Anderson Nutrient Injection System

The H.E. Anderson Nutrient Injection system is capable of injecting almost any liquid in-line at a very wide range of dosing rates. It allows for fully integrated fertigation and irrigation management and includes temperature, pressure monitoring, and control based on EC and pH setpoints

ARGUS
CONTROLS

Applications

The system has automated recipe creation for direct injection or fill batch tanks and can inject anything from synthetic fertilizers to fully organic materials. It is used for any highly concentrated material that normally needs to be diluted, over a wide range of flow rates.

Included in this system:

- Water Meter
- Diaphragm Dosing Pumps for Nutrient Injection and pH Correction
- Blending Tank
- pH Sensors
- Toroidal EC Sensor
- Pressure Sensors
- Temperature Sensor
- Stainless Steel Frame
- Compressor (optional)
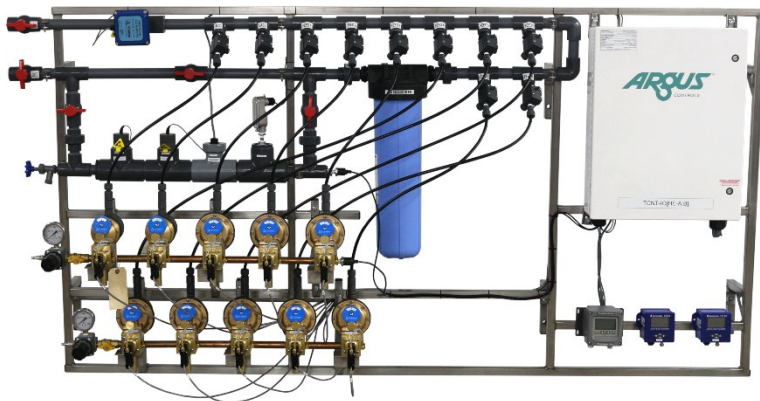
Features

- Models can be custom sized for any design flow rate ranging from a few gallons to thousands of gallons per minute.

- Low maintenance positive displacement double diaphragm pumps used for precise proportional injection.

- Separate pumps are used for incompatible concentrates.

- Directly inject organic nutrients, numerous acids, and sanitizers.

- Precision pH and EC control with industrial pH sensors and cutting-edge toroidal EC sensor.

- Pre-plumbed and factory tested for easy installation.

- Stainless steel frame and schedule 80 plumbing.

- Internal electrical components are pre-wired.

- Connects directly in-line with your irrigation system.

S p e c i f i c a t i o n s

NOTE: These specifications are provided for a standard Anderson Injection system. Units can be custom configured to accommodate larger or smaller flow rates as well as location-specific supply power requirements.

Injectors	Double diaphragm displacement pumps capable of nutrient, acid, or base injection volumes from 0.15 ml to 80 ml per gallon.
Controls and electrical interfacing	All sensors and equipment are pre-wired and mounted on a stainless-steel frame. Line voltage interfacing and motor control relays are housed in a separate NEMA 4x dry cabinet. **An Argus Titan controller is required. An Argus Titan controller is required.** You may already have one nearby with the capacity to manage the nutrient system's programs or a new controller would need to be separately purchased and installed from this nutrient system. Communication between the controller and the injection system is via a 2-wire twisted pair cable. Consult the custom drawings and documents shipped with the unit for full wiring and installation details.
Flow Range	1-20, 2-40, or 4-80 US GPM, or customizable flow rate upon request. 3-20, 4-40, or 8-80 US GPM for real time applications without batch tanks.
Operating Pressure	15-80 psi (8-gallon blend tank), up to 125psi for the pumps.
Inlet/Outlet Pipe Connections	1", 1.5", or 2" PVC unions depending on flow.
Compressor	2 CFM per dosing pump.
Piping	Schedule 80 – PVC
Toroidal EC Sensor	Toroidal in-line EC sensor – 0 to 10.00mS. Non-contacting type design requires no regularly scheduled calibration or maintenance.
pH Sensor	Dual in-line pH probes with easy removal for calibration.
Solution Temperature	Sensor is provided by Argus – part number SEN-TN2DW/C: Rev. C.
Flow Meter	Insertion paddle wheel.
pH Control	Capable of handling acid (sulfuric, citric, and phosphoric) and base concentrations.
Silica	Capable of handling silica concentrations.
Air and Water Line Pressure Transducers	SPT25-20-0150A - 0 to 150 psig range, stainless steel sensing element, 4-20 mA analog output, ¼" male NPT process connection, 9 to 36 VDC operating voltage, 6.6ft cable

Note: Concentrate tanks are not included (supplied by customer). Tubing to the stock tanks is included, as are all liquid end fittings.

Injection System Flow Schematic
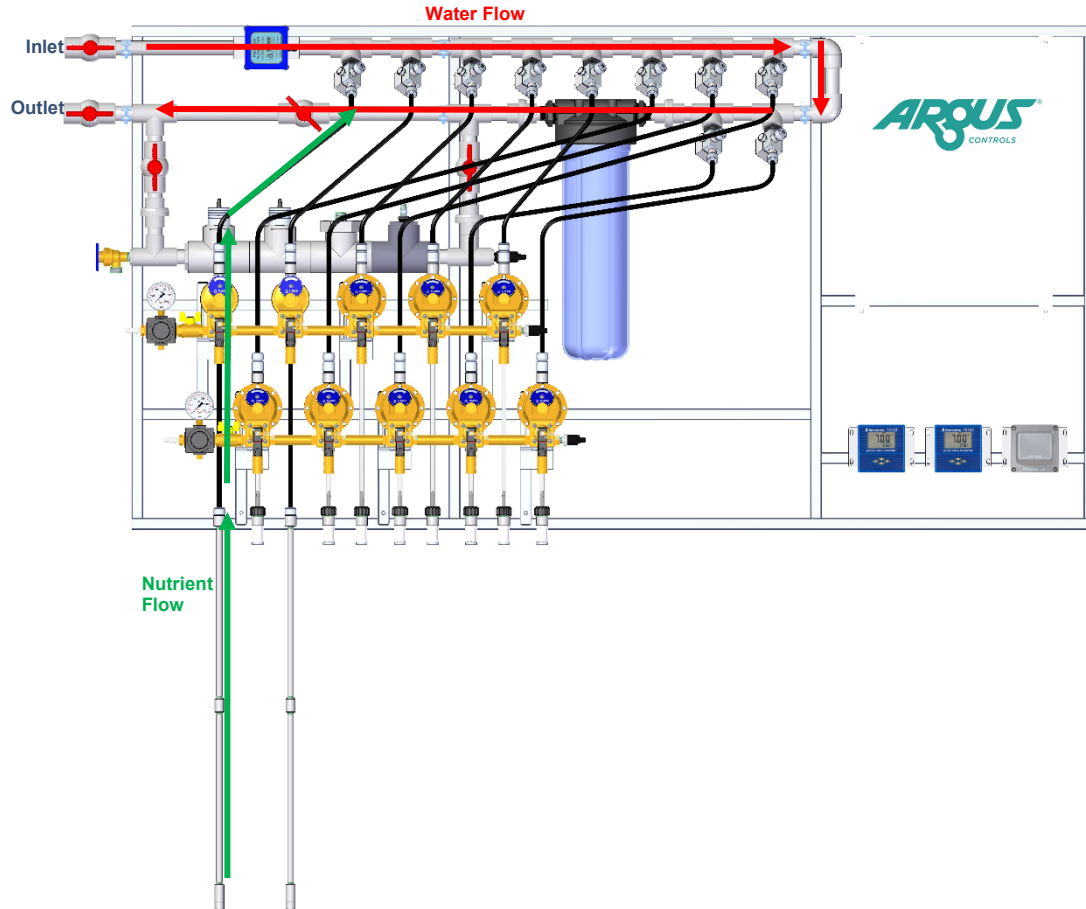
Additional Information

For more information, please contact Argus.