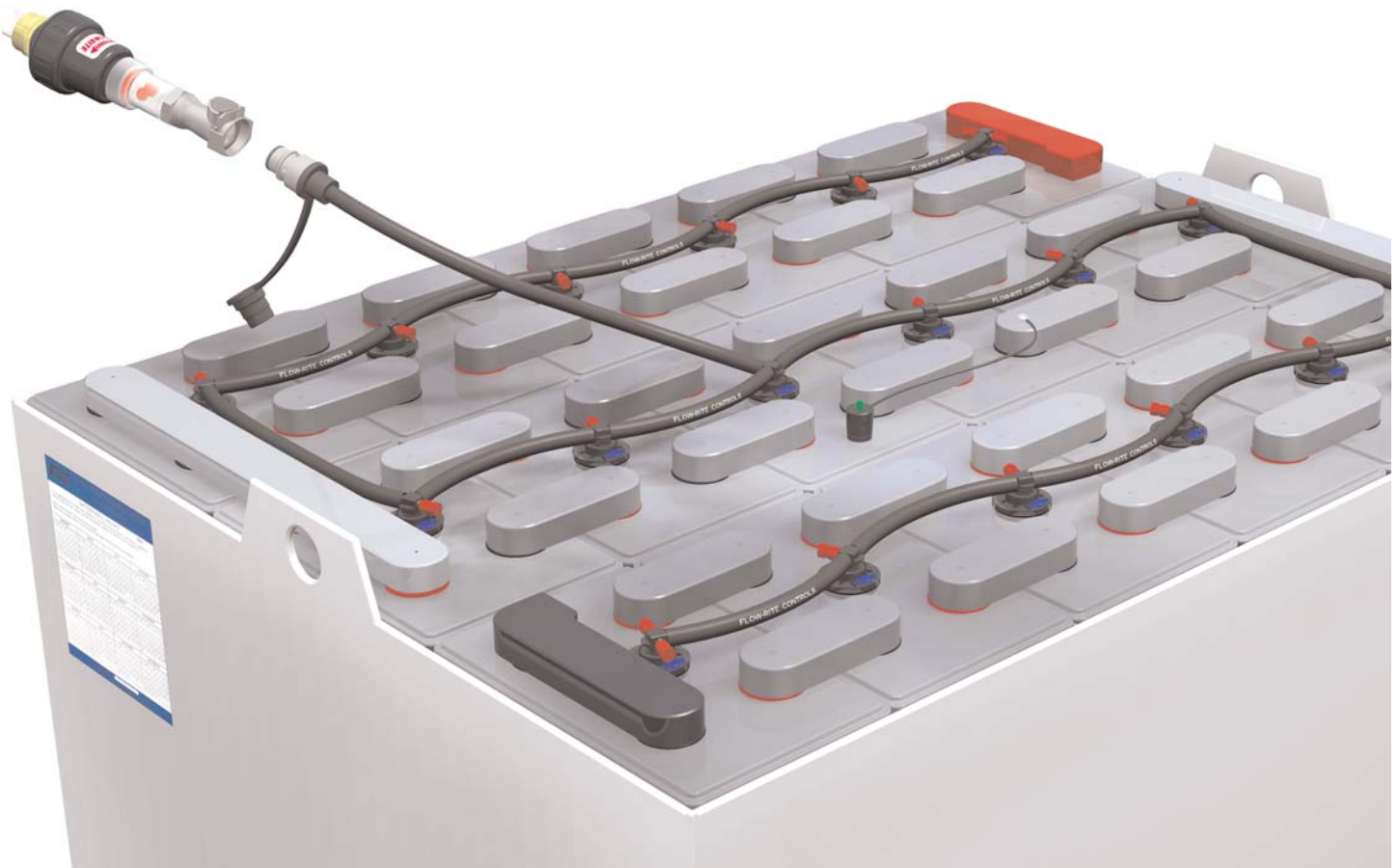




Operation & Maintenance Manual



Flow-Rite Controls
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Millennium SPW

Product Specifications

Flow-Rate:	2-5 gallons per minute*
Pressure Range:	3-35 PSI (no flow, static)
Temp. Range:	Freezing - 150° F
	Freezing- 65.5° C

All product specifications should be met for proper operation of the Millennium SPW system. Contact battery supplier or Flow-Rite Controls if you have any questions regarding product specifications or how to verify a water supply.

*Flow rate should be measured at the end of a purger (female / male coupler combination).

Approved water supplies include the following:

Any Flow-Rite produced water supplies including PowerStream, Snap-Fill, and Millennium
Contact factory for other water supplies.

Non approved water supplies include the following:

Any automatic watering devices
Consult battery supplier or Flow-Rite Controls for gravity feed applications

Three keys for successful operation

- A. Use the proper equipment
- B. Follow general watering rules
- C. Perform scheduled maintenance

A. Proper Equipment

To ensure proper operation of your Millennium single point watering system, use only a water supply that is supplied or approved by Flow-Rite Controls. Failure to do so may cause system failure and void your warranty. Any modifications of an approved water supply may also cause system failure and void the warranty.

Flow-Rite Controls offers many water supplies including AC & DC powered carts, AC & DC pumping stations, regulated hose supplies, deionizers, gravity tanks, and manual hand pumps.



Regulated Hose supply
BA-MS-320-20



Portable water supply
AC: BA-MS-606
DC: BA-MS-612



Portable watering cart
DC: BA-MS-100
AC: BA-MS-200



Deionized water supply
BA-MS-321-20

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B. General Watering Rules

1. Water After Charge

Charging generates heat, gas bubbles, and fluid expansion. Due to temperature, watering a battery before charge can lead to boil over resulting in potential damage of the watering system, battery and vehicle.

2. Disconnect the water supply when the flow indicator comes to a stop.

Do not leave the water supply connected to the watering system after the flow indicator stops spinning. The watering system has a built in drip rate that allows the valves to reset. If the water supply is left connected it could lead to an eventual overflow.



3. Watering Intervals

We recommend watering a maximum of once per week. Generally it is best to water on Wednesdays for most applications. Specifically you should not water a battery that has been sitting over an extended period of time with no activity (non use or not on charge) such as a battery that has sat over the weekend. It is best to water a warm, fully charged battery. If you have a fast charge application, you should water after equalize if the Level Lite indicates that the battery needs water.

C. Perform Regular Maintenance

Just like a lift truck and battery, the Millennium single point watering system requires regular preventative maintenance on at least a quarterly basis.

1. Check all screens and/or filters on water supplies

Make sure to clean or replace as necessary. Failure to do so can cause a reduction in both the water pressure and flow rates needed to operate the system properly. Filter screens can be found on the inlet of all regulators as well as the inlet of all suction tubes (of carts, or pump supplies). For deionizers be sure to replace cartridges as indicated by the water quality light.



Regulator screen



Inlet suction screens



Deionizer filter cartridge

2. Inspect condition of all tubing connections, red end caps, swivel t's, and couplers.

BL-125 Make sure that all parts are in good working condition and are securely and properly
11/04 connected. The coupler should have an O-ring and dust cover properly attached.

