

FUSION



WE JUST

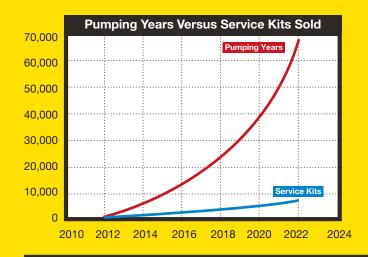
PUMPED UP

OUR GAME

ENGINEERED FOR LONG LIFE AND LOW MAINTENANCE

Unique dual-seal technology overcomes the many shortcomings of adjustable packing designs. The design enables a longer pump life requiring less maintenance, reduced operating costs and improved chemical compatibility.



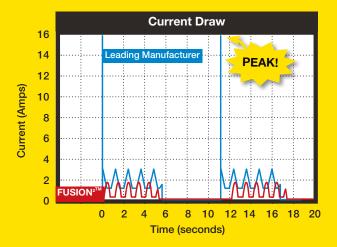


OVER 4 PUMPING YEARS PER REBUILD! (ON AVERAGE)

SIMPLEST AND FASTEST REBUILD AVAILABLE

NO SKILL REQUIRED





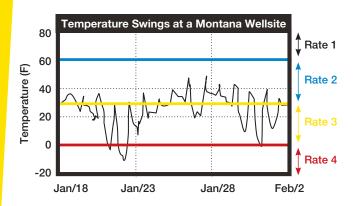
NO MORE MOTOR BRUSH FAILURES!

REDUCED SYSTEM MAINTENANCE AND REPAIR

The brushless, soft starting motor eliminates inrush currents which reduces mechanical stresses and extends motor, pump, and battery life.

The Fusion^{2™} has 1/10 the start-up current of the leading pump provider, with 500,000 fewer current spikes per year.

AUTOMATION AND CONTROLS... LIKE NO OTHER PUMP

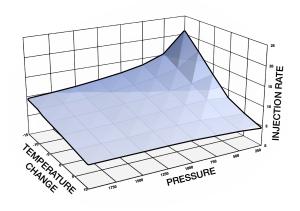


SIMPLE CONTROL

Conserve methanol using the Fusion^{2™} 4-zone temperature control. Flow rates automatically adapt to changing temperatures, saving chemical on warmer days while preventing freeze-ups on cold winter nights.

ADVANCED CONTROL

Configure the controller for proportional rate control using an external sensor, or have multiple sensor inputs for even more advanced control. The Fusion^{2TM} can be easily configured for the common equations such as the Hammerschmidt or Gas Gravity methods.



Error in Injection Rates as Pressure Changes 120 100 Set point Quarts per day 80 60 Q/day 60 FUSION² 40 Leading Manufacture 20 800 1000 1200 1400 1600 400 600 200 Pressure (psi)

AUTONOMOUS CONTROL

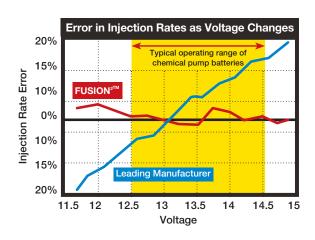
Process pressure variations affect chemical injection accuracy

The Fusion^{2TM} compensates for process pressure fluctuations using patented pressure-sensing technology.

Voltage fluctuations affect injection rate

Solar powered pumps experience day/night voltage swings as well as longer term fluctuations from changing seasons, weather, and cloud cover.

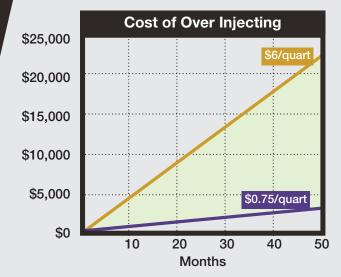
For most pumps, this voltage variation can generate injection rate errors exceeding 25%. The Fusion^{2™} maintains a constant injection rate using the patented voltage compensation feature.



SAVE & MONEY &

STOP OVER INJECTING

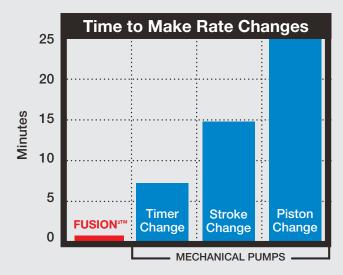
Inaccurate pumps force operators to over inject by at least 20% to ensure that minimum safe injection rates are met. The Fusion^{2TM} provides the confidence to dialback the over-injection. Even at low flow rates and low chemical costs, the Fusion^{2TM} has a typical payback period of less than one year.



SAVE &

REDUCE TIME ON SITE

- · No mechanical adjustments
- · Single button rate changes
- · Self-guided pump calibration



SAVE & MONEY

LOWER INVENTORY



The Fusion^{2TM}'s wide operating range and AC/DC power capabilities reduce the need to carry inventory for multiple pump models. Maintenance is made simple with minimal need to carry multiple pistons, seals, and fluid ends.

CONTINUOUS INJECTION RATES

maximize

ATOMIZER EFFICIENCY

Proper Operation



Inconsistent Rate



FUSION^{2™} FEATURES

CLIENT VALUE	
On board MPPT high efficiency solar controller	Industry Leading
Rate control directly in volume per day (Q/day, L/day, G/day)	✓
Injection Totalizer used to verify volume, carbon credits etc.	✓
Ability to calibrate to volume per day	Industry Leading
Automatically adjusts flow rate for pressure fluctuations	PATENT PENDING
Batch injection	✓
Four variable and 20 linear temperature zones for varying rate control	Industry Leading
Dual flow rate control	<i>y</i>
Independent multipoint rate control, up to 15 points	Industry Leading
Automatically compensates for voltage changes due to day night variation etc.	PATENT PENDING
One button easy rate change	✓
Real time flow rate measurement (with optional closed loop)	Industry Leading
In house firmware development and rapid customization	Industry Leading
Power Source is either AC or DCsame pump, motor, and controller	Industry Leading
Continuous and intermittent variable speed	Industry Leading
Auto transition from continuous injection to duty cycle rate control	PATENTED
Turndown Ratio 1000:1	Industry Leading
Area classification: General Purpose and Hazardous Location Rated	Industry Leading
Operating temperature -40°F (-40°C) to 131°F (55°C)	Industry Leading
COMMUNICATION AND CONTROL	inductry Locating
Wifi and cellular cloud service with support for many major carriers	Industry Leading
MODBUS communications, RS-485	January Louding
4-20 mA rate control	
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Individual point enable/disable	~
Three analog inputs for temperature and one digital temperature input	Industry Leading
Three analog inputs for pressure, tank level, etc	Industry Leading
Four digital inputs for injection enable	Industry Leading
Four digital inputs for batching	Industry Leading
Sixteen digital outputs for pump on, low battery, flow control, alarms	Industry Leading
Support for MODBUS TCP	✓
Communications watchdog (disable on comm fail)	✓
Flow verification alarm, tank level, low power, cal factors, motor current, etc	Industry Leading
DIAGNOSTIC AND PROTECTION	
Single pressure transmitter provides pressure status on up to 15 points	Industry Leading
Electronic pump protection switch	PATENT PENDING
Electronic pressure estimation	PATENT PENDING
Highly enhanced logged diagnostics	Industry Leading
Current protected voltage output for powering 4-20 mA loops, pressure sensors, tank gauges, etc.	Industry Leading
Over current protection	✓
Current controlled start/stop	✓
Controller current rating (15 Amp)	Industry Leading
Preventative maintenance log stored in the motor	Industry Leading
Stack check confirms multipoint valve operation	Industry Leading





FUSION² SOLAR STAND



Signs

TANK PACKAGE

50 TO 2000 GALLON DUAL WALL POLY

Patented HardTopper™ prevents rain, debris and animals from entering containment, virtually eliminating vacuum truck costs.

ABOUT SIRIUS

Sirius Instrumentation and Controls Inc. (Sirius) provides a full spectrum of solar powered chemical injection systems, AC chemical injection systems, environmentally friendly tank systems, and solar products. With headquarters in Alberta, Canada, the company focuses on the growing need for products that meet the changing environmental requirements within the oil and gas industry. Sirius' commitment to engineering has led to many innovations, keeping the company at the forefront of technology in the chemical injection and solar marketplace.

CONTACT

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