University of Wisconsin Biotron Laboratory
A Salt Reduction Project Case Study

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The Biotron Laboratory provides controlled environments for plant, animal and material testing.

http://biotron.wisc.edu
Key Resources Used in Biotron

- RO Water – requires softening
- Cooling tower – also requires softening
- Electricity
- HVAC
Justification for purchase

• Recommended by AD of residence hall facilities
• Presentation by Neil and Zach
• References from mechanics using system
• Cost savings on salt
• Labor savings
• Happy employee who doesn’t have to unload 49 bags of salt every other week!
Installation and operation

- Clean professional, timely installation
- We supplied a power outlet and data port: the rest was handled by Emonix
- Emonix monitors continually
- Adjustments can be made on-site by Biotron off-site by Emonix
- Caught a failed fill valve
Sump Valve Failure

Total Volume Flowed

Time

Tank 1 Volume
Tank 2 Volume
Tank 3 Volume

Feb 3, 2016
Feb 4, 2016
Feb 5, 2016
Feb 6, 2016
Feb 7, 2016
Feb 8, 2016
Feb 9, 2016
Feb 10, 2016
Feb 11, 2016

Feb 2016
Mar 2016
Apr 2016

From: noreply@emonix.io

Regen Report
April 26, 2016 at 13:35

Softener Tank 1 in Biotron Regenerated at 26 April, 2016 13:06
Biotron Lab Salt Consumption (lb/day)

Salt Usage (lb/day)

Before Emonix

After Emonix
Biotron salt usage in 9 months

1. 16 Pallets = Total for 6 months before Emonix July 2015 – Jan 2016
2. 5 Pallets = Total for 3 months after Emonix Feb 2016 – May 2016
3. 35% Savings = $2800 Yearly
Return on Investment (ROI)

• 7.5 Month ROI
Questions?

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