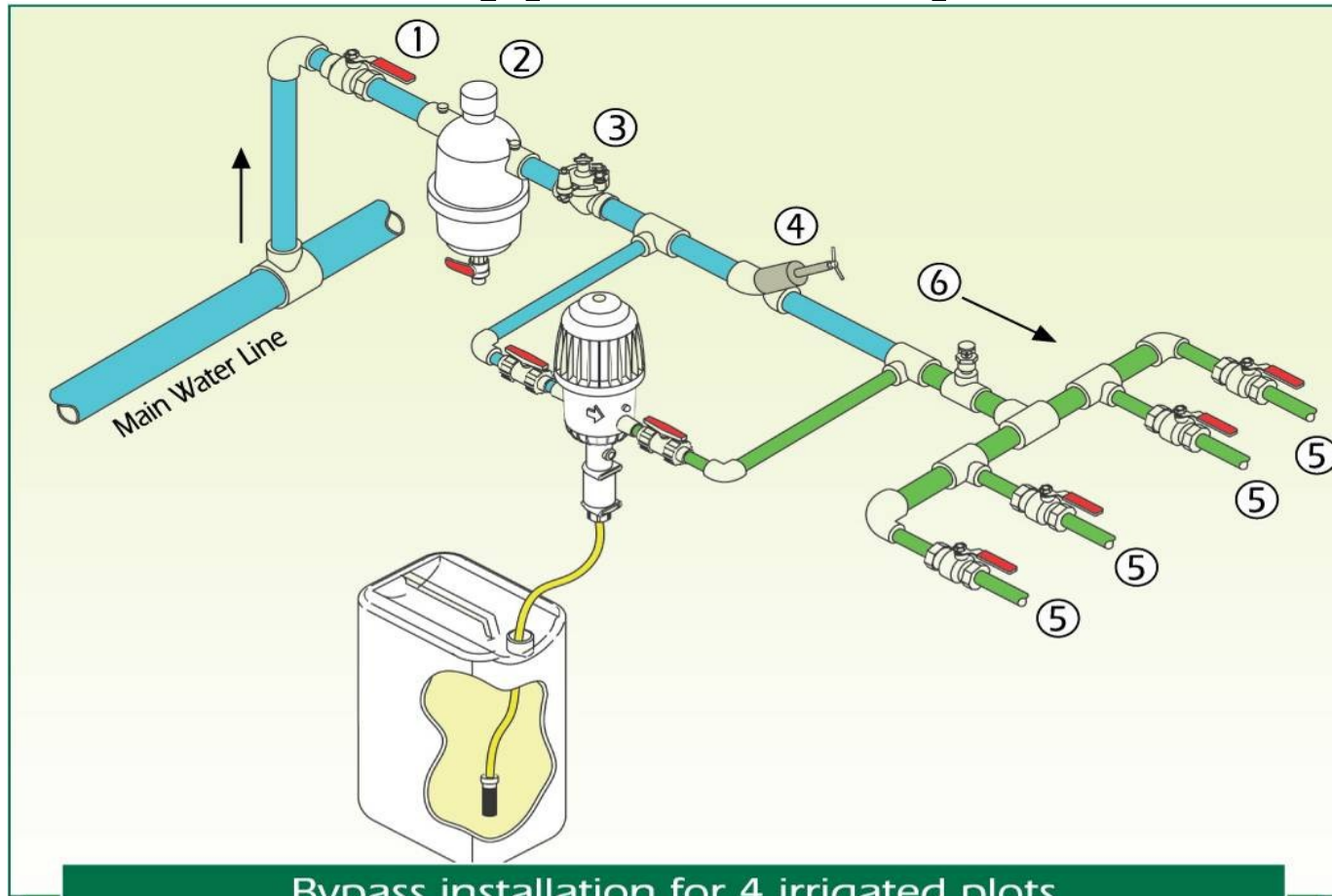


How many of these items do you sell?

Parallel Installation



Bypass Loop

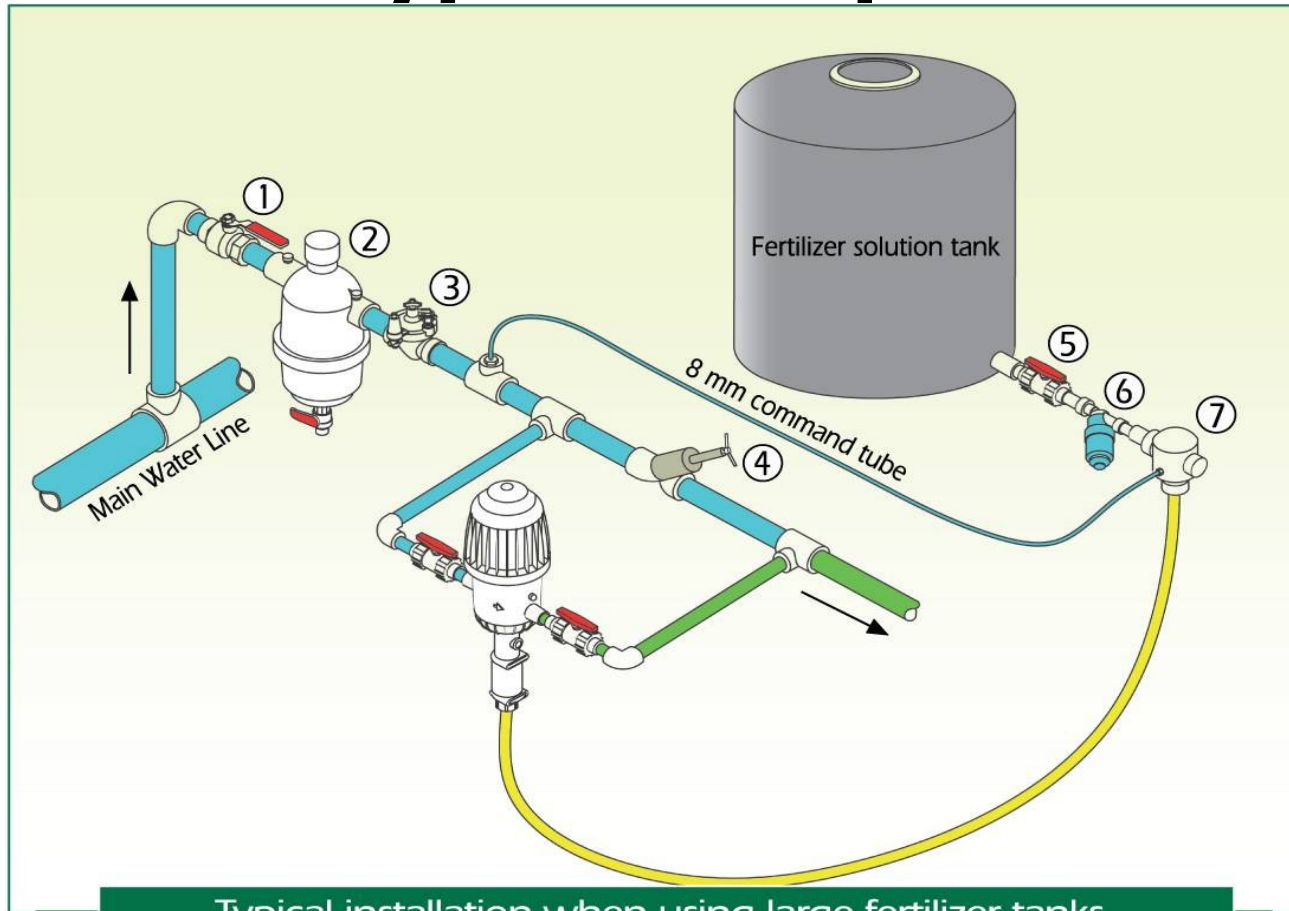


Bypass installation for 4 irrigated plots

- 1. Main Valve
- 2. Filter -130 micron minimum
- 3. Pressure reducing valve

- 4. Chocking Valve
- 5. Operate valve
- 6. Anti siphon valve

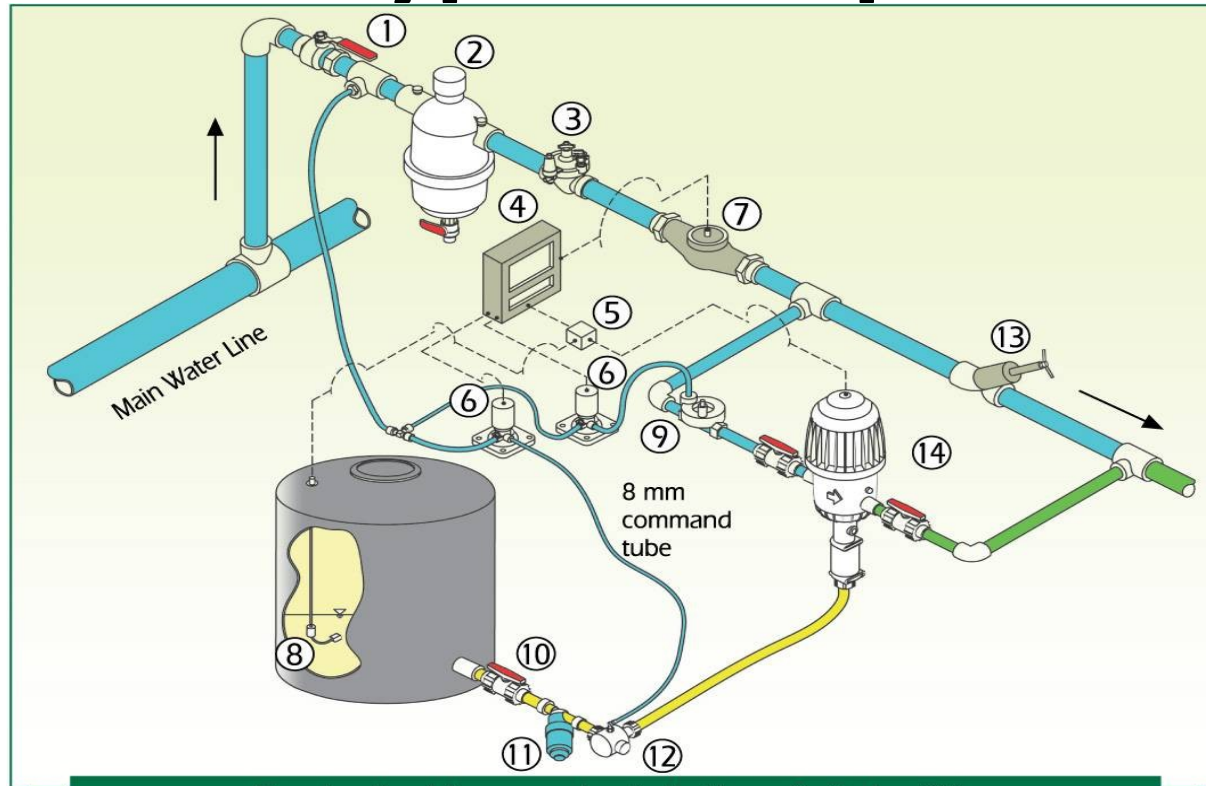
Bypass Loop



Typical installation when using large fertilizer tanks

- | | |
|--------------------------------|--|
| 1. Main Valve | 5. PVC fertilizer valve |
| 2. Filter - 130 micron minimum | 6. Fertilizer filter |
| 3. Pressure reducing valve | 7. Normally close hydraulic fertilizer valve |
| 4. Chocking Valve | |

Bypass Loop



Controlled bypass installation & PulseRite

- | | |
|---------------------------------|--|
| 1. Main valve | 9. Normally close hydraulic valve |
| 2. Filter - 130 micron minimum | 10. 3/4" fertilizer proof PVC valve |
| 3. Pressure reducing valve | 11. 3/4" fertilizer proof filter |
| 4. Irrigation controller | 12. 3/4" fertilizer proof normally close valve |
| 5. PulseRite communication box | 13. Chocking valve |
| 6. Command solenoid valve | 14. PulseRite system |
| 7. Water meter + electric pulse | |
| 8. Fertilizer level float | |

Bypass Calculation

How to Calculate Volume per Click for % of Chemical

$$\frac{\text{GPM of Flow} \times \% \text{ of MixRite}}{\text{Total Flow through System}}$$

X 100 =

% of Chemical in
Total Flow

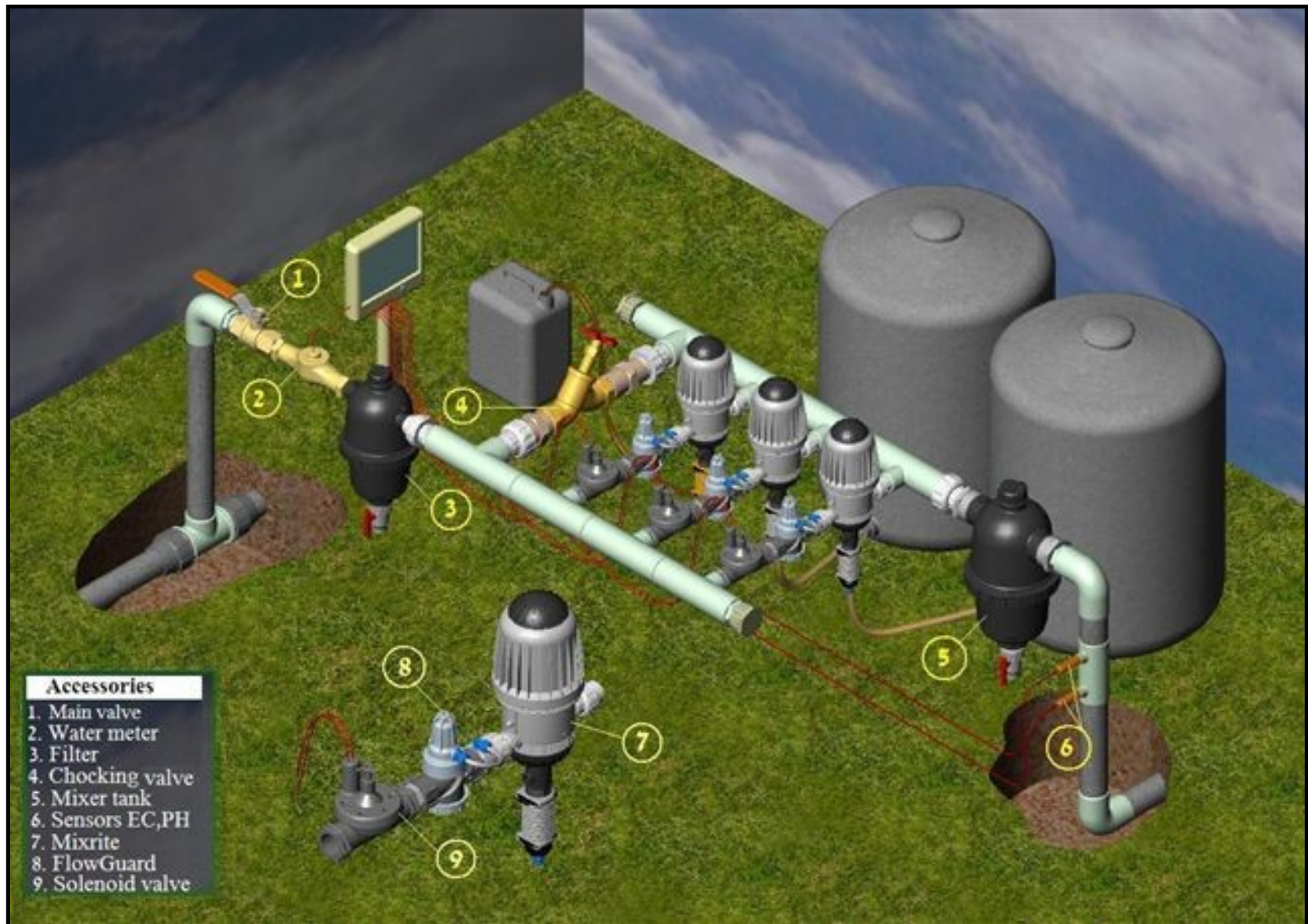
$$\frac{110 \text{ GPM} \times .05}{1200 \text{ GPM}}$$

X 100 =

.0045%

(Percent maximum Injection rate)

High Volume Feritgation



MixRite Water Driven Injectors Training

