

Dilution Solutions IQ PRO

Fertigation Controller

(Features - Function - Accessories Guide)



by  **DOSATRON**[®]
An Ingersoll Rand Business



This guide was created by the Fertigation experts at Dosatron USA to help Growers identify Features & Functions of the DS IQ PRO Fertigation Controller and Dosing Systems, in addition to Sensors and Accessories that are relevant to their operation. This Guide will also help Growers select Dosing System options that fit their growing style and site requirements. For detailed pricing, part numbers and additional information, please contact your Dosatron USA sales representative.



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Table of Contents

DS IQ PRO FERTIGATION CONTROLLER	01
CONTROLLER FEATURES	03
IRRIGATION CONTROL FEATURES	04
FERTIGATION CONTROL FEATURES	04
CONTROLLER / EXPANSION / TRANSFORMER	05
CONTROLLER CARDS	06
SENSORS	07
ELECTRIC METERING PUMPS	09
ELECTRIC MOTOR PUMPS	10
PUMP KITS & ACCESSORIES	11
NUTRIENT DELIVERY SYSTEM	13
LO-FLO IQ PRO SYSTEMS	13
HI-FLO IQ PRO SYSTEMS	14
IQ PRO PLUMBING KITS	15
IQ EQUIPMENT MOUNTING KITS	16
PRE-ASSEMBLED FERTIGATION SKID	17
MEGA-FLO SYSTEMS	19
USING DOSATRON	21
MOBILE DOSATRON CARTS	23
MOBILE DOSATRON CART APPLICATIONS	24
STAND-ALONE CORRECTION PANELS	25
CHEMICAL FILL STATIONS	26
DS HYDRO INTAKE FORM	27



THE MASTER OF CONTROL



A groundbreaking Automated Nutrient Delivery Controller designed with simplicity and versatility in mind, allowing a grower to optimize the crop's water and fertility requirements, generating better consistency and higher yields.

Monitor and control a multitude of variables within the grow area, from crop fertility and water management to environmental conditions.



DASHBOARDS

Customized dashboards with high-visibility widgets



RECIPES

Countless recipe configurations with limitless dosing inputs



DATA & REPORTS

Capture and measure success on metrics that matter



ALARMS

Establish set-points for status notifications and process updates



PLANT DAYS

Recipe and schedule will automatically adapt to stage of growth



SECURITY

Assign various access levels to manage user-level interface

[Back to table of contents](#)



THE BRAIN OF OUR FERTIGATION SYSTEMS

The **NEW STANDARD** for Precision Irrigation & Fluid Management



COMPLETE CONTROL

CONTROLLER FEATURES

- 15" Chemical Resistant Touchscreen Control + Web/App Interface
- No Subscription Fees (Includes Remote Access & Software Updates)
- Monitoring of Analog Inputs/Sensors such as Tank Level, Water Flow, pH, EC, Etc.
- Control of up to 240x 24V Solenoid Valves, Relays, or other Devices
 - Expansion Capacity Available - Control additional valves or Monitor Additional Inputs using Expansion Boxes & Modular I/O Cards
 - Continuously Expandable using multiple Controllers that can share data & device controls
 - I/O Qty & Type Customizable to meet individual facility needs
- 24V Transformer Box Included - 200VA @ 24VAC + 100VA @ 24VDC
- Customizable Dashboards for Live Data Overview & Remote Monitoring
- Customizable Schedule Patterns allow Precision Crop Steering
- Graphs & Reports function for viewing Valve/Sensor Historical Data
- Alarms function for Remote & On-Site Live Alerts of triggered Parameters



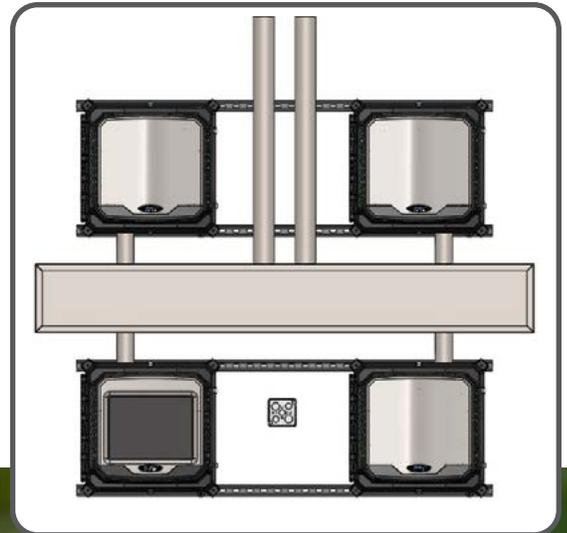
Remote Access

DILUTION SOLUTIONS iQ

Local Software

Remote Access

ZERO Subscription Fees



Plant Day



Recipe



Schedule

IRRIGATION CONTROL FEATURES

- Customizable Schedule Patterns allow Precision Crop Steering
 - Unlimited Event Schedule Database
 - Event Duration Range of **1 SECOND** to **999 MINUTES**
 - Capable of 1000+ Watering Events per Day, per zone (duration dependent)
 - Customizable Zone Configurations with ability to trigger multiple solenoids at once
- Automate Daily/Weekly Changes to the Irrigation Schedule using **Plant Day Zone Watering**
- Automate Changes to Irrigation Patterns based on Sensor Readings

FERTIGATION CONTROL FEATURES

- Customizable Recipes when using Controlled Injector Pumps
 - Create and Store an UNLIMITED number of Injection Recipes for use on-demand
- pH Correction Feature automates injection based on pH Targets
- Plant Day Feature allows scheduled changes to recipes based on crop stage or day
- Provides reports on Water Use and Fertilizer Consumption for every event
- Works for Direct Injection Systems and Batch Tank Fill Systems
- Ability to manage Room Dedicated or Recipe Dedicated Batch Tanks
- Can control Multiple Dosing Systems simultaneously

[Back to table of contents](#)



CONTROLLER / EXPANSION / TRANSFORMER

DETAILS & SPECIFICATIONS



DS-CON - Master Control

- Standard with 85-265VAC power supply (Consumes 1 slot)
- 11 Input/Output Card slots
- 15" Color display
- Chemical Resistant touch screen
- Standard with (3) 12X input cards and (8) Universal Relay Cards
- System motherboard with Ethernet and 4 USB Ports
- Alarm display side lights
- Add up to 2 Expansion boxes



DS-EXP1/2 - Expansion Boxes

- Standard with 85-265VAC power supply (Consumes 1 slot)
- ADDS 11 Card slots per Expansion Box
- 2x Expansion Box Limit per Base Control Chemical Resistant touch screen



CON-TRAN2 - 24V Transformer Box

- Standard with 120VAC (240VAC optional)
- Provides 24VAC & 24VDC for Device Control & Sensor Power



VFD-ENC - 3-Phase Motor Control Box (VFD Enclosure)

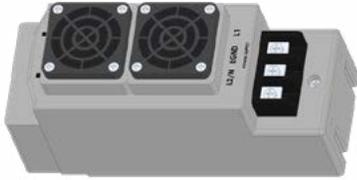
- Standard with 240VAC for control of 3-Phase Motors
- 3-Phase Power Preferred
- Works with Single Phase Power in select situations

[Back to table of contents](#)



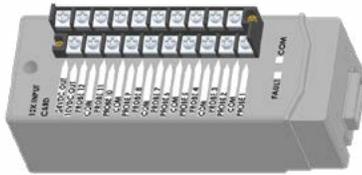
CONTROLLER CARDS

DETAILS & SPECIFICATIONS



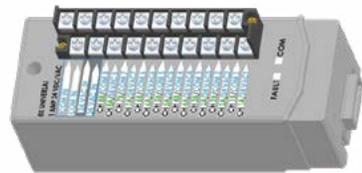
Power Supply Card

- 5-265 VAC
- 120 Watt
- 24 VDC Isolated output



12x Input Card

- Twelve Analog Input Connections
- One 24VDC +/- supply output
- One 10VDC +/- supply output



8x Universal Signal Relay Card

- Eight low current signal relays (3 Amps)
- 24VAC or dry contact selectable output



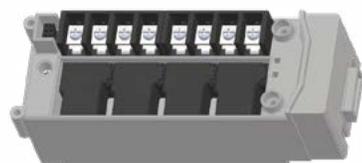
8x SSR Signal Relay Card

- Eight low current signal relays (1 Amp)



4X Analog Card

- Four high current relays (7.5 Amps)
- Four analog outputs configurable as 0-10V or 10-0V
- Integrated current sensing (AC only)
- Resistive and inductive loads



4X Relay Card

- Four high current relays (15 Amps)
- Integrated current sensing (AC only)
- Resistive and inductive loads

[Back to table of contents](#)



SENSORS

IMAGE	DESCRIPTION
	<p>Sensor Loop Instrumentation EC, pH, Temperature, Water Pressure</p> <ul style="list-style-type: none">- Available as a set or individually- Industrial EC, pH, Temperature, & Pressure Sensors ensure accurate data collection and provide validation of fluid conditions in dosing systems and storage tanks
	<p>Submersible Liquid Level Sensors</p> <ul style="list-style-type: none">- Submersible Level Sensors are used to monitor the solution level in storage tanks, including RO tanks, batch tanks, and nutrient stock tanks- PVC Sensors are available for highly corrosive solutions- Fits any tank up to 25' depth, tank penetration fittings provided
	<p>Ultrasonic Flow Sensors</p> <ul style="list-style-type: none">- Available for pipe sizes from 1/2" to 8"- Ultrasonic Flow Sensors provide accurate, live flow rates without penetrating the water pipeline- IP67 rated, 24VDC powered via the DS CON-TRAN2 (24VDC) or included 120VAC wall plug
	<p>Pulse Output Water Meters</p> <ul style="list-style-type: none">- Available for 1/2" - 2", these Water Meters are used to monitor and report water flow from Batch Tanks or Dosatron Systems- Not for use with Controlled Dosing Systems

[Back to table of contents](#)



SENSORS

IMAGE	DESCRIPTION
	<p>ORP Sensor</p> <ul style="list-style-type: none">- High quality ORP Sensors allow for monitoring of ORP values within the water system, to assist with managing water quality
	<p>High/Low Level Float Switch</p> <ul style="list-style-type: none">- The M8700 series side-mounted plastic Float Switches are designed for liquid level sensing for a wide variety of fluids and conditions- These sealed Float Switches provide years of dependable sensing at an economical cost- Used with standard 1/2" NPT threaded stem, can easily be mounted through the wall of a tank as a high or low level float switch
	<p>Teros 12 VWC Sensors</p> <ul style="list-style-type: none">- Moisture Sensors can be connected to the DS IQ Controller to monitor, log, and report media conditions data as well as influence irrigation events based on VWC (volumetric water content), allowing for precision crop steering techniques- Teros 12 media sensors measure volumetric water content, conductivity and temperature in soil or other growing media- The water-proof probe with stainless steel probes inserts directly into media or can be fully buried

[Back to table of contents](#)



ELECTRIC METERING PUMPS

Electric Diaphragm Metering Pumps are the best option to deliver consistent injection for low-flow scenarios and controlled direct-inject fertigation systems up **30 GPM**, given their small stroke volumes and capacity to deliver up to **300 injection strokes per minute**.



CHARACTERISTICS

- The Etatron eOne MF Electric Metering Pump is reliable, durable, and easy to use
- Built with chemical resistant components and minimal moving parts, requires little maintenance while providing accurate injection throughout its working life
- Available with chemical injection capacities from 0.26 GPH to 7.93 GPH
- With single injection stroke volumes as small as 0.2mL.

eOne Wetted Parts

Pump Head	PVDF
Diaphragm	PTFE (Teflon®)
Seals	TFE/P (Aflas®)
Valves	Ceramic Ball
Discharge Tubing	PE (Polyethylene)
Suction Tubing	PVC

Version	Single Stroke Volume (mL) @ 40 PSI	Strokes Per Minute	Max. GPM to Inject @ 1:100	Max. Pressure
0110	0.22	180	1.0	145 PSI
0216	0.33	300	2.6	232 PSI
0420	0.38	300	3.0	290 PSI
0607	0.38	300	3.0	101 PSI
0710	0.60	300	4.7	145 PSI
1012	0.77	300	6.1	174 PSI
1505	0.87	300	6.9	72 PSI
2007	1.21	300	9.5	101 PSI
3005	1.72	300	13.6	72 PSI

[Back to table of contents](#)



ELECTRIC MOTOR PUMPS

Electric Motor Pumps are utilized to achieve higher delivery rates than electric metering pumps, specifically for filling large batch tanks and in direct injection systems for large agricultural settings. Electric Motor Pumps are used to inject large volumes of solution in high-demand applications.

- Spring return, motor-driven mechanical diaphragm, or piston pumps, offer chemical injection capacities from **5.02 GPH** to **271.3 GPH** against line pressures up to **145 PSI***
- Standard power supply **275 – 480 V, 3 phase at 60 Hz****
- **PVC** or **Polypropylene** is standard material for pump heads. Stainless Steel available upon request
- 2 year warranty
- Maximum output and working **PSI** dependent on pump model
- Single phase power can be used with proper **VFD** or phase converter in-place.

DIAPHRAGM MOTOR PUMPS

ST-D Series

Series	Flow Rate		Max. GPM to Inject 40 mL/Gal	Delivery Head PP		Strokes Per Minute
	GPH	LPH		PSI	BAR	
ST-D Diaphragm			Max GPM			
AD0016	5.02	19	7.9 GPM	203	14	72
AD0060	19.02	72	30 GPM	145	10	144



D Series

Series	Flow Rate		Max GPM to Inject 40 mL/Gal	Delivery Head PVC		Strokes Per Minute
	GPH	LPH		PSI	BAR	
D Diaphragm			Max. GPM			
BD0135	42.80	162	67.5 GPM	116	8	122



PISTON MOTOR PUMPS

P Series

Series	Flow Rate		Max GPM to Inject 40 mL/Gal	Delivery Head PVC		Strokes Per Minute
	GPH	LPH		PSI	BAR	
P Piston			Max. GPM			
BP0220	68.68	260	108.6 GPM	131	9	122
BP0431	135.26	512	213.25 GPM	116	8	122
BP0838	165.23	1004	349.0 GPM	94	6.5	122
BP1027	271.30	1027	428.0 GPM	94	6.5	120



[Back to table of contents](#)



PUMP KITS & ACCESSORIES

IMAGE	DESCRIPTION
	<p>Motor Pump Suction & Discharge Kit</p> <p>Motor Pump Injection Kits include the parts needed to connect the Motor Pump to a Stock Concentrate Tank and to the Injection Point on the Dosing System.</p> <p>Built with SCH 80 PVC Parts and Reinforced Hose, available for Motor Pumps with 1/2", 3/4" and 1" Connection sizes.</p> 
	<p>Pressure Sustaining Valves</p> <ul style="list-style-type: none"> - Pressure Sustaining Valves require pressure (adjustable set) to open, creating a consistent pressure environment within the dosing system - Installed INLINE at the dosing system mainline outlet, the PSV will maintain back pressure conditions across the entire dosing system - Installed INLINE between an Injector Pump and Injection Point, the PSV will maintain back pressure conditions for that injector pump only - Available for Etatron eOne Pumps (4MM / 6MM), in standard pipe sizes from 3/4" to 1-1/2"
	<p>Flow Regulators</p> <ul style="list-style-type: none"> - Flow Regulators are used to maintain a defined flow rate regardless of pressure variations of the supply line - Precise flow control improves system performance in injection systems - Flow Regulators are included in all Nutrient Delivery System IQ Starter Kits <p>Standard Models:</p> <ul style="list-style-type: none"> • 9 GPM, 1" Female NPT • 30 GPM, 1-1/2" Female NPT <p>*Alternative models available upon request</p>

[Back to table of contents](#)



PUMP KITS & ACCESSORIES

IMAGE	DESCRIPTION
	<p>Injection Saddles</p> <ul style="list-style-type: none"> - Spears® PVC Clamp-On Saddles allow quick, easy and reliable addition of branch lines, or injection points, to piping system lines - Can be used in either temporary or permanent installations, on all types of pipes with IPS (Iron Pipe Size) outside diameter - Available from 2" - 8" (IPS) with 1/2" FPT or 1" FPT connections. Standard with FKM seals, SS hardware, and SR FPT connection <p>*Alternative size combinations available upon request</p>
	<p>Imperium Motorized Ball Valves</p> <ul style="list-style-type: none"> - Built for the high demands of irrigation systems of any scale - IP67 rated to stand harsh environments with high humidity, tested to over 70,000 cycles to maintain quality control - True union design of the Pro PVC ball valve easy to replace or remove - All valves include corrosion resistant PVC internals that are anti-stick and self cleaning - Zone valves available in 3/4" - 1" NPT, Pro PVC Ball Valves available in 3/4" - 2" NPT or socket
	<p>Koflo® Accessories</p> <p>Chemical Injection Quills ensure chemicals are evenly dispersed into the center of the pipeline, which prevents channeling of the chemical down the pipe wall. Each unit includes an integral removable spring-loaded ball check to prevent flow of injected chemical into the main flow, when system is shut down</p> <ul style="list-style-type: none"> - Available in 1/2", 3/4", and 1" - All injection quills include female by male NPT connections for ease installation - Injection quills are standard with Sch. 80 PVC body & stinger, and (FKM) check valve o-ring seal - Alternative Materials include PVDF, 316L SS, Hastelloy® C-276
	<p>Static Mixers are highly-engineered motionless mixing devices that allow for the continuous blending of fluids within a pipeline</p> <ul style="list-style-type: none"> - With no moving parts, static mixers utilize the energy of the flow stream to generate consistent, cost-effective, and reliable mixing - Available in sizes from 1/2" to 20" with flanged, NPT, or socket connections - Constructed with clear PVC, gray Sch. 80 PVC, C-PVC, PVDF PFA, or 316 / 316L SS to fit a variety of applications

[Back to table of contents](#)



NUTRIENT DELIVERY SYSTEM

The **Nutrient Delivery System** is an assembly of **high-quality Injector Pumps** paired with easy-to-configure commercial plumbing kits. The system thrives anywhere from greenhouse environments to outdoors, allowing installation in any application.

The Nutrient Delivery System can be configured using a variety of Injector Pumps, including Etatron Metering Pumps, Electric Piston Motor Pumps, and Dosatron Injectors, providing unmatched accuracy and reliability in both Direct Inject and Batch Tank Systems.*

With total control in mind, tailoring the system to your preferred nutrient program is simple. It provides increased quality control, and makes the process of blending and dispensing nutrients easier and more accurate.

*Custom System Designs deliver the best fit for each application - the Nutrient Delivery System should be designed and specified to meet the application requirements.

LO-FLO IQ PRO Systems

Pipe Size: 3/4"

Op. Flow: 1 to 10 Gallons Per Minute (GPM)

Op. PSI: 15 to 72 PSI

Injectors: Etatron Metering Pumps

- The **LO-FLO Nutrient Delivery System** works best for Direct Injection Systems and/or filling Batch Tanks up to 750 Gallons.
- Injection Rate Range between 0.1mL/Gal to 50mL/Gal**
- Multiple Injection Systems are recommended for Direct Injection Systems to minimize waste and eliminate the potential for cross-contamination of nutrient recipes

** Injection Rate Range dependent on Pump Selection and Operating Flow GPM. Multiple Injector Pumps may be used for a single solution to achieve higher Injection Rates.



[Back to table of contents](#)

HI-FLO IQ PRO Systems

Pipe Size: 1-1/2"

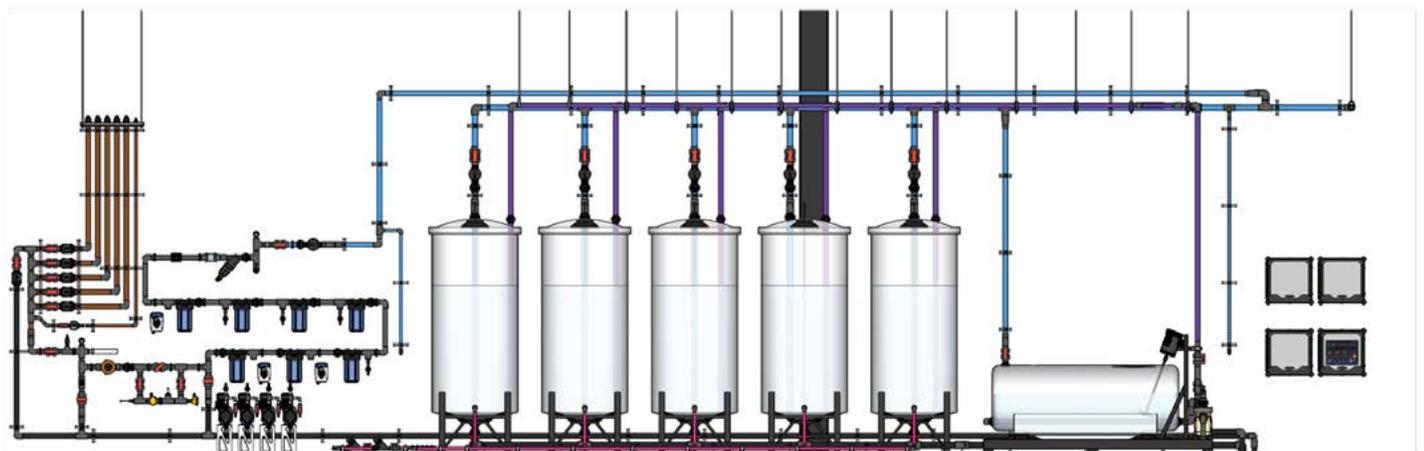
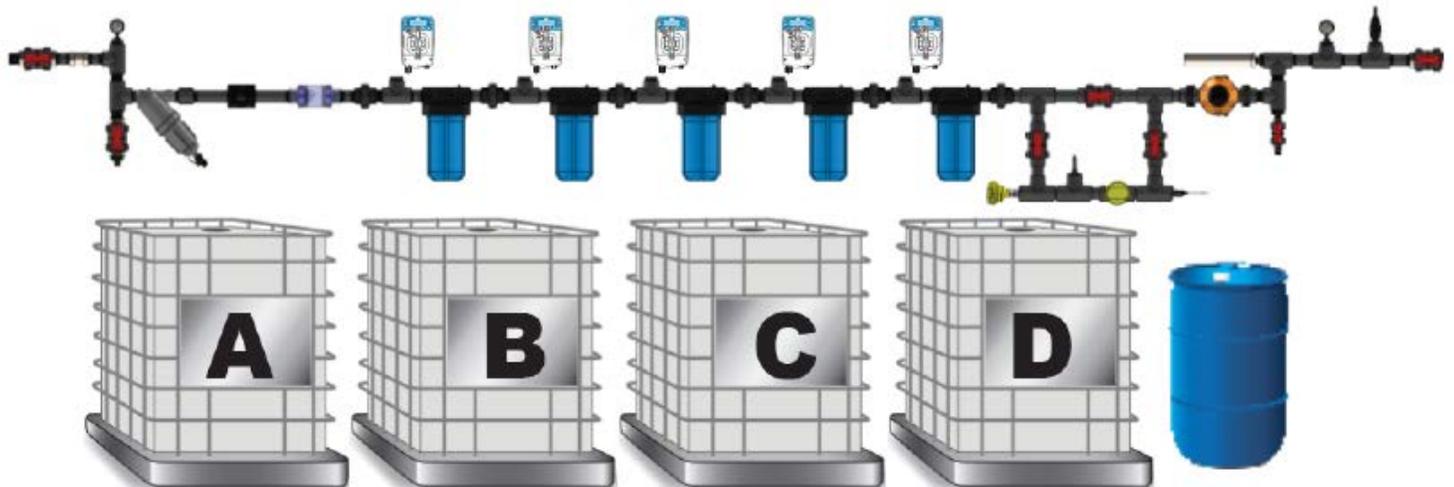
Op. Flow: 2 to 40 Gallons Per Minute (GPM)

Op. PSI: 15 to 72 PSI

Injectors: Etratron Metering Pumps / Electric Motor Pumps

- The **HI-FLO Nutrient Delivery System** works best for filling Batch Tanks larger than 250 Gallons, and can be used with Direct Injection Systems when properly specified.
- Injection Rate Range between 0.1mL/Gal to 50mL/Gal**
- Multiple Injection Systems (2+) are recommended for Direct Injection Systems to minimize waste and eliminate the potential for cross-contamination of nutrient recipes

** Injection Rate Range dependent on Pump Selection and Operating Flow GPM. Multiple Injector Pumps may be used for a single solution to achieve higher Injection Rates.



[Back to table of contents](#)



NUTRIENT DELIVERY SYSTEM

IQ PRO Plumbing Kits

Plumbing Kits are available for On-Site Assembly of Dosing Systems, available in both 3/4" and 1 1/2" to simplify sourcing of commercial materials and ensure proper function of the Dosing Systems.

1 PRO STARTER KIT

Includes all components necessary to protect the dosing system and water source; including the required **Ultra-Sonic Flow Sensor** for dosing system monitoring and control.



5 PRO END KIT

Includes all components necessary to protect the dosing system, including the required **Vacuum Relief Valve** and **Water Hammer Arrestor**.



2 INJECTION MIXING KIT

Contains all necessary components for injection when using non-Dosatron pumps, including a 1/2" **Injection Port** and **Mixing Chamber**. 1x Injection Point per kit.



3 PRO SENSOR LOOP KIT

Designed to fit with the DS Sensor Loop Instrumentation Package. Kit includes bypass loop with **True-Union Ball Valves**, and **connections for EC, pH, Temperature, and Pressure Sensors**. Fits Dosing Systems or Batch Tanks.



4 PRESSURE SUSTAINING VALVE

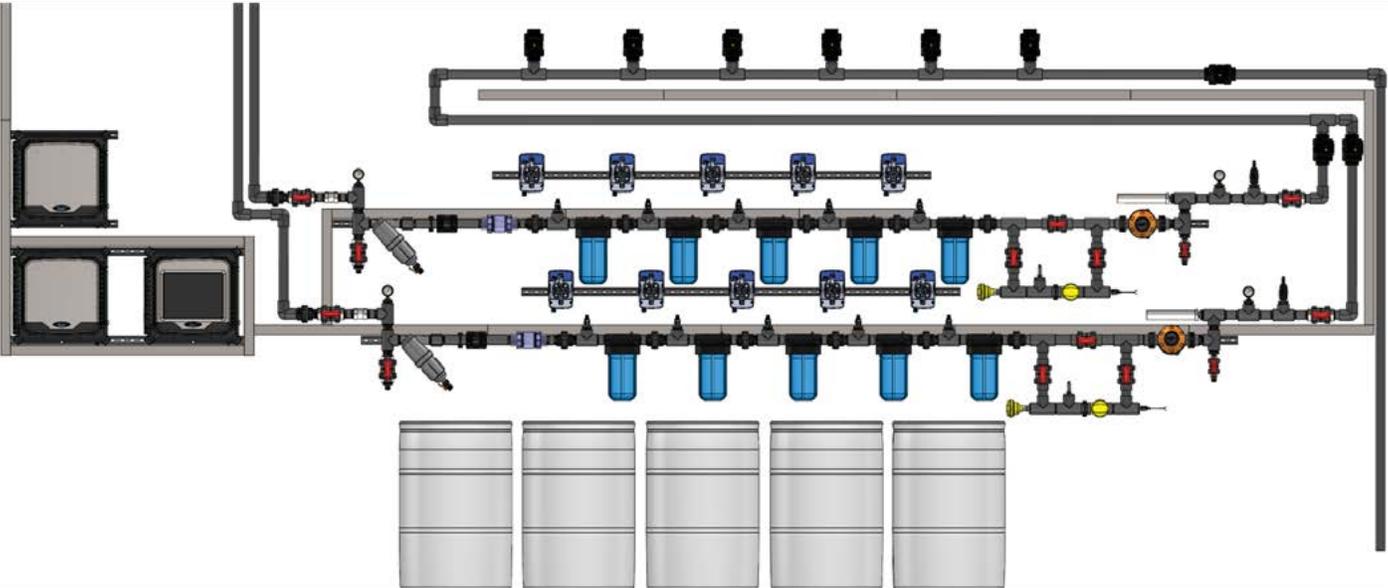
Required to maintain consistent pressure within the Dosing System.



[Back to table of contents](#)



IQ EQUIPMENT MOUNTING KITS

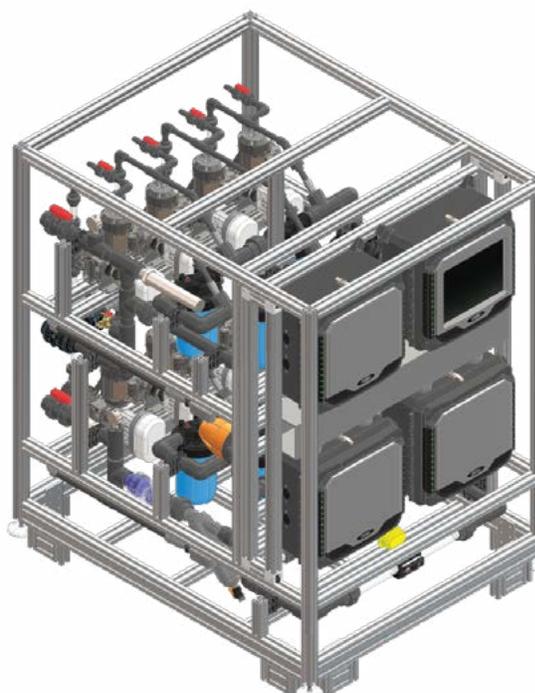
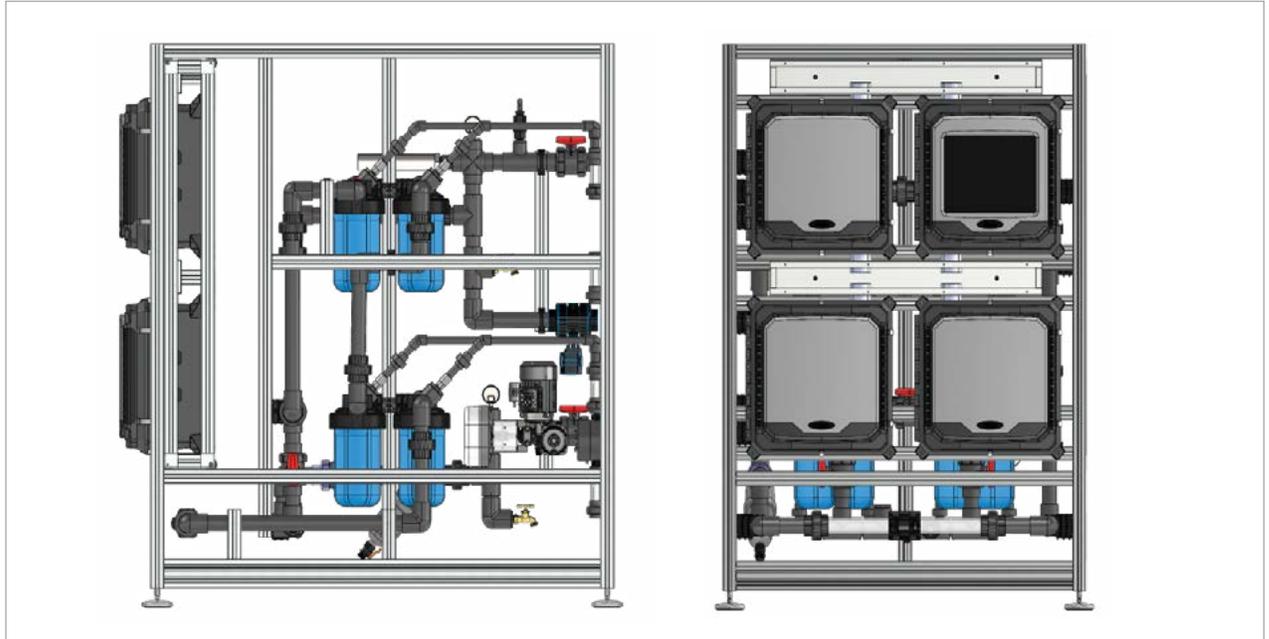
IMAGE	DESCRIPTION
	<p>Controller Mounting Kit</p> <p>Includes Fiberglass Channel Strut, Wire Ducting, and hardware to mount (2) DS Control boxes</p>
	<p>Dosing System Plumbing Mount Kit</p> <p>Includes 7.5' fiberglass Channel Strut, 6.5' Wire Ducting, Pipe Support Clamps and hardware for both 3/4" and 1 1/2" dosing systems. Pipe Support Kits also available individually in both sizes. Additional Wire Ducting available in 6.5' lengths</p>
	<p>Injector Mounting Kits</p> <p>Mounting Kits are available for both Wall-Mount Etatron Dosing Pumps and Wall-Mount or Floor Mount Motor Dosing Pumps. Mounting hardware included</p>
	

[Back to table of contents](#)



PRE-ASSEMBLED FERTIGATION SKID

The Dilution Solutions **Pre-Assembled Fertigation Skid** is the perfect fit for Batch Tank Fill Systems with limited space, or to replace an existing outdated injection system. Available with up to 8 injectors to fit a variety of feed program requirements.



RTU SOLUTION OUT

WATER IN

Hi-FLO Fertigation Skid

Pipe Size: 1 1/2"
Op. Flow: 2 to 40 Gallons Per Minute
Injectors: Electric Motor Pumps
Etatron Metering Pumps
Dimensions: 48" W x 60" D x 70" H
Weight: 1050 lbs
Power Req.: (2) 115VAC 20A-30A
Dedicated Breakers

***Water Supply Pump Not Included**

[Back to table of contents](#)



PRE-ASSEMBLED FERTIGATION SKID

Designed for easy installation, the **DS Fertigation Skid** is ready to quickly connect to your plumbing system; and allows for management of batch tanks and feeding of irrigation zones.

The DS Fertigation Skid can be assembled with Electric Motor Pumps (standard), and/or Etatron Microprocessor Pumps.

It is recommended that pumps are selected to fit the target injection rates and meet minimum/maximum flow rate requirements.

For more information, or to get a quote for your project, contact your Dilution Solutions Rep.



[Back to table of contents](#)



MEGA-FLO SYSTEMS

For irrigation systems with flow rates **over 50 GPM**, DS IQ Fertigation System utilizes **Electric Motor Dosing pumps** and **Etatron Microprocessor pumps** for **precise fertilizer injection** and **pH adjustment** to deliver customized feed recipes directly to crops.

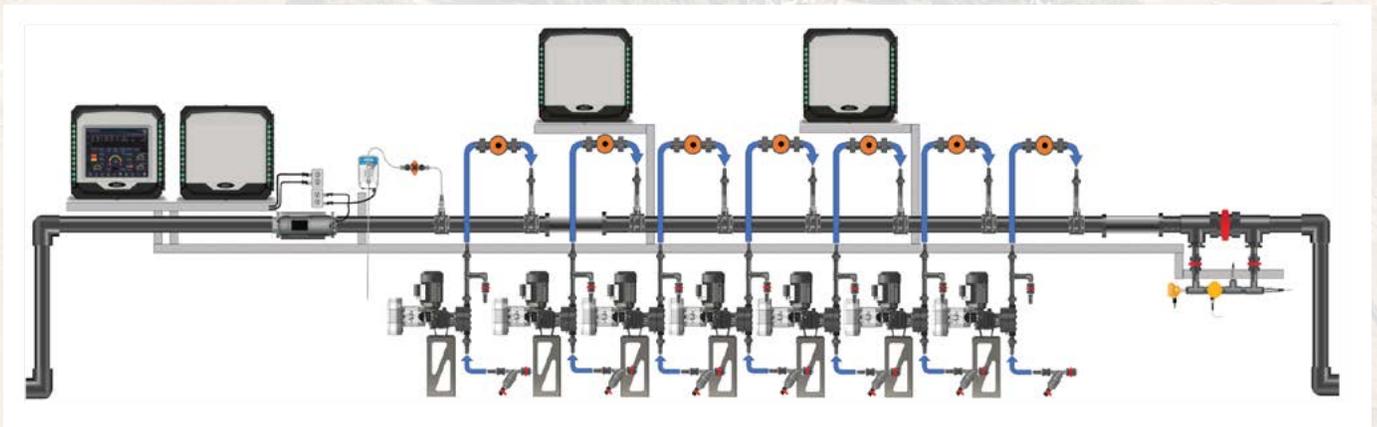
System components are selected to match the irrigation flow rates and meet the target **injection rates**** specified for each project.

System Sizes: 2" to 8"

Flow Ranges: 50 GPM to 2500** GPM

****Injection Rate Range** dependent on Pump Selection and Operating Flow GPM.

Multiple Injector Pumps may be used for a single solution to achieve higher Injection Rates.



[Back to table of contents](#)



MEGA-FLO SYSTEMS



The in-line, Direct Inject, Mega-Flow System blends recipes on demand so that waste of costly inputs is minimized. Detailed Reporting delivers information including total application rates, per input, for every scheduled event.



[Back to table of contents](#)



USING DOSATRON



DEMETER
DESIGNS

The **Dilution Solutions IQ Controller** can also be used to manage Dosatron Nutrient Delivery Systems*, batch tanks, and irrigation systems. **IQ PRO Plumbing** and **Sensor Kits** can easily replace traditional Dosatron Nutrient Delivery System plumbing kits to add monitoring and reporting of system conditions, and allow for control of **pH correction** using an **Etatron eOne Metering Pump**.

- 1** Traditional Dosatron Nutrient Delivery Systems do not include sensors that connect to control systems, though operation (on/off) of the system can be controlled and scheduled via the **DS IQ** to manage batch tanks or directly feed crops via the irrigation system control.
- 2** Upgrading to **IQ PRO Plumbing Kits** and **Sensors** will allow for real-time monitoring of **EC, pH, Temp,** and **Pressure** of the blended solutions as they exit the Dosatron System(s), along with data logging and reporting of historical conditions including total water use for each watering event.
- 3** **Etatron eOne Metering Pumps** have long been a part of the traditional Dosatron Nutrient Delivery System, and now with the use of the **DS IQ Controller, IQ PRO Plumbing Kits,** and **Sensors,** the Etatron eOne Pump can be controlled to deliver specific volumetric targets, or can be set to correct pH by adjusting to real-time conditions in the Dosatron System.

*Dosatron Injectors are water-powered, manually adjusted injectors that cannot be adjusted remotely. The Dilution Solutions IQ Controller is designed to manage the flow of water through Dosatron Systems via solenoid valve control.

[Back to table of contents](#)



USING DOSATRON

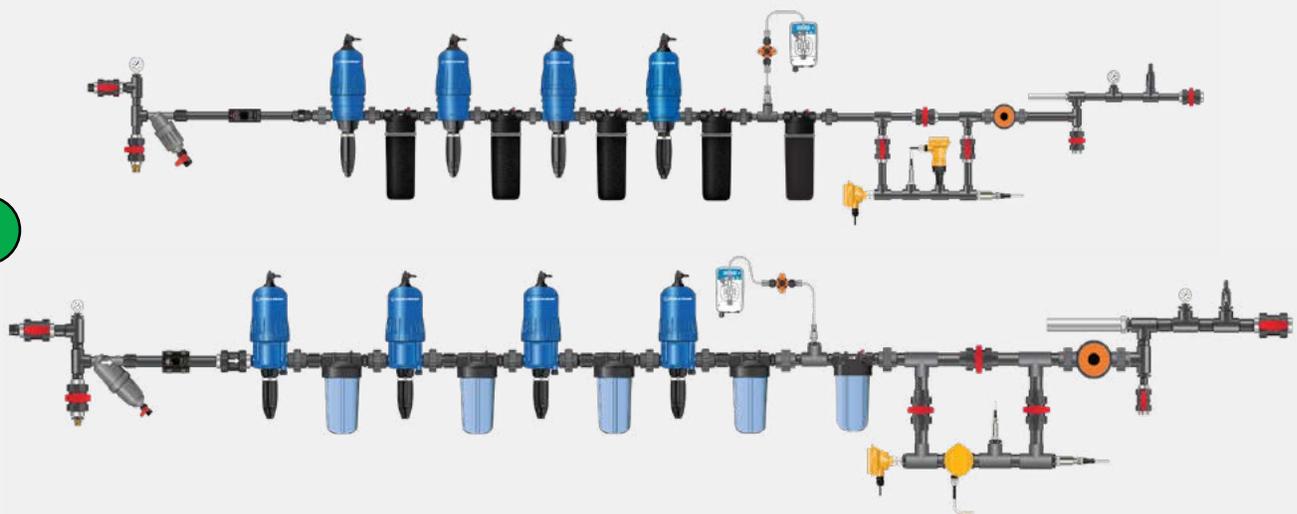
1



2



3



[Back to table of contents](#)



MOBILE DOSATRON CARTS



The Dosatron Li'l Bud-D Cart is a mobile and portable solution to provide proportional, on-demand dispensing, from horticulture to sanitation and everything in between.

The cart is designed for maximum mobility, and the cart Hook-Up Kit makes attaching your Dosatron easy.

This system is economical to operate, is designed specifically for your needs, and the on-demand dispensing eliminates waste.

Add a foamer to the Li'l Bud-D and it creates wet or clinging foam that increases chemical contact time and effectiveness.

Ideal in dispensing:

- Fertilizers
- Fungicides
- Pesticides
- Algicides
- Disinfectants
- Surfactants
- Nematodes

The Li'l Bud-D Cart Features

- Polyethylene construction
- 5-gallon bucket with lid
- 10" no flat tires for maximum mobility
- **Dimensions:** 44.5" H, 19" W and 22" D

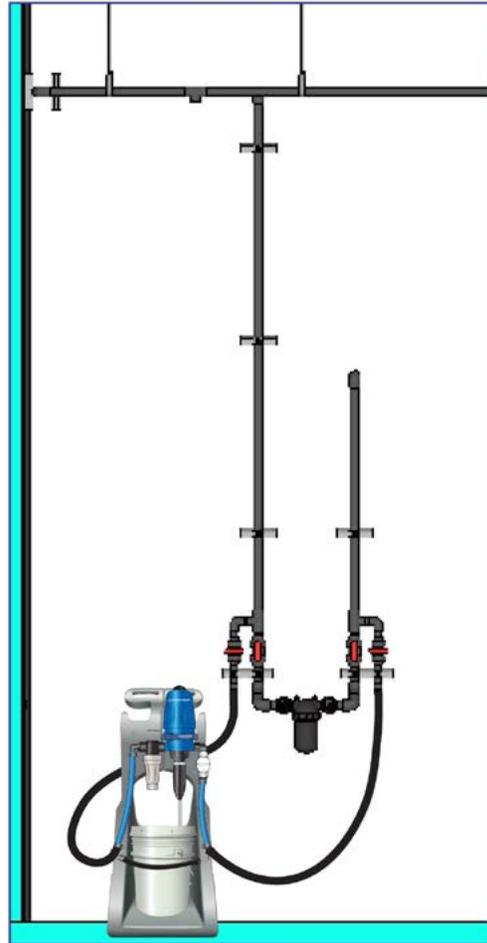


[Back to table of contents](#)



MOBILE DOSATRON CART APPLICATIONS

Installing a Bypass Access Point at each grow area for the connection of a Dosatron Mobile Cart allows the grower to apply individual solutions to sections of the irrigation system independently, such as IPM Treatments and Irrigation Line Cleaners.



Mobile Dosatron Carts can be used for hand-applying Nutrients, IPM Treatments, or Sanitizing Solutions; to help minimize human contact with chemicals and improve efficiencies in processes that require frequent blending of solutions.



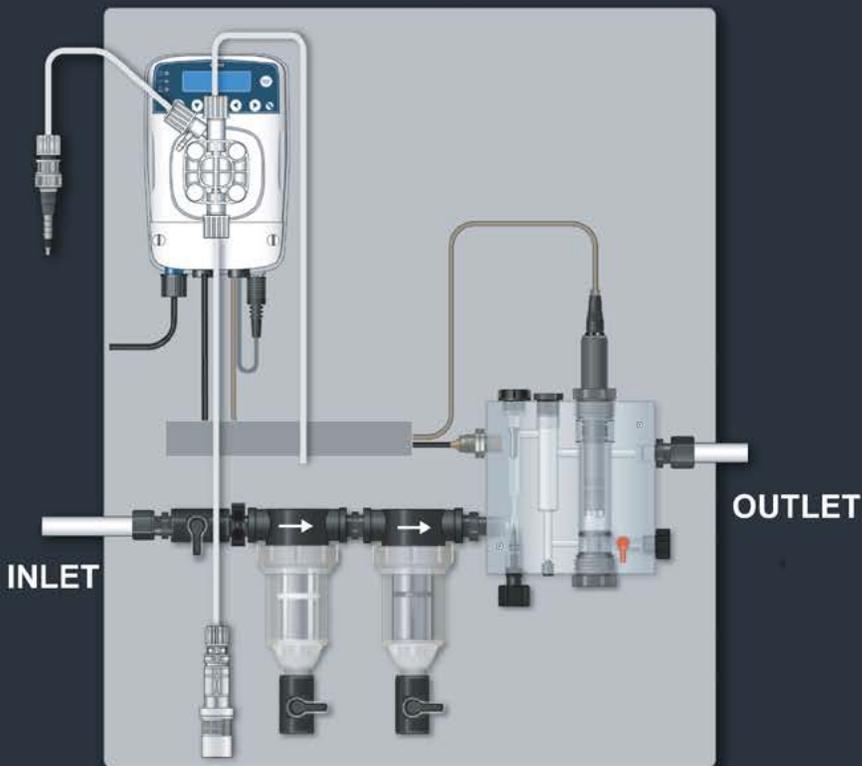
[Back to table of contents](#)

STAND-ALONE CORRECTION PANELS

Dilution Solutions Correction Panels are stand-alone systems, with simplified configuration for maintaining water conditions in Recirculating Systems and Storage Tanks.

These panels are built with **Etatron eOne Plus pumps**, and can be configured for to maintain a specific **pH**, **PPM of Chlorine**, **PPM of PAA**, or **PPM of H2O2**

Suitable for Recirculating Water Volumes up to **10,000 Gallons**.



FEATURES

- Electrode continuously monitors concentration to maintain desired set point
- Electric pump with integrated controller
- Auto shut-off if chemical container is empty
- Underload and overload alarm functionality
- Flush valves on strainers to maintain a clean sample water supply for analysis
- Proximity switch sets the system in standby mode when sample flow interrupted

BENEFITS

- Automated system
- No manual pump operation
- No handling of harmful chemicals
- No titration required to maintain disinfectants
- Easy maintenance



CHEMICAL FILL STATIONS

Quick-Fill Dosing Station

The **Pre-Plumbed, Quick-Fill Dosing Station** is fast and easy to install, limiting the exposure time it takes to set up. Just mount on a wall and hook up to your water source, it's that easy. Proportional, On-Demand Chemical Mixing and Dispensing.

Low flow for filling spray bottles, hand-held foggers, hand-dip buckets, foot baths, back-pack sprayers, and sanitary sink stations. Perfect for diluting Quaternary Ammonium Compound (QUAT), Bleach (Sodium Hypochlorite), or PAA (Peracetic Acid).



Two or Four Unit Sanitation Chemical Panel System

Turn-key system, on a manifold, is ideal for multiple sanitizers and cleaners.

Includes:

- Dosatron injectors
- Filter
- Pressure regulator
- Poly panel, 24" x 48"



[Back to table of contents](#)

DS HYDRO INTAKE FORM

<u>Project Details</u>							
Project or Facility Location:							
Contact Email:				Contact Phone Number:			
Best method of contact:				Best Time of Day to Contact:			SOCIAL:
Timeline Of Needs / Install Date:	30 Days or Less		30 to 90 Days		90 Days to 6 Months		6 Months to 1 Year / Budgetary Quote
How or where did you hear about Dosatron or Dilution Solutions?							
<u>Site/Feed Specifications</u>							
	<u>VEG Recipe</u>			<u>FLOWER Recipe</u>			
<i>What nutrients are being used?</i>	<u>Product Name</u>	<u>Injection Rate</u>	<u>Product Name</u>	<u>Injection Rate</u>			
Include MINIMUM and MAXIMUM injection rates for each product. This can be mL/Gallon, mL/Liter, Injection %, Injection Ratio, or Grams/Gallon. List VEG/MOM and FLOWER/BLOOM Separately							
<i>*PROVIDE FEED CHART IF AVAILABLE*</i>							
<i>Does your recipe change from week to week in Flower?</i>				<i>If YES, Summarize changes below:</i>			
<i>Size of stock tanks/nutrient containers:</i>							
<i>How many rooms need to be fed using Nutrient Delivery Systems?</i>				<i>Is the plan to Direct Inject from Dosing System to crop, or fill Batch Tanks with various recipes?</i>			
<i>How many rooms are dedicated to FLOWER?</i>							
<i>How many rooms are dedicated to VEG?</i>							
				DIRECT:		BATCH:	

[Back to table of contents](#)

Irrigation System Specifications

Do you currently have an Irrigation system?		YES		NO		
Number of Irrigation Zones PER ROOM:		←		How is the crop currently being irrigated? Please Describe:		
Number of Drip emitters PER ZONE:						
Gallon Per Hour Output PER EMITTER:						
What is the MINIMUM / MAXIMUM water demand in Gallons Per Minute? [GPM Demand for SMALLEST & LARGEST Irrigation Zone]	SMALLEST ZONE GPM		Are you considering an Irrigation Controller or Fertigation System? Yes <input type="checkbox"/> No <input type="checkbox"/>			
	MIN					
	MAX					
	LARGEST ZONE GPM					
	MIN					
	MAX					
WHEN POSSIBLE, WE RECOMMEND PROVIDING AN IRRIGATION SYSTEM LAYOUT DRAWING OR DETAILED DESCRIPTION OF SYSTEM				Yes <input type="checkbox"/> No <input type="checkbox"/>		
				Are you working with an Irrigation System Designer?		
				Yes <input type="checkbox"/> No <input type="checkbox"/>		
				WHO?		
Do you have a Water Treatment System? Describe:						
Do you have a Filtration System? Describe:						
Do you have Fresh Water Storage? Describe:						
Do you have a Pump to provide Fresh Water to the Nutrient Delivery System(s)? Provide Details:						
NOTES:						

[Back to table of contents](#)



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Dilution[™]
SOLUTIONS

An Ingersoll Rand Business