



SERVICE SYSTEMS SOLUTIONS

35 Maplewood Ave

Albany, NY 12205

PH: 518-458-7252

FX: 518-458-7259

Customer: Water Pollution Control

Location: NY

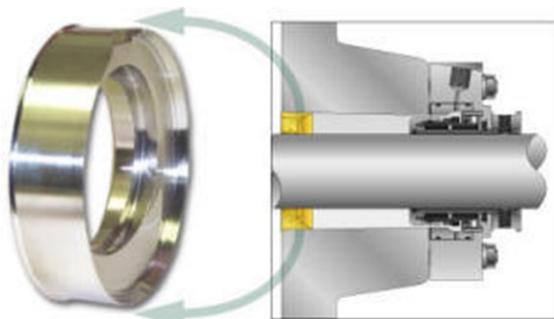
Specialist: Chris Plumaker

System/Product: AWC 442 Seal, SpiralTrac & Flow Meter

Date Installed: 2009

CUSTOMERS CHALLENGE

Excessive water consumption for seal flush on three existing pump assemblies. Cost incurred for both purchasing city water as well as treatment of effluent. Shaft damage caused by mechanical packing.



CPE'S SOLUTION

Configuration: Pump station consisting of three pumps, primary pump operational 24hrs/365days, secondary pumps running as necessary.

Solution: installed A.W. Chesterton 442 Split Mechanical Seals, SpiralTrac water reducing environmental controls and Flow-Meter to regulate seal flush water.



Chesterton 442 Split Mechanical Seal  
High Reliability Sealing without Equipment Disassembly

**Proven Performance**

*High pressure capability*

*Handles vacuum*

*Wide range of services*

**Fast & Easy Installation**

*No equipment disassembly*

*No measurements*

*Universal fit*



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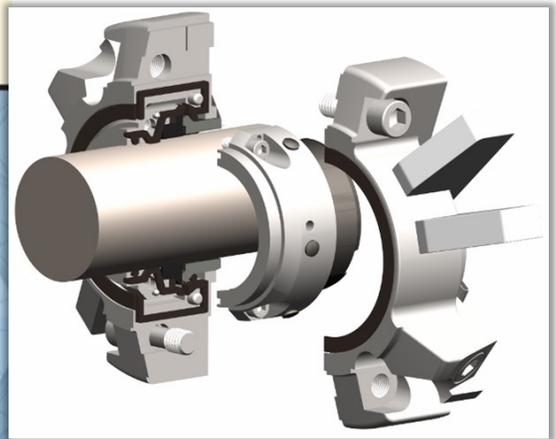
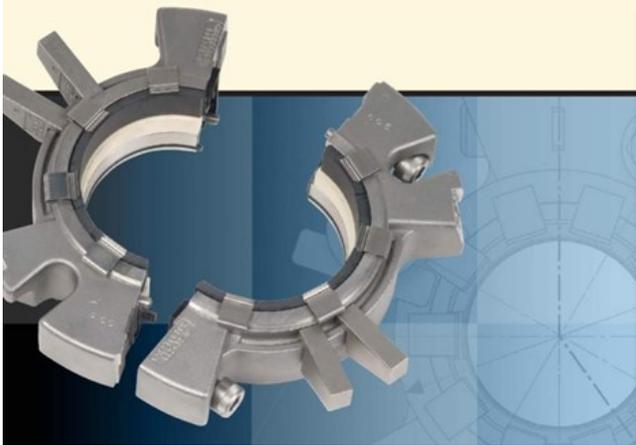
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442 SPLIT MECHANICAL SEAL



SIDE ENTRY MIXERS



HORIZONTAL SPLIT CASE PUMPS



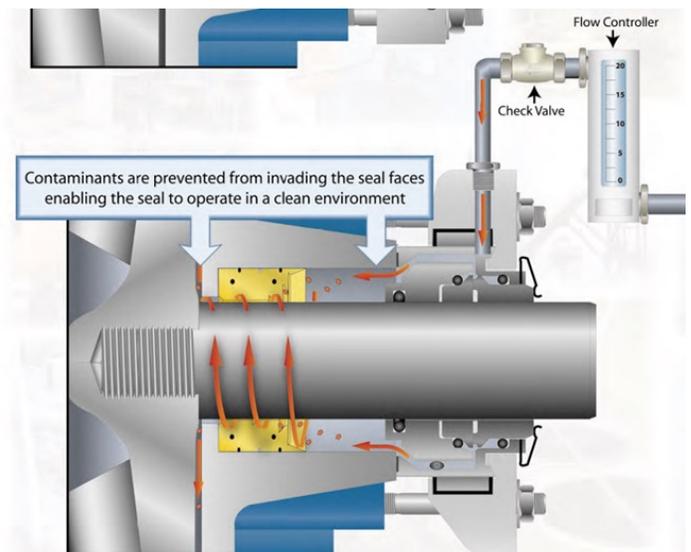
VERTICAL PUMPS



Designed and Engineered for Your Toughest Applications

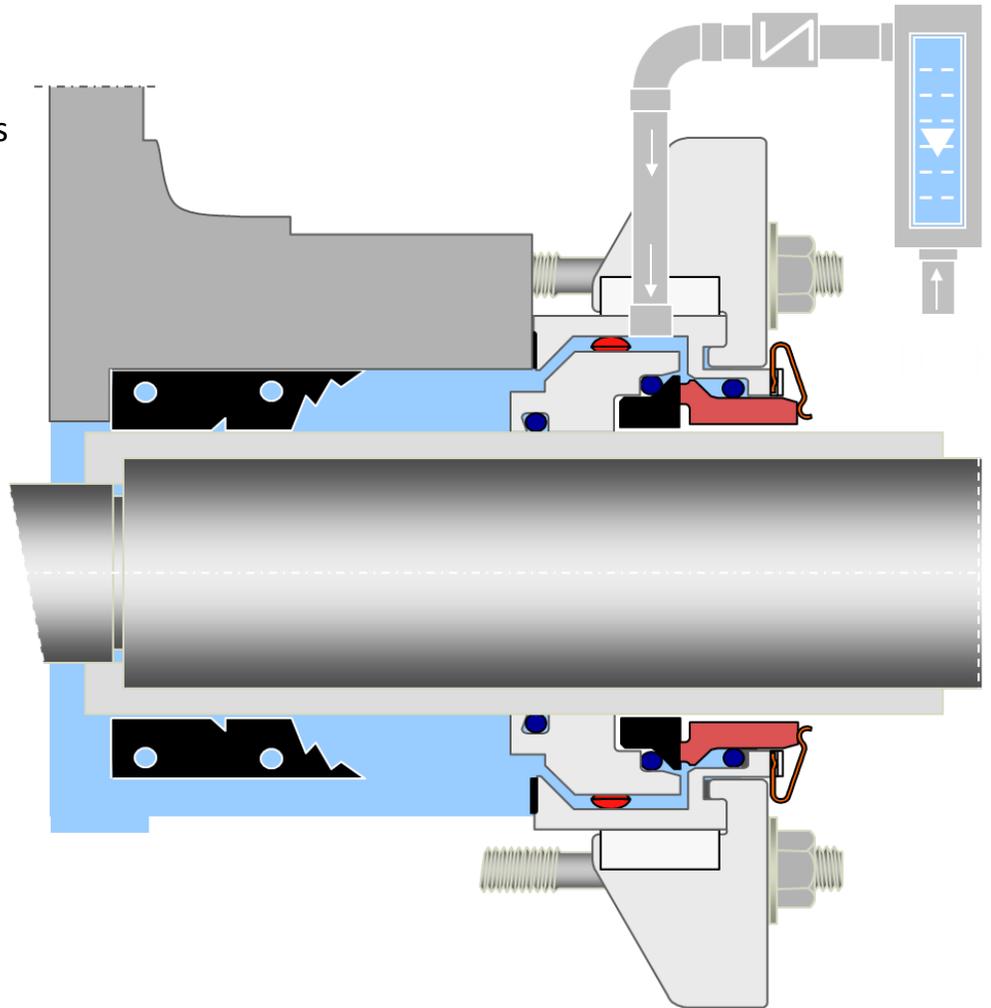
Innovative Technology that will:

- Reduce or eliminate flush
- Protect mechanical seals and packing
- Improve equipment reliability
- Reduce the high costs associated with sealing your equipment



# 442 with SpiralTrac

- All Split Components
- Uses Proven SpiralTrac abrasives expeller device
- For use in abrasive services and slurries
- Reduces flush water flow



## Chesterton Flow Guardian™

Flow meters are specifically designed to supply uninterrupted regulated seal flush water and deliver operational efficiency to the pump population.



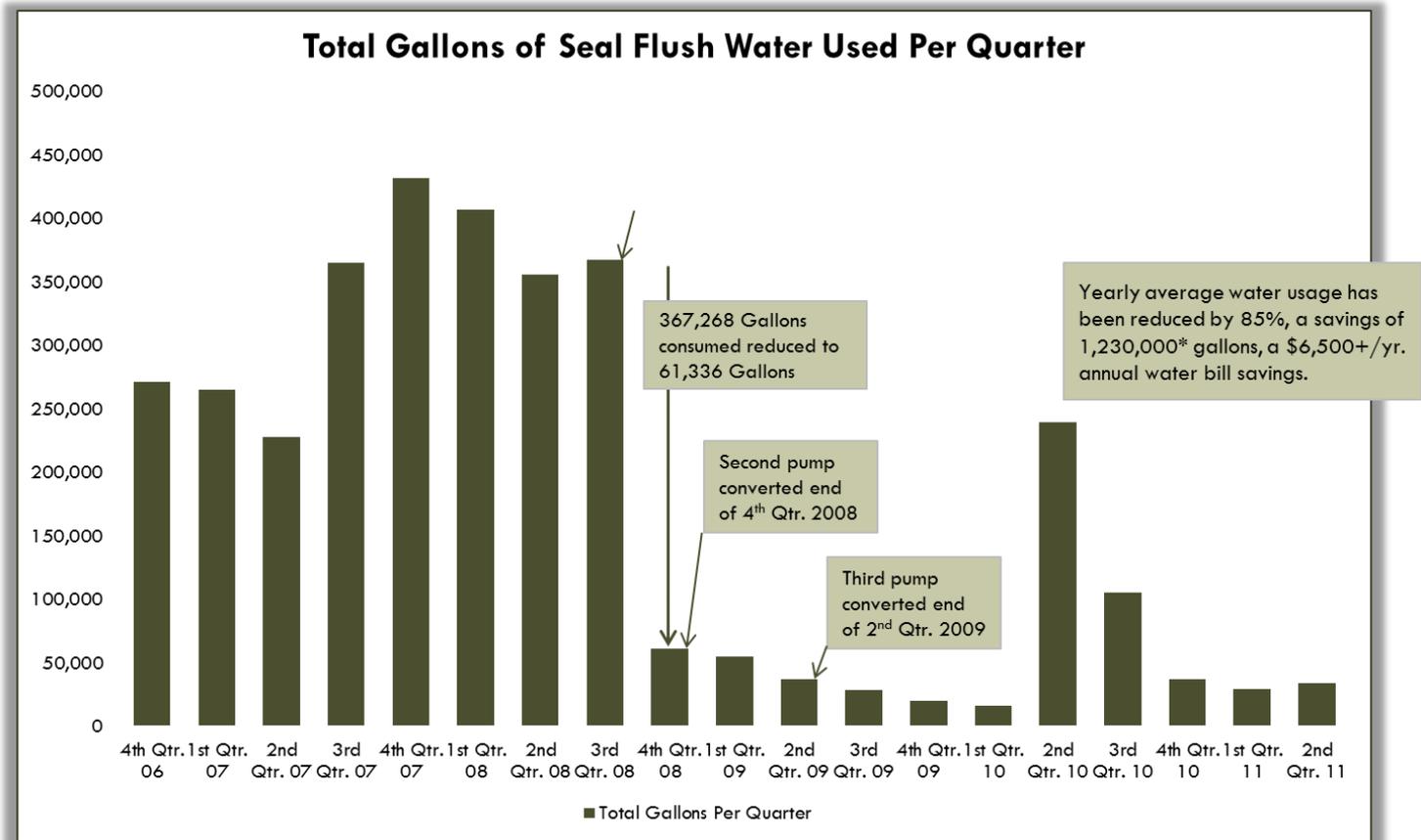


### Plant Water Conservation

Flow Guardian™ Seal Meters will assist in your water conservation programs. In today's competitive environment, plants are faced with improving operational efficiency and meeting federal mandates through seal flush water reduction. Seal water flush rates can be reduced from gallons per minute to gallons per hour without adversely affecting seal performance.



## RESULTS



\* Savings based on results after the 3<sup>rd</sup> pump was converted – 2<sup>nd</sup> quarter 2009. Excluding 2<sup>nd</sup> & 3<sup>rd</sup> quarters 2010 – storm damage power loss and generator cooling system failure required city water flow for heat exchange – the condition lasted for 9 days and consumed close to 300,000 gallons of water.



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## RESULTS

### BEFORE

Average water usage prior to flush reduction implementation:

Quarterly: 336,434 Gallons

Cost: \$1,812.00

### AFTER

Average water usage after flush reduction implementation:

Quarterly: 28,527 Gallons

Cost: \$201.45

Savings per year:  
1,230,000 Gallons  
\$6500.00  
85% Savings



## WE DELIVER RESULTS

CPE has the knowledge and expertise to find solutions for a wide array of customer needs.