



FACILITIES PLANNING, DESIGN & CONSTRUCTION

Sixth Avenue and Grant Street • P.O. Box 172760 • Bozeman, Montana 59717-2760
Phone: (406) 994-5413 • Fax: (406) 994-5665

REQUEST FOR PROPOSAL

Project Title: Cooley Laboratory Renovation
Location: Montana State University

PPA No.: 10-0023
RFP No.: 67
Date: September 4, 2012

To: Dick Anderson Construction
4498 Jackrabbit Lane
Bozeman, MT 59718

Attention: Platisha

From: Cecilia Vaniman, Project Manager
Cooley Lab Renovation
Montana State University

Attention:

In order to expedite the Work and avoid or minimize delays in the Work the following information is requested. Please return a response by: 09/11/2012 Date Sent: 09/04/2012 Date Received:

Proposal Requested:

ADD WATER SOFTENER & HOT WATER CONTROL VALVE

Scope of work includes; Specification 15050 PIPING & FITTINGS 15041 DOMESTIC & NON POTABLE WATER SYSTEMS

- ADD A WATER SOFTENER AS SPECIFIED
ADD A HOT WATER CONTROL VALVE AS SPECIFIED.
PIPING AS REQUIRED TO SOFTENER BYPASS LOOP FOR IHW & ICW TO THE GLASSWASHER EQ-5 - EQ-6 & EQ 7

SEE ATTACHED Pricing/Specification Sheets 1 through 5

This RFP is for pricing purposes only. The contractor shall not proceed with the scope of work described within until pricing is approved by the owner in writing.

Distribution: [ ] Owner [ ] Agency [x] Architect [x] Contractor [ ] Engineer [ ] Other

# PROPOSAL

September 4, 2012

**TO:** CMS  
Attn: Don

Water Treatment System  
Water Softening System

**RE:** Cooley Hall  
MSU, Bozeman MT

**H125 Water Softener**

**\$2,495.00**

- 64k Capacity
- On Demand Regeneration
- Digital Water Meter
- LCD Display and Programming
- 1-1/4" supply

**Pre-Filter**

***Included***

- 4"x10" 20 micron cartridge

**Installation**

***Included***

- Assembly & Set up
- Programming & Start up

<b>TOTAL</b>	<b>\$2,495.00</b>
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\* **Installation to be done by mechanical contractor.**

- *Prices are Valid for 30 days from bid date.*
- *Terms are Net 30 days.*

# H-125 SERIES™

## WATER CONDITIONING SYSTEM



- Agriculture
- Apartment Buildings
- Boiler Water Treatment
- Car Washes
- Commercial Buildings
- Condominiums
- Dairies
- Factories
- Hospitals
- Homes
- Laundries
- Mobile Home Parks
- Motels and Hotels
- Nursing and Rest Homes
- Office Buildings
- Restaurants
- Schools

### The H125 Control is User Friendly and Reliable.

- Modular Design
- Non-Corrosive Valve Body & Internals
- One Piece Stack Assembly
- Piston Operated
- No Nuts, Bolts or Screws
- Disassemble and Reassemble in Minutes

  
**Hellenbrand®**

# H-125 SERIES™

WATER CONDITIONING SYSTEM



## Going Green

**Brine Reclaim** – The H125 standard electronic package is capable of reclaiming up to 30% of the salt used in regeneration for the next regeneration. Salt savings will vary depending on the lbs. of salt per cubic foot of resin used to regenerate.

**Water Reclaim** – The H125 standard electronic package is capable of reclaiming much of the water used to regenerate the water softener and re-use that water to flush toilets. This water is typically soft and is free of the salt/brine discharge which is diverted to your standard drain/waste system. A holding tank is installed to reclaim this water, along with a re-pressurization and disinfection system. A separate line is required to re-fill this tank when the reclaim water drops below a certain level between regenerations.



## H125 Features and Benefits

- 1.25" internal porting, provides higher service flows with less pressure drop
- 12-Volt Operation AC or DC
- Electronic Meter Demand with Calendar Day Override
- Scrolling User Screen shows capacity remaining, time of day and flow rate
- 12-Volt Relay Driver allows multiple dry contact signals
- Service Interval Screen displays preventative maintenance reminder
- Differential Pressure Switch Capability
- Fully Programmable Cycle Position and Times
- Nine Cycle Control
- Soft Water Brine Tank Re-Fill
- Multiple Backwash and Rinse Capabilities
- Quiet Operation
- Variable Reserve automatically adjusts to changing water usage patterns.
- Several programming options including: variable reserve, fixed reserve, calendar day override, delayed or immediate regeneration.
- Diagnostics
  - Days since last regeneration
  - Gallons since last regeneration
  - Gallon reserve capacity last 7 days
  - 63 Days history of daily totals usage
  - Maximum flow rate for the last seven days
  - Total number of regenerations
  - Total days in service
  - Total gallons processed
- Permanent memory backup of all programming
- 2-1/2 years Time of Day Backup
- Uses less than \$2 of electricity per year

### System Designs Options

Single, Twin Parallel,  
Twin Alternating  
Brine Reclaim  
No Raw Water Bypass  
Separate Source Regeneration

### Meter Accuracy

Model: H125  
Flow Ranges 0.25-34 GPM  
Accuracy: ±5%

## Specifications

**HELLENBRAND WARRANTY**  
Go to [www.hellenbrand.com](http://www.hellenbrand.com) for full details.

DEMAND MODEL NAME	MINERAL CU. FT.	LOW SALT GRAINS/LBS.	CAPACITY MED. SALT GRAINS/LBS.	HIGH SALT GRAINS/LBS.	FLOW RATE @ 15 PSI	PEAK FLOW RATE @ 25 PSI	BACK WASH RATE GPM	MINERAL TANK (INCHES)	BRINE TANK <sup>1</sup>	
									TANK SIZE (INCHES)	SALT STORAGE (POUNDS)
H125-32-10ED	1	19,000/6	28,000/10	32,000/15	22	31	2.2	1044	18x40	330
H125-48ED	1.5	28,500/9	42,000/15	48,000/22.5	19	28	2.2	1054	18x40	330
H125-64ED	2	38,000/12	56,000/20	64,000/30	25	34	4.2	1354	18x40	330
H125-96ED	3	57,000/18	84,000/30	96,000/45	24	33	4.2	1465	18x40	300
H125-128ED	4	76,000/24	112,000/40	128,000/60	25	34	5.3	1665	24x41	640
H125-160ED	5	95,000/30	140,000/50	160,000/75	27	35	7.5	1865	24x50	750
H125-192ED	6	114,000/36	168,000/60	192,000/90	26	34	7.5	1865	24x50	750

<sup>1</sup>Suggested brine tank size with grid plate option.

**DEALER NAME:**



**Hellenbrand, Inc.**  
1-800-626-1617  
[www.hellenbrand.com](http://www.hellenbrand.com)



# PROPOSAL

September 4, 2012

**TO:** CMS  
Attn: Don

**RE:** Cooley Hall  
MSU, Bozeman MT

**Water Treatment System**

**Hot Water  
Softening System**

**4650 Hot Water—Water Softener**

**\$1,295.00**

- 15k Capacity
- On Demand Regeneration
- 3/4" supply

**Installation**

***Included***

- Assembly & Set up
- Programming & Start up

<b>TOTAL</b>	<b>\$1,295.00</b>
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\* **Installation to be done by mechanical contractor.**

- *Prices are Valid for 30 days from bid date.*
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Front (without cover)

Back (without cover)

### Features

- Designed with double backwash
- Combines rugged, lead-free brass body with time-tested "L" style powerhead
- Uses standard 5600 style yokes and bypasses
- 7-cycle downflow brining control is efficient and reliable
- Injector/drain modules containing the brine valve, flow controls, and injector are removable from the valve's exterior
- Continuous service flow rate of 20 GPM
- Backwash capacity accommodates tanks up to 12" diameter
- Economical - very small annual power consumption; keeps time, and activates the piston/valve mechanics with a single motor

### Options

- Fiber-reinforced polymer or stainless steel bypass valve
- Backwash filter
- Auxiliary switches
- Hot water up to 180°F for filters and non-metered control valves
- Choice of 7 or 12 day clock

### Valve Specifications

Valve material	Lead-free brass*
Inlet/Outlet	3/4", 1" or 1-1/4"
Cycles	7

### Flow Rates (50 psi Inlet) - Valve Alone

Continuous (15 psi drop)	20 GPM
Peak (25 psi drop)	26 GPM
Cv (flow at 1 psi drop)	5
Max. backwash (25 psi drop)	7 GPM

### Regeneration

Downflow/Upflow	Downflow only
Adjustable cycles	Brine fill only
Time available	180 minutes per cycle

### Dimensions

Distributor pilot	1-1/20" O.D.
Drain line	1/2" NPTF
Injector brine system	1600
Brine line	3/8"
Mounting base	2-1/2" - 8 NPSM
Height from top of tank	7"

### Typical Applications

Water softener	6" - 12" diameter
Filters	6" - 10" diameter

### Additional Information

Electrical rating **	24 v, 110 v, 220 v - 50 Hz, 60 Hz
Estimated shipping weight	Time clock: 7 lbs.
Pressure	Hydrostatic: 300 psi Working: 20 - 125 psi
Temperature	34° - 110° F (cold water) 34° - 180° F (hot water)

\* As defined in the U.S. EPA Safe Drinking Water Act

\*\* 24 VAC Pentair Transformers:

115 VAC +/- 20% Input, 24 VAC Output  
230 VAC +/- 20% Input, 24 VAC Output



