

RESOLUTION NO. 2019-_____

Accepting bid to construct a post frame storage building at the Jefferson County Sheriff's Office Training Facility in Lake Mills

Executive Summary

The Jefferson County Sheriff's Office solicited bids from vendors to construct a post frame storage building at the Jefferson County Sheriff's Office Training Facility in Lake Mills. The Building and Grounds Committee met on March 6, 2019 and recommended forwarding this resolution to the County Board to accept the bid from Bos as the lowest responsible bidder at a cost not to exceed \$71,000.

WHEREAS, the Executive Summary is incorporated into this resolution, and

WHEREAS, the Jefferson County Sheriff's Office received bids to construct a post frame storage building at the Jefferson County Sheriff's Office Training Facility in Lake Mills, and

WHEREAS, bids were received with the following results:

Company	Bid Price
Bos Design Builders	\$70,495
Badgerland	\$109,610

AND WHEREAS, the Building and Grounds Committee has determined that Bos Design Builders is the lowest responsible bidder for this project.

NOW, THEREFORE, BE IT RESOLVED that the Jefferson County Board of Supervisors hereby accepts the bid from Bos Design Builders as the lowest responsible bidder to construct a post frame storage building at the Jefferson County Sheriff's Office Training Facility in Lake Mills at a cost not to exceed \$71,000.

Fiscal Note: Funds of \$71,000 for this project have been allocated in 2019 Sheriff's Office Budget, Account Number _____.

Ayes _____ Noes _____ Abstain _____ Absent _____ Vacant _____

Requested by
Building & Grounds Committee
J. Blair Ward: 03-5-19

County Board March 12, 2019

REVIEWED: Administrator _____; Corporation. Counsel _____; Finance Director _____

RESOLUTION NO. 2019-_____

Accepting bids to replace two boilers at the Human Services Workforce Development Building

Executive Summary

The Human Services Department solicited bids from vendors to replace two boilers at the Human Services Workforce Development Building. The Building and Grounds Committee met on March 6, 2019, and the Human Services Board met on March 12, 2019, and recommended forwarding this resolution to the County Board to accept the bid from Sun Mechanical as the lowest responsible bidder.

WHEREAS, the Executive Summary is incorporated into this resolution, and

WHEREAS, the Jefferson County Human Services Department received bids to replace two boilers at the Human Services Workforce Development Building, and

WHEREAS, original bids were received with the following results to replace the current boilers with high efficiency boilers:

Company	Bid Price
Sun Mechanical, LLC	\$50,500
General Heating and Air Conditioning, Inc.	\$53,995
1901, Inc.	\$58,250
Richter Heating and Air Conditioning, Inc	\$64,968
Illingworth-Kilgust Mechanical	\$65,483

AND WHEREAS, the Human Services Board and the Buildings and Grounds Committee have determined that Sun Mechanical is the lowest responsible bidder for this project.

NOW, THEREFORE, BE IT RESOLVED that the Jefferson County Board of Supervisors hereby accepts the bid from Sun Mechanical as the lowest responsible bidder to replace two boilers at the Human Services Workforce Development Building in the amount of \$50,500.

Fiscal Note: Funds of \$40,000 for this project have been allocated in 2019 Human Services Department Budget, Account Number 61169900.594822.65210.

Ayes _____ Noes _____ Abstain _____ Absent _____ Vacant _____

Requested by Brian Bellford
Building & Grounds Committee/Human Services Board

3-12-19

REVIEWED: Administrator _____; Corporation Counsel _____; Finance Director _____

GENERAL

HEATING & AIR CONDITIONING, INC.

P.O. Box 259596
2920 Perry Street (53713)
Madison, Wisconsin 53725-9596
(608) 271-3900
FAX (608) 271-0103

February 13, 2018

Jefferson County

Attn: Mr. Ryan Mundt

RE: New boilers for Human Services Boiler Replacement

We submit the following proposal to install two (2) new hot water boilers Base bid to match existing PK as close as what is available. Alternate boiler is condensing Lochinvar.

Included: Base BID

- Remove two existing PK boilers, boiler pumps and triple duty valves
- Provide and install two new PK Velox N750-VX, **non-condensing** boilers
- Provide and install two (2) new Armstrong pumps and Flo-Trex combo valves
- Disconnect and modify existing utilities as needed for new install (gas, venting, hot water piping)
- Patch Insulation as required
- Trucking
- Certificate of Insurance
- Permit/ Boiler registration
- Start up
- Work to be performed during normal hours M –F 6 AM – 4 PM.

Included: Alternate Boilers (if not noted, included same as base bid)

- New venting in PVC pipe
- Demo existing boiler venting
- Taco pumps and triple duty valves

Not Included:

- Engineering
- Electrical
- Controls
- Concrete pads
- Motor starters
- Bond
- Roofing
- Chemical Treatment
- Overtime including Saturdays, Sundays and Holidays

Total Price for PK Velox: \$46,950

Total Price for Lochinvar FTX725 Condensing boilers and Taco pumps: \$53,995

If you have any questions or need any clarifications please do not hesitate to contact Dean Horne at 608-271-3900.

Sincerely,
General Heating & Air Conditioning

Dean Horne
Project Manager



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
12/07/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
MCGRIFF, SEIBELS & WILLIAMS, INC.
P.O. Box 10265
Birmingham, AL 35202

CONTACT
NAME: Lisa Vincent

PHONE
(A/C, No, Ext): 800-476-2211

FAX
(A/C, No):

E-MAIL
ADDRESS: tvincent@mcgriff.com

INSURER(S) AFFORDING COVERAGE

NAIC #

INSURER A :Travelers Indemnity Company of America

INSURER B :Travelers Property Casualty Company of America

25674

INSURER C :

INSURER D :

INSURER E :

INSURER F :

INSURED
General Heating & Air Conditioning, Inc.
2920 Perry Street
Madison, WI 53713

COVERAGES

CERTIFICATE NUMBER:GF84GVXG

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			VTC2KCO5794B322IND18	04/01/2018	04/01/2019	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
A B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			VTKCAP5794B309TIL18 (Exec.) VTC2JCAP6794B310TIL18 (Fleet)	04/01/2018	04/01/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$			VTSMJCUP5794B579TIL18	04/01/2018	04/01/2019	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
A B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	VTRJUB2727X79218 (WI Only) Part I WC excludes ND,OH,WA,WY; Part II includes ND,OH,WA,WY; VTC2HUB2476X83618 (All Other States excl. WI) Part I excludes ND,OH,WA,WY; Part II includes ND,OH,WA,WY.	04/01/2018	04/01/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
							\$ \$ \$ \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
For Evidence Purposes Only

CERTIFICATE HOLDER

Evidence of Insurance

Madison, WI 53704

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

RICHTER

Heating & Air Conditioning Inc.

421 Water Tower Ct., Watertown, WI 53094
Bill Richter 920-988-7050 Adam Richter 920-253-5458
RichterHVAC@gmail.com RichterHVAC.com

Proposal for Jefferson County Workforce Development

874 Collins Road, Jefferson, WI

Attn: Ryan Mundt

Date Submitted ~ 2/15/19

HVAC Proposal to Replace Two Existing Patterson Kelley Boilers. All necessary primary pumps, valves, and near boiler piping. Intake and exhaust venting of boilers. Gas piping and regulators for boilers. Removal / Disposal of Existing Equipment. Proper Start Up of New Equipment.

Option #1 – IBC High Efficiency Boilers

- Three SL40-399 96% AFUE 40,000-399,000 BTUs 10:1 Turn Down Ratio, Stainless Heat Exchanger (See Enclosed for Specs)
- Warranty: 5 yr. parts, 10 yr. pro-rated heat exchanger
- Built-in Outdoor Sensors, Low Water Cut Off and High Temp Limit
- Bacnet Compatible
- Three Grundfos UPS 43-44F Pumps
- Racking and Near Boiler Piping Manifolds for Boilers
- PVC Exhaust and Intake Venting

Price \$63,571.00

Option #2 – Patterson Kelley High Efficiency Boilers

- Two Patterson Kelley SC650 Sonic Boilers 94% AFUE 650,000 BTUs 5:1 Turn Down Ratio (See Enclosed for Specs)
- Warranty: 1 yr. parts, 5 yr. burner, 10 yr. heat exchanger
- Built-in Outdoor Sensors and High Temp Limit
- Bacnet Converter
- Two Armstrong 4360-2B Flow Trex Combo Valves
- PVC Exhaust and Intake Venting

Price \$64,968.00

Option #3 – Patterson Kelley Standard Efficiency Boilers

- Two Patterson Kelley N750-VX Velox Boilers 85% AFUE 750,000 BTUs 1.2:1 Turn Down Ratio (See Enclosed for Specs)
- Warranty: 1 yr. parts, 5 yr. burner, 10 yr. heat exchanger
- Built-in Outdoor Sensors and High Temp Limit
- Bacnet Converter
- Two Armstrong 4360-2B Flow Trex Combo Valves
- Connect to Existing Venting

Price \$52,703.00

Option #4 – Move Existing Expansion Tank

- All Necessary Piping & Valves

Price \$623.00

Changes can be made through change request forms.
Valid for 30 days. Draws upon request.

AS REQUIRED BY THE WISCONSIN CONSTRUCTION LIEN LAW, CLAIMANT HEREBY NOTIFIES OWNER THAT PERSONS OR COMPANIES PERFORMING, FURNISHING, OR PROCURING LABOR, SERVICES, MATERIALS, PLANS, OR SPECIFICATIONS FOR THE CONSTRUCTION ON OWNER'S LAND MAY HAVE LIEN RIGHTS ON OWNER'S LAND AND BUILDINGS IF NOT PAID. THOSE ENTITLED TO LIEN RIGHTS, IN ADDITION TO THE UNDERSIGNED CLAIMANT, ARE THOSE WHO CONTRACT DIRECTLY WITH THE OWNER OR THOSE WHO GIVE THE OWNER NOTICE WITHIN 60 DAYS AFTER THEY FIRST PERFORM, FURNISH, OR PROCURE LABOR, SERVICES, MATERIALS, PLANS OR SPECIFICATIONS FOR THE CONSTRUCTION. ACCORDINGLY, OWNER PROBABLY WILL RECEIVE NOTICES FROM THOSE WHO PERFORM, FURNISH, OR PROCURE LABOR, SERVICES, MATERIALS, PLANS, OR SPECIFICATIONS FOR THE CONSTRUCTION, AND SHOULD GIVE A COPY OF EACH NOTICE RECEIVED TO THE MORTGAGE LENDER, IF ANY. CLAIMANT AGREES TO COOPERATE WITH THE OWNER AND THE OWNER'S LENDER, IF ANY, TO SEE THAT ALL POTENTIAL LIEN CLAIMANTS ARE DULY PAID.

Richter Heating & Air Conditioning, Inc.

Bill Richter, President

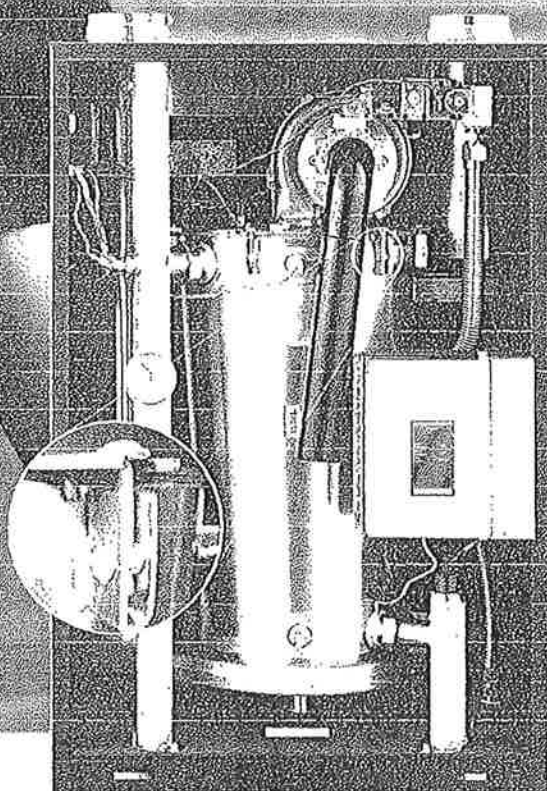
Date _____

Acceptance of Proposal – The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Final payment will be made within 30 days of completion.

Acceptance Signature _____ Date _____

Option #1

More Features Built-in

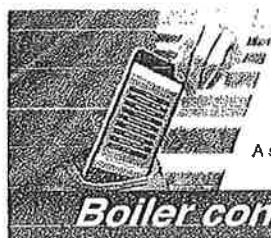


SL 40-399

40,000 to 399,000 BTU/H

Commercial / Large Residential Condensing Boiler

- **New Touch Screen V-10 Boiler Control**
Express set up, Remote monitoring & diagnostics, Easy USB programmability, Optional true native BACnet, Intuitive alert system.
- Multi-boiler communication up to 9.5 million Btu/h (24 boilers) without additional controls.
- PVC/CPVC/PPs approved - venting up to 400 feet.
- Built-in CSA/UL approved LWCO and manual reset high limit.
- With 24 boilers turndown ratio is 240:1 = min. firing rate range is 40,000 Btu/h all the way up to 9.5 million Btu/h in 1000 Btu/h increments.
- Built-in multiple zone pump control - up to 4 zones replacing the need for external pump controls.
- Built-in outdoor reset control of water temperature.
- **Moisture Technology:** Patented moisture management system. Protects and ensures long life for all components in the boiler.
- New and innovative side bolt heat exchanger lid configuration.
- DDC Control 0-10 VDC or 4-20 mA without additional controls.
- Optional 316 Ti titanium heat exchanger.
- DHW opt out priority for multi boiler systems.
- Reverse flow detection.



V-10 PORTAL

A secure method of remotely managing your SL Boiler from any location.

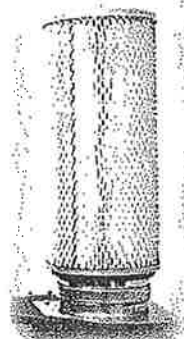
Boiler control on the go!



Optional Accessories Available

Description	Part No.	Description	Part No.
Secondary Loop Sensor	240-033	60 PSI Refill Valve	180-059
Stainless Steel Well	180-053	TC4-MJ Test and Check	180-053
Ext. Water H-Limit Manual Reset	180-054	LWCO Piping Kit - 389	P-186
2 1/2" Tri-Stat	180-018	BACnet - Addressation	703-032
Condensate Neutralizer Tank	180-048	Air Vent Piping Kit	P-185B
Condensate Neutralizer Refill	180-018	30 PSI Refill Valve	180-025
1" Air Intake Filter	P-172	45 PSI Refill Valve	180-076
FE-4 Flow Switch	180-079	60 PSI Refill Valve	180-077
FS-10 Flow Switch	180-079D	75 PSI Refill Valve	180-078

Low Loss Headers		
Size	Part No.	Max GPM
NON ASME RATED		
3" LL Header	180-055	124 GPM
4" LL Header	180-057	247 GPM
ASME RATED		
3" LL Header (ASME)	180-058	124 GPM
4" LL Header (ASME)	180-059	247 GPM
6" LL Header (ASME)	180-080	424 GPM



P-172 Air Intake Filter mounted directly onto an SL 40-399 boiler



180-048 Condensate Neutralization Tank

SL 40-399 Technical Information

Specifications	SL 40-399G3
CSA Input (Natural Gas or Propane) - MBH	40 - 389
CSA Input (Natural Gas or Propane) - KW	11.7 - 117
CSA Output - MBH	33.4 - 383
CSA Output - KW	11.2 - 112
Combustion Efficiency (B16-2000 Thermal Efficiency)	88%
Min gas pressure (NG or Propane) - inch w.c.	4
Max gas pressure (NG or Propane) - inch w.c.	14
Ambient temperature - Low (°F/°C)	32°F / 0°C
Ambient temperature - High (°F/°C)	122°F / 50°C
Max relative humidity (non-condensing)	90%
Min water temperature	34°F / 1°C
Max programmable water temperature limit	180°F / 82°C
Max water temperature lockout limit	201°F / 94°C
Max ΔT - supply / return (electronic fence)	40°F
Power use (120V/60Hz) - Watts @ full fire - Watts	190 (less pumps)
Weight (empty) - lbs/kg	240 / 110
Heating Surface Area - ft²/m²	36.55 / 3.40
Pressure vessel water content - USGallons	6.65 / 25.20
Max boiler flow rate - USGpm	45
Min boiler flow rate - USGpm	20
Max operating pressure - psig	80
Min water pressure - psig	8
Approved installation altitude - ASL	0 - 12,000'
Maximum equivalent vent length, each side (Natural Gas or Propane)	4"
Air Intake options: either direct vent or indoor supply	

Exhaust pipe size	Maximum equivalent length
Sched 40, Rigid PPA	200'
4"	200'
90° Vent elbow	allow 8' equivalent
90° Long sweep elbow	allow 5' equivalent
45° Elbow	allow 3' equivalent
PPA 87-93° Elbow	use 8' equivalent
3" SS Schematic Terminal (SST)	allow 65' equivalent
3" CPVC (to adapt to the SST)	for each 1' allow 3.2' equivalent
Flexible PPA	
4" Flexible	160' max, using 1.2 x for equivalent length

Surface	Distance from combustible surfaces	Recommended distance for installation and service
Front	2"	24"
Rear	0"	0"
Left side	1"	0" (to non-combustibles)
Right side	1"	4" (for electric and gas if required)
Top	12"	12" (for vent connection)
Bottom	12"	12" (for condensate trap and piping)



IBC Technologies Inc.
info@ibcboiler.com • www.ibcboiler.com
Toll Free: 1-844-HEAT IBC / 1-844-432-8422



British Columbia
8015 North Fraser Way
Burnaby, BC V5J 5M8
Tel: 604-877-0277
Fax: 604-877-0295

Ontario
Unit 5, 1455 16th Ave.,
Richmond Hill, ON L4B 4W5
Tel: 905-818-0113
Fax: 904-877-0295



Wisconsin
4507 South Taylor Drive,
Sheboygan, WI 53081
Tel: 920-783-8340
Fax: 920-783-8339

New Jersey
Unit 1, 1100 Taylors Lane,
Chatham, NJ 08077
Tel: 856-887-0544
Fax: 856-735-5584



Option #2

P-K SONIC

Boiler Models SC-650, SC-750, SC-850 & SC-1000

High Pressure, Industrial Grade, Cast Iron, Steel, or Stainless Steel Boilers
Vertical or Horizontal, Single or Dual Fuel, Natural Gas or Propane



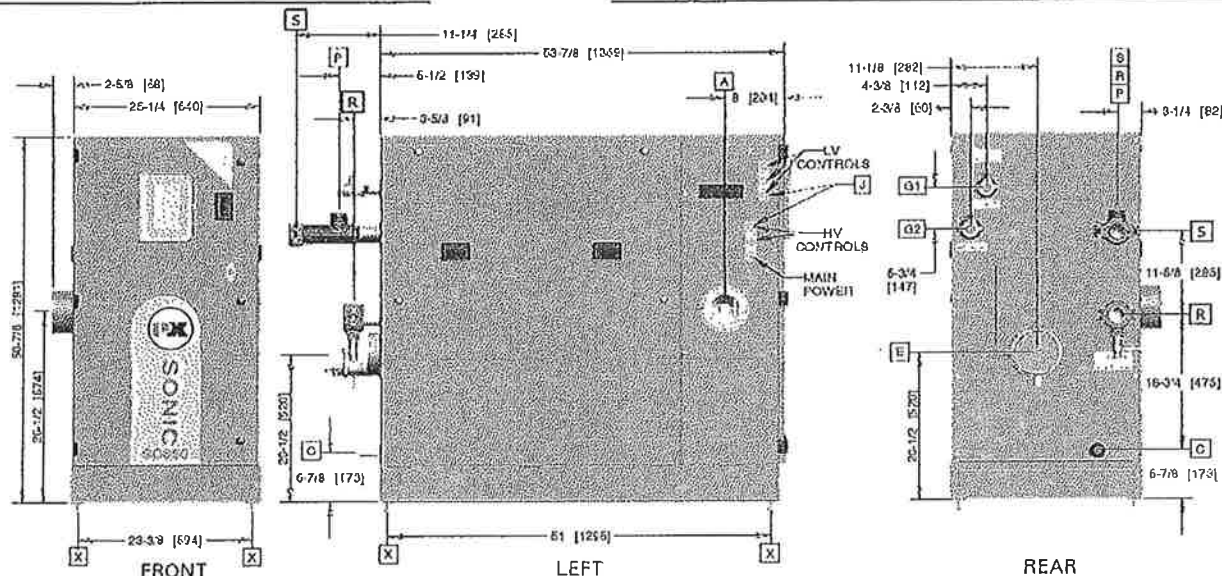
Patterson-Kelley

Rep Name: _____

Email: _____

Phone Number: _____

Date: _____



Primary dimensions are in inches. The secondary dimensions, [in brackets], are in millimeters.

This SONIC boiler requires Category IV venting (condensing-positive pressure) or Category II venting¹ (condensing-negative pressure as defined in ANSI Z223.1/NFPA 54/CSA-B.149 latest edition).

¹Category II venting must include the optional combustion air damper

BOILER CONNECTIONS	
A Combustion Air Inlet	6" dia. stub
C Condensate Drain	3/4" hose
E Exhaust Vent	6"
G1 Propane Gas	1" NPT-F
G2 Natural Gas	1" NPT-F
J Wiring Junction Boxes	knife cabinet
P Pressure Relief Valve	see list for options
R ¹ Boiler Return, Victaulic clamp	2" pipe, grooved
S ¹ Boiler Supply, Victaulic clamp	2" pipe, grooved
X Anchor Bolt Locations	(4) 1/2" Bolt Holes

¹SCD Hot Water Supply Boiler models terminate with 2" copper tube, grooved

BOILER CONTROLS	
ASME CSD-1 is standard	
Complies with: GE GAP (RI) guidelines GAP.4.1.0 and GAP.4.1.3	
FM Global 6-4 Section 1.0	
Main Gas Train with Dual Shut-off	
Integrated Boiler Control, NURO Series	
Operating Thermostat, 42°-195°F (5.6°-81°C)	
High Limit Thermostat, Manual Reset, 160°-197°F (38°-92°C)	
High Exhaust Back Pressure Switch	
LVCO/Flow Switch, Paddle Type (Optional LWCO, Probe Type)	
Combustion Air Proving Switch, Differential Pressure Type	
Combustion Blower, Variable Speed, 350 Watt (SC-650-750-850) & 950 Watt (SC-1000)	

A.S.M.E. SECTION IV DESIGN DATA	SC-650	SC-750	SC-850	SC-1000
Max Pressure	160 PSIG	160 PSIG	160 PSIG	160 PSIG
Max Allowable Temperature	210°F	210°F	210°F	210°F
Max Operating Temperature	194°F	194°F	194°F	194°F
Heated Wet Surface Area	76.2	76.2	87	87
Flow Rate @ 20°FΔT	62	72	82	92
Min Flow Rate @ All Firing Rates (Flow Switch Setting)	25	25	30	30

MODEL SELECTION				
Boilers	SC-650	SC-750	SC-850	SC-1000
Hot Water Supply Boilers	SCD-650	SCD-750	SCD-850	SCD-1000
Fuel Options	DUAL FUEL	DUAL FUEL	DUAL FUEL	DUAL FUEL
Min Inlet Gas Pressure	3.5 w.c.	3.5 w.c.	3.5 w.c.	3.5 w.c.
Max Inlet Gas Pressure	14" w.c.	14" w.c.	14" w.c.	14" w.c.
Max Input (BTU/hr)	650,000	750,000	850,000	1,000,000
Max Output (BTU/hr)	612,000	706,000	800,000	923,000
Boiler HP	18.3	21.1	23.9	27.5
Min Input (BTU/hr)	125,000	125,000	141,000	143,000
Turndown Ratio	5.2:1	6:1	6:1	7:1
Operating & Shipping Weight ¹	780 lbs.	780 lbs.	800 lbs.	810 lbs.
Recovery Rate (gph)	734.4	847.2	960	1107.8
Boiler Water Content	<10 gallons			
Shipping Dimensions	84"x36"x57" (LxWxH)			
Power Supply	120V 1ph 60 Hz			
Operating Current	< 5 Amps			
Recommended Minimum Circuit Capacity	10 Amps			

¹Add 50 lbs. to the listed values when configuring a dual fuel model

PRESSURE RELIEF VALVE/PRESSURE-TEMPERATURE GAUGE	
Shipped Loose for Field Installation	
30 PSIG 1"x 1"	0-100 psi/30-240°F
50 PSIG 1"x 1-1/4"	0-100 psi/30-240°F
60 PSIG 1"x 1"	0-100 psi/30-240°F
75 PSIG 1"x 1"	0-240 psi/30-240°F
80 PSIG 1"x 1"	0-240 psi/30-240°F
100 PSIG 1"x 1-1/4"	0-240 psi/30-240°F
125 PSIG 1"x 1"	0-240 psi/30-240°F
150 PSIG 1"x 1"	0-240 psi/30-240°F

RECOMMENDED CLEARANCE FOR SERVICE ACCESS				
Front - 26"	Rear - 0"	Top - 12"	Left Side - 24"	Right Side - 0"

Notes:

¹Victaulic is a registered trademark of Victaulic Company, Easton, PA, USA

Harsco Industrial Patterson-Kelley reserves the right to make changes at any time without notification

Dual fuel models are not designed to run both fuels simultaneously



PROPERTY
HARSCO INDUSTRIAL PATTERSON-KELLEY
P.O. BOX 1000

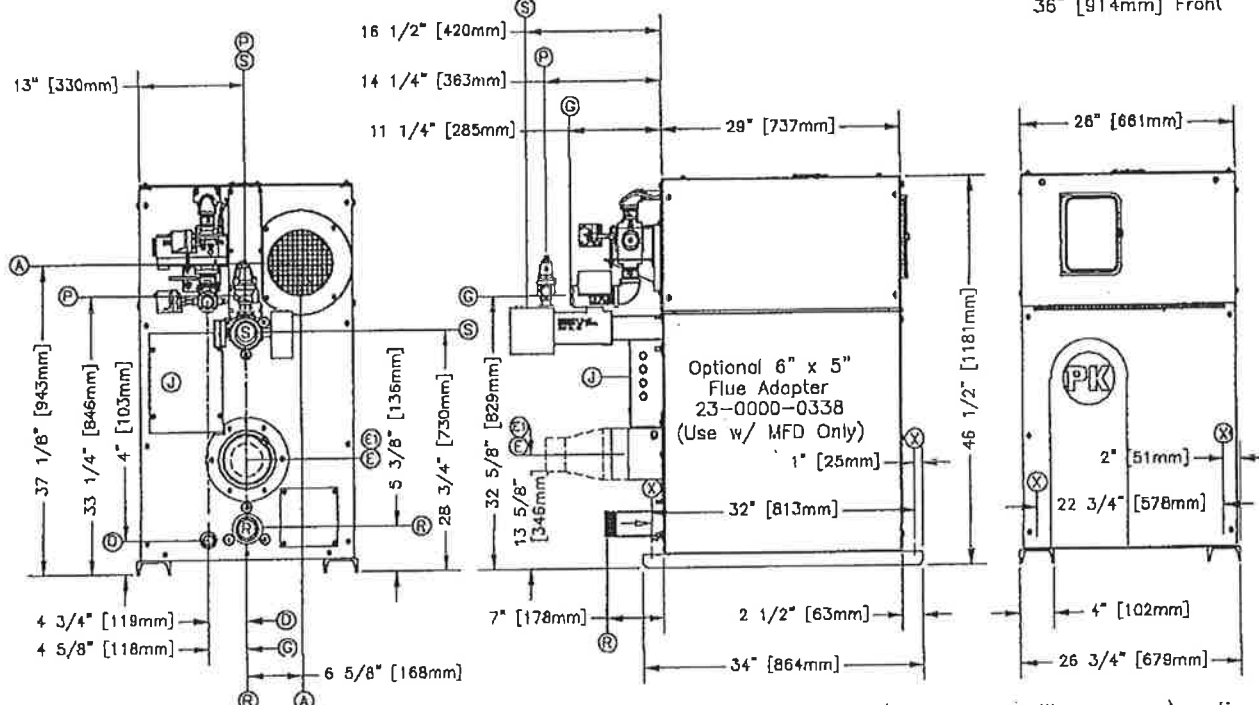
Option #3

MODU-FIRE® Forced Draft Boiler Models N750MFD & N1000MFD

VELOX™ Boiler Models N750VX & N1000VX

w/ NURO® Control

Service Clearances:
24" [610mm] Both Sides
24" [610mm] Above
36" [914mm] Front



MODU-FIRE® FD boilers require Category II (condensing-negative pressure) or Category IV (condensing-positive pressure) venting and VELOX™ boilers require Category I (non-condensing) venting as defined in ANSI Z223.1/NFPA 54/CSA-B.149 Latest Edition. Harsco Industrial, Patterson-Kelley reserves the right to make changes at any time without notification.

BOILER CONNECTIONS:

(A) Combustion Air Inlet	8" dia
(D) Drain (Fireside)	3/4" NPT-M
(E) Exhaust Vent	6" OD Nominal
(G) Exhaust Vent (With Adaptor - MFD Only)	5"
(C) Main Gas Connection	1 1/4" NPT-F
(J) Wiring Junction Box	
(P) Pressure Relief Valve	see list for selection
(R) Boiler Water Return	2 1/2" NPT-M
(S) Boiler Water Supply	2 1/2" NPT-F
(X) Anchor Bolt Location	(4) 3/4" dia holes

BOILER CONTROLS: ASME CSD-1 is standard.
Complies with GE GAP (IR) guidelines GAP.4.1.0 and GAP.4.1.3.
Complies with FM Global 8-4/12-69 Section 1.0

Main Gas Train: see gas train submittal

Integrated Boiler Control, NURO® Series

Operating Thermostat, 130°-220°F (54.4°-104°C)

High Limit Thermostat, Manual Reset, 100-240°F (38°-116°C)

High Exhaust Temperature Switch, Manual Reset

High Exhaust Back Pressure Switch

LWCO/Flow Switch, Paddle Type

Air Switch, Differential Pressure Type

Combustion Blower, Variable Speed, 0.5hp

A.S.M.E. Section IV Design Data - "H" Stamp

Maximum Pressure	160 psig
Maximum Temperature	250°F
Heating Surface	116 sq ft

FACTORY OPTIONS:

- ☐ Probe Type Low Water Cut Off, Manual Reset (factory installed)
- ☐ Probe Type Low Water Cut Off, Manual Reset (shipped loose)

C.S.A. CERTIFIED RATINGS AND CAPACITIES

Max Input BTU/Hr	750,000	1,000,000
Max Output BTU/Hr	638,000	850,000
Boiler HP	19.0	25.4
Max/Min Flow GPM	120/60	150/80
MFD Boiler Model	N750MFD	N1000MFD
Turndown Ratio	3:1	5:1
Min Input BTU/Hr	150,000	166,000
VELOX Boiler Model	N750VX	N1000VX
Turndown Ratio	1.2:1	1.6:1
Min Input BTU/Hr	604,000	610,000
Fuel	<input checked="" type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
Max Gas Pressure	14" w.c.	
Min Gas Pressure	NG-3.5" / LP-7" w.c.	
Power Requirements	<input checked="" type="checkbox"/> 120v, 1ph, 60hz <input type="checkbox"/> 208-240v, 1ph w/neutral, 60hz	
Max Operating Amps	Less than 6 Amps	
Operating Weight	800 Lbs.	
Water Content	6.2 Gallons	

Pressure Relief Valve/Press-Temp Gauge Shipped Loose for Field Installation

<input type="checkbox"/> 30 PSIG 1 1/4"	0-100psi/70-320°F
<input type="checkbox"/> 50 PSIG 1" x 1 1/4"	0-100psi/70-320°F
<input checked="" type="checkbox"/> 60 PSIG 1"	0-100psi/70-320°F
<input type="checkbox"/> 75 PSIG 1"	0-240psi/70-320°F
<input type="checkbox"/> 80 PSIG 3/4" x 1"	0-240psi/70-320°F
<input type="checkbox"/> 100 PSIG 3/4"	0-240psi/70-320°F
<input type="checkbox"/> 125 PSIG 3/4"	0-240psi/70-320°F
<input type="checkbox"/> 150 PSIG 3/4"	0-240psi/70-320°F

HARSCO
INDUSTRIAL

Patterson-Kelley
N750MFD--N1000MFD&N750VX--N1000VX _NURO
01.30.18



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

06/07/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Brandon Mueller Agency LLC 206 South 3rd Street Watertown WI 53094		CONTACT NAME: Brandon Mueller PHONE (A/C, Ho, Ext): (920) 262-9775 FAX (A/C, Ho): (920) 262-9761 EMAIL ADDRESS:	
INSURED Richter Heating & Air Conditioning Inc. 421 Water Tower Court Watertown WI 53094		INSURER(S) AFFORDING COVERAGE INSURER A: Rural Mutual Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	

REVISION NUMBER:

COVERAGES **CERTIFICATE NUMBER:** **THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.**

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GENL AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	N	N	CPPG142955	03/15/2018	03/15/2019	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPROP AGG \$ 2,000,000	
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	N	N	BAPG134282	06/06/2018	06/06/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$	
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10000	N	N	CPPG142955	03/15/2018	03/15/2019	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000	
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/ MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N Y	N/A	N	WRKG134280	06/06/2018	06/06/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 100,000 E.L. DISEASE - EA EMPLOYEE \$ 100,000 E.L. DISEASE - POLICY LIMIT \$ 500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Jefferson County Human Services
1541 Annex road
Jefferson WI 53549

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Brandon Mueller

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February 15, 2019

Proposal #: 019700253-000

Project Location:
Jefferson, WI

Project Name: Jefferson County Workforce
Development

Following Scope of Work is based off bid advertisement dated 1-19-19

Scope of Work (Base Bid):

- PK Boiler/pumps
 - Furnish and install 2 PK model N750-vx boilers⁹ (CSD-1)
 - Furnish and install 2 Armstrong 4360-2b pumps
 - Remove 2 existing PK boilers
 - Reconnect new boilers to existing venting, gas piping, and hydronic piping
 - Piping method to be grooved (Victaulic)
 - Extend existing housekeeping pads
- Controls
 - Owner provided
 - Sun Mechanical will coordinate with owner's controls contractor
- Electrical
 - Owner provided
 - Sun Mechanical will coordinate with owner's electrical contractor

Lead Time:

- Boilers: 3-4 weeks
- Pumps: 6-8 weeks

Estimated Completion Date:

- 5-1-19

Qualifications:

- Both existing boilers will need to be removed for clearances of installation of both new boilers

Exclusions:

- Tax (tax exempt project)

BASE BID TOTAL:

\$40,100.00

ALTERNATE 1 (condensing boiler option):

- Boilers and pumps
 - Furnish and install 2 Lochinvar FTX725 boilers (CDS-1)
 - Furnish and install 2 Calefactio Neutralizer Kit (condensate piping to nearest floor drain included)
 - Furnish and install 2 Taco 1935 series pumps
 - Furnish and install 2 new Multipurpose valves
 - Furnish and install 2 new low water cutoffs
 - Remove existing PK boilers
 - Furnish and install PVC exhaust and intake piping
 - Extend housekeeping pad for both boilers
 - Piping method to be grooved (Victaulic)
- Controls
 - Owner provided
 - Sun Mechanical will coordinate with owner's controls contractor
- Electrical
 - Owner provided
 - Sun Mechanical will coordinate with owner's electrical contractor
- Focus on Energy
 - Boilers are eligible for Focus on Energy
- Permit
 - Included in proposal

Lead Time:

- Boilers: 3-4 weeks
- Pumps: 6-8 weeks

Estimated Completion Date:

- 5-1-19

Qualifications:

- Both existing boilers will need to be removed for clearances of installation of both new boilers

Exclusions:

- Tax (tax exempt project)

ALTERNATE TOTAL (ADD TO BASE BID):

\$50,500.00

If you have any questions, please do not hesitate to call me.

Sincerely,

Ronak Patel

Project Manager

Please Sign for Acceptance

Signature: _____

Date: _____

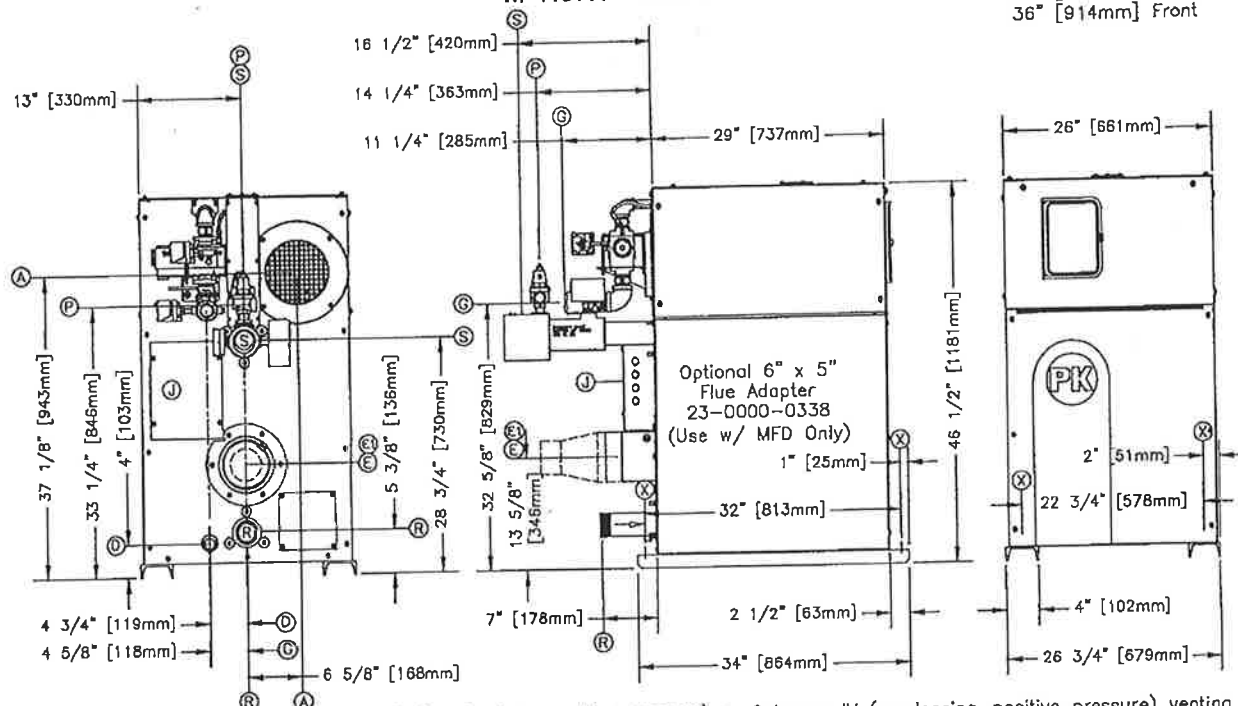
Sun Mechanical. • 2340 Chaparrel Dr • Janesville, WI 53546
Phone: (608) 931-6066

MODU-FIRE® Forced Draft Boiler Models N750MFD & N1000MFD

VELOX™ Boiler Models N750VX & N1000VX

w/ NURO® Control

Service Clearances:
24" [610mm] Both Sides
24" [610mm] Above
36" [914mm] Front



MODU-FIRE® FD boilers require Category II (condensing-negative pressure) or Category IV (condensing-positive pressure) venting and VELOX™ boilers require Category I (non-condensing) venting as defined in ANSI Z223.1/NFPA 54/CSA-B.149 Latest Edition. Harsco Industrial, Patterson-Kelley reserves the right to make changes at any time without notification.

BOILER CONNECTIONS:	
(A) Combustion Air Inlet	8" dia
(D) Drain (Fireside)	3/4" NPT-M
(E) Exhaust Vent	6" OD Nominal
(E) Exhaust Vent (With Adapter - MFD Only)	5"
(G) Main Gas Connection	1 1/4" NPT-F
(J) Wiring Junction Box	
(P) Pressure Relief Valve	see list for selection
(R) Boiler Water Return	2 1/2" NPT-M
(S) Boiler Water Supply	2 1/2" NPT-F
(X) Anchor Bolt Location	(4) 3/4" dia holes

BOILER CONTROLS: ASME CSD-1 is standard.
Complies with GE GAP (IRI) guidelines GAP.4.1.0 and GAP.4.1.3.
Complies with FM Global 6-4/12-69 Section 1.0

Main Gas Train: see gas train submittal
Integrated Boiler Control, NURO® Series
Operating Thermostat, 130°-220°F (54.4°-104°C)
High Limit Thermostat, Manual Reset, 100-240°F (38°-116°C)
High Exhaust Temperature Switch, Manual Reset
High Exhaust Back Pressure Switch
LWCO/Flow Switch, Paddle Type
Air Switch, Differential Pressure Type
Combustion Blower, Variable Speed, 0.5hp

A.S.M.E. Section IV Design Data -- "H" Stamp

Maximum Pressure	160 psig
Maximum Temperature	250°F
Heating Surface	116 sq ft

FACTORY OPTIONS:

- ☐ Probe Type Low Water Cut Off, Manual Reset (factory installed)
- ☐ Probe Type Low Water Cut Off, Manual Reset (shipped loose)

C.S.A. CERTIFIED RATINGS AND CAPACITIES		
Max Input BTU/Hr	750,000	1,000,000
Max Output BTU/Hr	638,000	850,000
Boiler HP	19.0	25.4
Max/Min Flow GPM	120/60	150/80
MFD Boiler Model	N750MFD	N1000MFD
Turndown Ratio	8:1	5:1
Min Input BTU/Hr	150,000	166,000
VELOX Boiler Model	N750VX	N1000VX
Turndown Ratio	1.2:1	1.6:1
Min Input BTU/Hr	604,000	610,000
Fuel	<input checked="" type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
Max Gas Pressure	14" w.c.	
Min Gas Pressure	NG-3.5" / LP-7" w.c.	
Power Requirements	<input checked="" type="checkbox"/> 120v, 1ph, 60hz <input type="checkbox"/> 208-240v, 1ph w/neutral, 60hz	
Max Operating Amps	Less than 6 Amps	
Operating Weight	800 Lbs.	
Water Content	6.2 Gallons	

Pressure Relief Valve/Press-Temp Gauge Shipped Loose for Field Installation		
<input type="checkbox"/> 30 PSIG	1 1/4"	0-100psi/70-320°F
<input type="checkbox"/> 50 PSIG	1" x 1 1/4"	0-100psi/70-320°F
<input checked="" type="checkbox"/> 60 PSIG	1"	0-100psi/70-320°F
<input type="checkbox"/> 75 PSIG	1"	0-240psi/70-320°F
<input type="checkbox"/> 80 PSIG	3/4" x 1"	0-240psi/70-320°F
<input type="checkbox"/> 100 PSIG	3/4"	0-240psi/70-320°F
<input type="checkbox"/> 125 PSIG	3/4"	0-240psi/70-320°F
<input type="checkbox"/> 150 PSIG	3/4"	0-240psi/70-320°F

HARSCO
INDUSTRIAL
Patterson-Kelley
N750MFD-N1000MFD&N750VX-N1000VX_NURO
01.30.18



Lochinvar®

HIGH EFFICIENCY BOILERS & WATER HEATERS

FTXL FIRE TUBE CONDENSING BOILER

Submittal Sheet

FTX-Sub-03

FTXL FIRE TUBE COMMERCIAL BOILERS

Job Name: Jefferson County Model No. _____

Location: _____ Type Gas: _____

Engineer: _____ Equipment Tag(s): _____

Wholesaler: _____

Contractor: Sun Mechanical

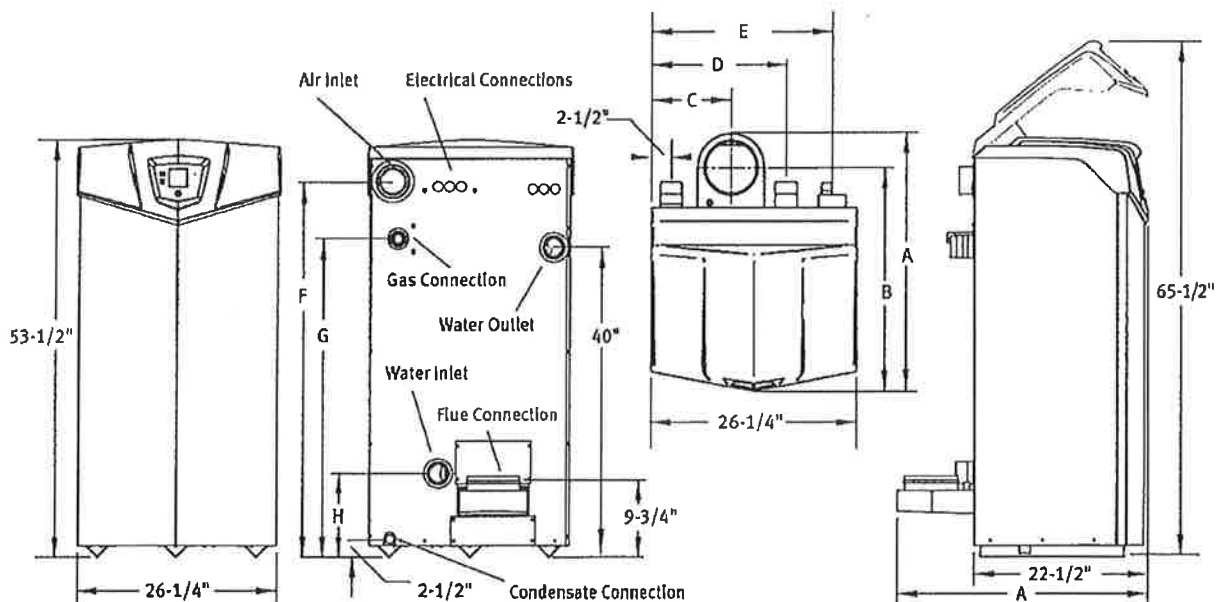
NOTES:

FOR EASE IN ORDERING
BY MODEL NUMBER

FTX	850	N	M13
FTX Boiler	850,000 Btu/hr Input	Natural Gas	Firing Control

This model is:

- FTXL Fire Tube boiler
- 850,000 Btu/hr
- Natural gas
- M13 Firing Controls



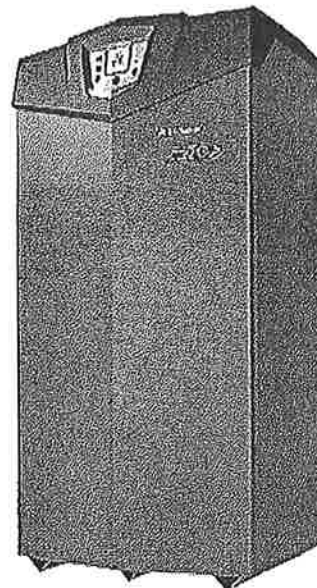
FTXL Boiler										Dimensions and Specifications												
Model No.	Input Min MBH	Input Max MBH	Thermal Eff.	Gross Output MBH	NET AHRI Rating MBH	Turn down	Flow (GPM) Min	Flow (GPM) Max	HEX Water Volume	A	B	C	D	E	F	G	H	Water Conn.	Vent Size	Air Intake	Gas Conn.	Ship Wt. (lbs.)
○ FTX850(N,L)	40.0	399.9	98.0%	392	341	10:1	10	105	13	30-1/2"	27-1/2"	10-1/4"	17"	23-1/4"	46-1/4"	31-1/2"	10-3/4"	2"	4"	4"	1"	435
○ FTX500(N,L)	50.0	500.0	97.7%	489	425	10:1	15	105	12	30-1/2"	27-1/2"	10-1/4"	17"	23-1/4"	46-1/4"	31-1/2"	10-3/4"	2"	4"	4"	1"	440
○ FTX600(N,L)	65.0	600.0	97.5%	585	508	7:1	15	105	12	30-1/2"	27-1/2"	10-1/4"	17"	23-1/4"	46-1/4"	31-1/2"	10-3/4"	2"	4"	4"	1"	470
✓ FTX250(N,L)	103.5	725.0	97.2%	705	613	7:1	20	150	17	33"	28-1/2"	10-1/2"	17-1/2"	23-1/2"	48-1/2"	41-1/4"	11"	2-1/2"	6"	4"	1"	510
○ FTX150(N,L)	121.5	850.0	97.0%	825	717	7:1	25	150	16	33"	28-1/2"	10-1/2"	17-1/2"	23-1/2"	48-1/2"	41-1/4"	11"	2-1/2"	6"	4"	1"	535

*Information subject to change without notice. Dimensions are in inches. Select "N" or "L" for Natural or LP gas. *The Net AHRI Water Ratings shown are based on a piping and pickup allowance of 1.15. *Lochinvar should be consulted before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc. *The ratings have been determined under the provisions governing forced draft burners.

FTXL™

FIRE TUBE BOILER

CON-X-US® REMOTE CONNECT CAPABLE
CASCADING SEQUENCER
LOCH-N-LINK™ USB DRIVE SETUP
5 INPUTS FROM 399,999 TO 850,000 BTU/HR
UP TO 10:1 TURNDOWN RATIO
COMMON VENT AND PVC DIRECT-VENTING
FLOW RATES FROM 10 TO 150 GPM
SMALL 6.2 SQ. FT. FOOTPRINT
4 PUMP CONTROL
WIRELESS OUTDOOR SENSOR CAPABLE



Smart System Features

- › **Smart System Digital Operating Control**
Multi-Color Graphic LCD Display w/Navigation Dial
- › **Loch-N-Link™ USB Thumb Drive Port for Easy Programming**
- › **Cascading Sequencer with Built-In Redundancy**
Selectable Cascade Type:
Lead Lag/Efficiency Optimization
Multiple Size Boilers
Front-End Loading
- › **3 Reset Temperatures Inputs w/Independent Outdoor Reset Curves for Each Outdoor Sensor**
- › **Four-Pump Control**
System Pump with Parameter for Continuous Operation
Boiler Pump with Variable-Speed Control
Domestic Hot Water Boiler Pump
Domestic Hot Water Recirculation Pump Control with Sensor
- › **Building Management System Integration**
0-10 VDC Input to Control Modulation or Setpoint
0-10 VDC Input from Variable-Speed System Pump
0-10 VDC Modulation Rate Output Signal
0-10 VDC Enable/Disable Signal
- › **Programmable System Efficiency Optimizers**
Space Heating Night Setback
DHW Night Setback
Anti-Cycling
Ramp Delay
Boost Time and Temperature
- › **High-Voltage Terminal Strip**
120 VAC/60 Hertz/1 Phase
Pump Contacts for 3 Pumps
- › **Low-Voltage Terminal Strip**
Building Recirculation Pump Start/Stop
Building Recirculation Return Temp Sensor
Contacts
Proving Switch Contacts
Flow Switch Contacts
Alarm Contacts

- Runtime Contacts
 - 3 Space Heat Thermostat Contacts
 - Tank Thermostat Contacts
 - System Sensor Contacts
 - Tank Sensor Contacts
 - Cascade Contacts
 - 0-10 VDC BMS Contacts
 - 0-10 VDC Boiler Rate Output Contacts
 - 0-10 VDC Boiler Pump Speed Contacts
 - 0-10 VDC System Pump Speed Contacts
 - ModBus Contacts
- › **Time Clock**
- › **Data Logging**
Ignition Attempts
Last 10 Lockouts
Space Heat Run Hours
Domestic Hot Water Run Hours

Standard Features

- › **97%-98% Thermal Efficiency**
- › **Modulating Burner with up to 10:1 Turndown**
Direct Spark Ignition
Low NOx Operation
Sealed Combustion
Low Gas Pressure Operation
- › **Stainless Steel Fire-Tube Heat Exchanger**
ASME-Certified, "H" Stamped
160 psi Working Pressure
50 psi Relief Valve
Combustion Analyzer Test Port
Fully Welded Design
- › **Vertical and Horizontal Direct Vent**
Direct Vent up to 100 feet
PVC, CPVC, Polypropylene or AL29-4C
Factory Supplied Sidewall Vent Termination
- › **Smart System Control**
- › **Other Features**
On/Off Switch
Adjustable High Limit with Manual Reset
Automatic Reset High Limit

- Manual Reset Low Water Cutoff
- Flue Temperature Sensor
- Low Air Pressure Switch
- Temperature and Pressure Gauge
- Condensate Trap
- Zero Service Clearances
- 10-Year Limited Warranty
- Low Water Cutoff
- Custom Maintenance Reminder with Contact Info
- Password Security
- Customizable Freeze Protection Parameters

Optional Equipment

- ☐ CON-X-US Remote Connectivity
- ☐ ModBus Communication
- ☐ BMS Gateway to BACnet or LonMark
- ☐ SMART SYSTEM PC Software
- ☐ Alarm Bell
- ☐ Motorized Isolation Valve
- ☐ Wireless Outdoor Temperature Sensor
- ☐ Multi-Temperature Loop Control
- ☐ Variable-Speed Boiler Circulator
- ☐ Constant-Speed Boiler Circulator
- ☒ Condensate Neutralization Kit
- ☐ Concentric Vent Kit (FTX400-FTX600)
- ☐ Common Vent Kits
- ☒ High and Low Gas Pressure Switches w/Manual Reset (FTX500-FTX850)
- ☐ 30 psi ASME Relief Valve
- ☒ 75 psi ASME Relief Valve 50 psi ASME relief
- ☐ 100 psi ASME Relief Valve
- ☐ 125 psi ASME Relief Valve
- ☐ 150 psi ASME Relief Valve
- › **Firing Controls**
 - ☐ M9 - Standard Construction
 - ☒ M13 - CSD-1/FM/GE Gap (FTX500-FTX850)



Lochinvar, LLC
300 Maddox Simpson Parkway
Lebanon, Tennessee 37090
P: 615.889.8900 / F: 615.547.1000
f t i n Lochinvar.com





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
02/14/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER State Farm 305 S Main St Janesville, WI 53545	CONTACT NAME: Don Gerharz PHONE (A/C No, EX): 608-741-1122 FAX (A/C No): 608-741-1124 E-MAIL: don.gerharz.q618@statefarm.com ADDRESS: don.gerharz.q618@statefarm.com
INSURED SUN MECHANICAL LLC 2340 CHAPARREL DR JANESVILLE WI 53546-3139	INSURER(S) AFFORDING COVERAGE INSURER A: State Farm Fire and Casualty Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
	NAIC # 25143

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADOLISUBR INSR LTR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY		99-CC-T410-1 F	10/10/2018	10/10/2019	EACH OCCURRENCE \$ 2,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					DAVAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					MED EXP (Any one person) \$ 5,000
	GEN'L AGGREGATE LIMIT APPLIES PER					PERSONAL & ADV INJURY \$ 2,000,000
	POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/>					GENERAL AGGREGATE \$ 4,000,000
	AUTOMOBILE LIABILITY					PRODUCTS - COMPROP AGG \$ 4,000,000
	ANY AUTO					
	ALL OWNED AUTOS					COMBINED SINGLE LIMIT (Ea accident) \$
	LORED AUTOS					BODILY INJURY (Per person) \$
	SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB					\$
	EXCESS LIAB					EACH OCCURRENCE \$
	OCCUR					AGGREGATE \$
	CLAIMS-MADE					\$
	DEF <input type="checkbox"/> RETENTION \$					\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY					WC STATU-TORY LIMITS \$
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICEMEMBER EXCLUDED? (Mandatory in NH)	Y/N				OTL-ER \$
	If yes, describe under DESCRIPTION OF OPERATIONS below					E L EACH ACCIDENT \$
						E L DISEASE - EA EMPLOYEE \$
						E L DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Web: www.1901inc.com

Phone: 608.273.3434

Fax: 608.273.9654



Mailing Address:

2801 Syene Road
Madison, WI 53713-3203

DATE: Feb. 15, 2019

QUOTATION

TO: JEFFERSON COUNTY
Ryan Mundt, Maintenance Supervisor

RE: Replacement Two Boilers at Workforce Development

We are pleased to offer our quotation for the replacement work based on the following scope of work:

Including:

- Provide boilers, pumps, triple duty valves disconnection and removal as required
- Provide Two PK model N750-VX Velox non-condensing boilers, 750,000 BTU/Hr input, direct replacements
- Furnish Protonode BACnet protocol converter with boilers
- Provide hot water, gas, flue and combustion air pipe reconnections
- Provide two new boiler recirculation pumps and two new triple duty valves
- Test, Adjust and Balance two new pumps
- Pipe Insulation as required
- Local HVAC Permit Fees
- Test, Startup and one-year warranty all parts and labor
- Owner Training

Exclusions:

- Cost of bond
- Sales Taxes
- Electrical disconnections and reconnections
- Temperature Controls work
- Temporary heat or ventilation
- Asbestos and Lead abatement
- Removal of hazardous / toxic materials
- Concrete work at pads (if needed)
- Overtime
- MBE participation

Web: www.1901inc.com

Phone: 608.273.3434

Fax: 608.273.9654



Mailing Address:

2801 Syene Road
Madison, WI 53713-3203

TOTAL BASE BID PRICE:

\$49,280.00

ALTERNATE ADD TO BASE BID:

TWO NEW HI EFFICIENCY 600,000 CONDENSING BOILERS

\$8,970.00

Additional work required over and beyond Base Bid items:

- We disconnect and remove existing boilers flues and combustion air piping
 - Provide new boilers exhaust flues and combustion air to area well per code
 - Provide acid neutralization at each new boiler
- Note concrete pads need to be extended by owner

Estimating Direct Phone: 608-268-5963

Please call the undersigned if we can be of any assistance. We look forward to working with you on this project.

Sincerely,

1901 Mechanical & Plumbing

Mike Casper

Project Estimator

mcasper@1901inc.com



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
1/9/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER M3 Insurance Solutions, Inc. 828 John Nolen Drive Madison WI 53713		CONTACT NAME: Kimberly Zimmerman PHONE (A/C, No, Ext): 608-288-2738 E-MAIL ADDRESS: kimberly.zimmerman@m3ins.com FAX (A/C, No):		
INSURED 1901 Inc 2801 Syene Road Madison WI 53713 H&HINDU-01		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A: Amerisure Insurance Company		
		INSURER B: Nautilus Insurance Company		
		INSURER C: Amerisure Mutual Insurance		
		INSURER D:		
		INSURER E:		
INSURER F:				

COVERAGES CERTIFICATE NUMBER: 1591648907 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC OTHER:			CPP21038040201	1/1/2019	1/1/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/OP AGG \$ 2,000,000 \$
C	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			CA21038030202	1/1/2019	1/1/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0			CU21038050202	1/1/2019	1/1/2020	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	WC210380602	1/1/2019	1/1/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 100,000 E.L. DISEASE - EA EMPLOYEE \$ 100,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
B	Prof./Pollution			CCP2016441	1/1/2019	1/1/2020	2,000,000
A	Leased/Rented Equip Installation			CPP21038040201	1/1/2019	1/1/2020	100,000 Installation Floater 650,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
1901 Inc. will meet any higher insurance requirements by combining the primary underlying policy with our Umbrella limit, which contains primary & non-contributory language by endorsement, when required in contract

CERTIFICATE HOLDER	CANCELLATION
Master Certificate	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

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Illingworth-Kilgust

Mechanical

An EMCOR Company

Milwaukee:
11217 West Becher Street
West Allis, WI 53227-1032
Phone: 414.476.5790
Fax: 414.476.0916
www.illingworth-kilgust.com

Madison:
6950 Gisholt Drive
Madison, WI 53713-4828
Phone: 608.222.9196
Fax: 608.222.3339

February 14, 2019

Mr. Ryan Mundt
Jefferson County Human Services
1541 Annex Road
Jefferson County, WI 53549
E: ryanmu@jeffersoncountywisc.gov

Re: Workforce Devolvement Boiler Replacements

Dear Mr. Mundt :

We are pleased to provide our proposal for the above referenced project. We include the following:

OPTION 1

NON-CONDENSING BOILERS

Two (2) Patterson-Kelley Model VELOX N750VX NON-CONDENSING hot water boiler. Each boiler is equipped with Integral burner and burner control system, is completely preassembled, piped, wired, factory fire tested, bears the AGA certification, and will be equipped in accordance with factory specifications, including these special features:

- Full Modulation Burner w/ 1.75:1 turndown 637.5 MBH to 513 MBH output
- 8" vent connection, Category I, CAN RE-USE EXISTING VENTING
- 115/1/60 ELECTRICAL
- Gas Train, including: motorized shut-off valves, low & high gas pressure switches
- 160 PSIG design pressure with 60 PSIG relief valve and trim
- Microprocessor controller for Flame and Combustion Management. Color touch screen display for operating information set up info, and fault information with trouble shooting guides on screen. Functions include outdoor reset, lead-lag, and auto rotation. Sensors for outdoor air temperature and supply header temperature are shipped loose.
- Main gas pressure regulator (7" W.C. min. - 14" W.C. max.).
- Boiler Pump Delay Relay (pilot duty).
- Terminals for 0-10 Vdc for external enable and control of either firing rate or set point.

One (1) START UP and operator training

Two (2) BOILER CIRCULATING PUMPS, ARMSTRONG Series: E24 In-Line Boiler Pump, 1-1/2" flanged, 64 gpm @ 18 TDH, 0.4 hp 3400 rpm, 115/1/60, ODP
Tag: B1, B-2

Two (2) TRIPLE DUTY VALVES, ARMSTRONG, 2-1/2" flanged
Tag: B-1, B-2

Our price for this work is\$49,165.00
Optional pumps and triple duty valves delete for credit of(\$2,235.00)

Not included in the above proposal on OPTION 1:

- Asbestos Identification or Abatement.
- Taxes
- Premium Time.

Plumbing

Piping

Sheet Metal

Controls

Service

Engineering

Design

Auto Cad

Green Buildings

OPTION 2**OPTIONAL IF CURRENT VENTING IS AL29-4C STAINLESS**

In lieu of two (2) Model N750VX, provide Model N750MFD with 5:1 turndown full modulation burners. All other components remain the same as above non-condensing option, however the ELECTRICAL IS 208/230/3/60 FOUR WIRE.

- Provide and Install new Stainless Steel Venting on (2) Boilers.

Our price for this work is **\$65,483.00**
Optional pumps and triple duty valves delete for credit of **(\$2,235.00)**

Not included in the above proposal on OPTION 2:

- Electrical
- Asbestos Identification or Abatement.
- Taxes
- Premium Time.

This proposal is based on work being performed during normal working hours unless otherwise noted above. Normal working hours are considered to be between 7:00 a.m. and 4:30 p.m., Monday through Friday.

To the extent this quotation/proposal includes materials and/or equipment that contain or are comprised of steel, the price set forth herein for such items is guaranteed for a period of 15 days from the date of this quotation/proposal. After such time, Illingworth-Kilgust Mechanical reserves the right to increase the price set forth herein for such items when the parties enter a contract for the work or when Illingworth-Kilgust Mechanical actually orders such items, whichever the later, to reflect the then-current price of such items, as such pricing may be affected by market conditions including, but not limited to, tariffs, quotas, and/or duties. The parties agree that the pricing for such items in this quotation/proposal is guaranteed only for such time, and Customer assumes the risk of any such price increases for such items after such time.

If customer fails to sign this quotation/proposal within fifteen (15) days from the date of this quotation/proposal, this quotation/proposal shall be deemed void, withdrawn, and canceled.

We thank you for the opportunity to provide you with this proposal and look forward to working with you on this project. Should you have any questions, please do not hesitate to contact us.

Sincerely,

Lou Garcia

Lou Garcia
Project Manager
Illingworth-Kilgust Mechanical, Inc.
Direct: 414.431.7128
lgarcia@ikmechanical.com

LG/sb

This Proposal Accepted By:

(Signature)

(Date)

(P.O. Number)



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
09/05/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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PRODUCER MARSH USA INC 1166 AVENUE OF THE AMERICAS NEW YORK, NY 10036 Phone: 866-966-4664 Emcor.Certrequest@marsh.com / Fax: 203-229-6787 496638-illn-Corp-18-19	CONTACT NAME:	FAX (A/C, No):	
	PHONE (A/C, No, Ext):	E-MAIL ADDRESS:	
INSURED ILLINGWORTH-KILGUST MECHANICAL 11217 W. BECHER ST. WEST ALLIS, WI 53227	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A : Continental Casualty Company		20443
	INSURER B : American Casualty Company Of Reading, Pa		20427
	INSURER C : Transportation Insurance Co		20494
	INSURER D : Continental Insurance Company		35289
	INSURER E :		
INSURER F :			

COVERAGES CERTIFICATE NUMBER: NYC-008952868-20 REVISION NUMBER: 11

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVO	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		GL 6072246207	10/01/2018	10/01/2019	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 6,000,000 PRODUCTS - COMP/OP AGG \$ 14,000,000 \$
A	<input checked="" type="checkbox"/> AUTO/MOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY		BUA 6072246269	10/01/2018	10/01/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ Auto Physical Damage \$ Included
D	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTIONS \$ 10,000		CUE 6050250605	10/01/2018	10/01/2019	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/H <input checked="" type="checkbox"/> N	WC 6072290921 (AOS) WC 6072336019 (CA) WC 6072378738 (AZ, OR, WI)	10/01/2018 10/01/2018 10/01/2018	10/01/2019 10/01/2019 10/01/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
EVIDENCE OF COVERAGE

CERTIFICATE HOLDER ILLINGWORTH-KILGUST MECHANICAL 11217 W. BECHER ST. WEST ALLIS, WI 53227	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE of Marsh USA Inc. Manashi Mukherjee <i>Manashi Mukherjee</i>
--	---

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AGENCY CUSTOMER ID: 498638

LOC #: Norwalk



ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY ***MARSH USA INC		NAMED INSURED ILLINGWORTH-KILGUST MECHANICAL 11217 W. BECHER ST. WEST ALLIS, WI 53227	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAJC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Auto Physical Damage Comp / Coll Deductible \$500

In the event of cancellation or material change that reduces or restricts the Insurance afforded by this Coverage Part (other than the reduction of aggregate limits through payment of claims as applicable), Insurer agrees to mail prior written notice of cancellation or material change to: Certificate Holder

Schedule

1. Number of days advance notice: For any statutorily permitted reason other than non-payment of premium, the number of days required for notice of cancellation as provided in paragraph 2 of either the Cancellation Common Policy Conditions or as amended by the applicable state cancellation endorsement is increased to the lesser of 60 days or the number of days required in a written contract.

For non-payment of premium, The greater of (1) the number of days required by state law or (2) the number of days required by written contract.

2. Name:

Notice will be mailed to: Certificate holder



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
09/05/2018

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	PHONE (A/C, No, Ext):	E-MAIL ADDRESS:	
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	INSURER A: Continental Casualty Company		20443
	INSURER B: American Casualty Company Of Reading, Pa		20427
	INSURER C: Transportation Insurance Co		20494
	INSURER D: Continental Insurance Company		35289
	INSURER E:		
INSURER F:			

COVERAGES

CERTIFICATE NUMBER:

NYC-008952868-20

REVISION NUMBER: 11

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL SUBROGATION	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOG OTHER:		GL 6072246207	10/01/2018	10/01/2019	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 6,000,000 PRODUCTS - COMP/OP AGG \$ 14,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY		BUA 6072246269	10/01/2018	10/01/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ Auto Physical Damage \$ Included
D	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000		CUE 6050250605	10/01/2018	10/01/2019	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory In NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/H <input checked="" type="checkbox"/> N	WC 6072290921 (AOS) WC 6072336019 (CA) WC 6072378738 (AZ, OR, WI)	10/01/2018 10/01/2018 10/01/2018	10/01/2019 10/01/2019 10/01/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
EVIDENCE OF COVERAGE

CERTIFICATE HOLDER

CANCELLATION

ILLINGWORTH-KILGUST MECHANICAL
11217 W. BECHER ST.
WEST ALLIS, WI 53227

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
of Marsh USA Inc.

Manashi Mukherjee

Manashi Mukherjee

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AGENCY CUSTOMER ID: 498638

LOC #: Norwalk



ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY ***MARSH USA INC		NAMED INSURED ILLINGWORTH-KILGUST MECHANICAL 11217 W. BECHER ST. WEST ALLIS, WI 53227	
POLICY NUMBER			
CARRIER	NAIC CODE	EFFECTIVE DATE:	

ADDITIONAL REMARKS

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FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Auto Physical Damage Comp / Coll Deductible \$500

In the event of cancellation or material change that reduces or restricts the insurance afforded by this Coverage Part (other than the reduction of aggregate limits through payment of claims as applicable), Insurer agrees to mail prior written notice of cancellation or material change to: Certificate Holder

Schedule

1. Number of days advance notice: For any statutory permitted reason other than non-payment of premium, the number of days required for notice of cancellation as provided in paragraph 2 of either the Cancellation Common Policy Conditions or as amended by the applicable state cancellation endorsement is increased to the lesser of 60 days or the number of days required in a written contract.
For non-payment of premium, The greater of (1) the number of days required by state law or (2) the number of days required by written contract.

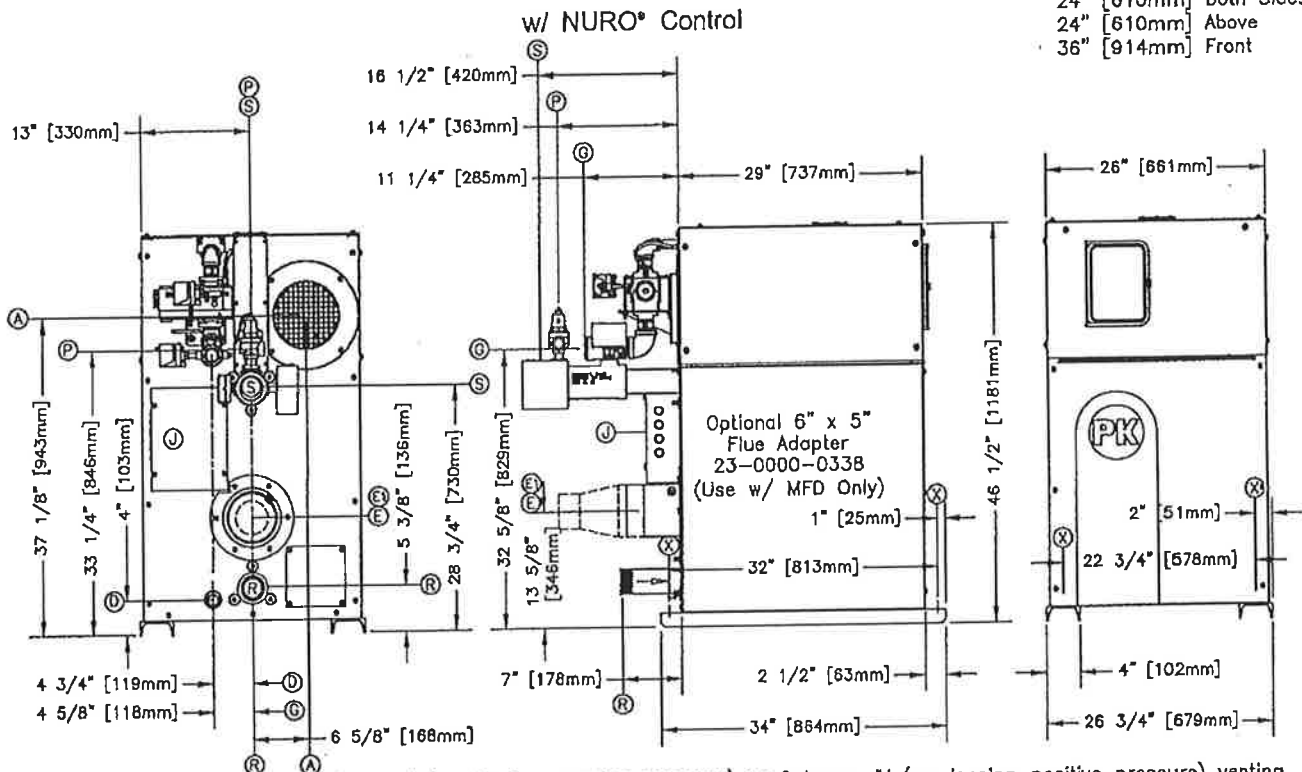
2. Name:

Notice will be mailed to: Certificate holder

MODU-FIRE® Forced Draft Boiler Models N750MFD & N1000MFD

VELOX™ Boiler Models N750VX & N1000VX

Service Clearances:
 24" [610mm] Both Sides
 24" [610mm] Above
 36" [914mm] Front



MODU-FIRE® FD boilers require Category II (condensing-negative pressure) or Category IV (condensing-positive pressure) venting and VELOX™ boilers require Category I (non-condensing) venting as defined in ANSI Z223.1/NFPA 54/CSA-B.149 Latest Edition. Harsco Industrial, Patterson-Kelley reserves the right to make changes at any time without notification.

BOILER CONNECTIONS:

(A) Combustion Air Inlet	8" dia
(D) Drain (Fireside)	3/4" NPT-M
(E) Exhaust Vent	6" OD Nominal
(E) Exhaust Vent (With Adapter - MFD Only)	5"
(G) Main Gas Connection	1 1/4" NPT-F
(J) Wiring Junction Box	
(P) Pressure Relief Valve	see list for selection
(R) Boiler Water Return	2 1/2" NPT-M
(S) Boiler Water Supply	2 1/2" NPT-F
(X) Anchor Bolt Location	(4) 3/4" dia holes

BOILER CONTROLS: ASME CSD-1 is standard.
 Complies with GE GAP (IRI) guidelines GAP.4.1.0 and GAP.4.1.3.
 Complies with FM Global 6-4/12-69 Section 1.0

Main Gas Train: see gas train submittal

Integrated Boiler Control, NURO® Series

Operating Thermostat, 130°-220°F (54.4°-104°C)

High Limit Thermostat, Manual Reset, 100-240°F (38°-116°C)

High Exhaust Temperature Switch, Manual Reset

High Exhaust Back Pressure Switch

LWCO/Flow Switch, Paddle Type

Air Switch, Differential Pressure Type

Combustion Blower, Variable Speed, 0.5hp

A.S.M.E. Section IV Design Data - "H" Stamp

Maximum Pressure	160 psig
Maximum Temperature	250°F
Heating Surface	116 sq ft

FACTORY OPTIONS:

- ☐ Probe Type Low Water Cut Off, Manual Reset (factory installed)
- ☐ Probe Type Low Water Cut Off, Manual Reset (shipped loose)

C.S.A. CERTIFIED RATINGS AND CAPACITIES

Max Input BTU/Hr	750,000	1,000,000
Max Output BTU/Hr	638,000	850,000
Boiler HP	19.0	25.4
Max/Min Flow GPM	120/60	150/80
MFD Boiler Model	N750MFD	N1000MFD
Turndown Ratio	5:1	5:1
Min Input BTU/Hr	150,000	166,000
VELOX Boiler Model	N750VX	N1000VX
Turndown Ratio	1.2:1	1.6:1
Min Input BTU/Hr	604,000	610,000

Fuel ☐ Natural Gas ☐ Propane Gas

Max Gas Pressure 14" w.c.

Min Gas Pressure NG-3.5" / LP-7" w.c.

Power Requirements ☐ 120v, 1ph, 60hz

☐ 208-240v, 1ph w/neutral, 60hz

Max Operating Amps Less than 6 Amps

Operating Weight 800 Lbs.

Water Content 6.2 Gallons

Pressure Relief Valve/Press-Temp Gauge Shipped Loose for Field Installation

<input type="checkbox"/> 30 PSIG 1 1/4"	0-100psi/70-320°F
<input type="checkbox"/> 50 PSIG 1" x 1 1/4"	0-100psi/70-320°F
<input type="checkbox"/> 60 PSIG 1"	0-100psi/70-320°F
<input type="checkbox"/> 75 PSIG 1"	0-240psi/70-320°F
<input type="checkbox"/> 80 PSIG 3/4" x 1"	0-240psi/70-320°F
<input type="checkbox"/> 100 PSIG 3/4"	0-240psi/70-320°F
<input type="checkbox"/> 125 PSIG 3/4"	0-240psi/70-320°F
<input type="checkbox"/> 150 PSIG 3/4"	0-240psi/70-320°F

HARSCO
 INDUSTRIAL

Patterson-Kelley
 N750MFD-N1000MFD&N750VX-N1000VX _NURO
 01.30.18

P-K SONIC®

Boiler Models SC-650, SC-750, SC-850 & SC-1000
Hot Water Supply Boiler Models SCD-650, SCD-750, SCD-850 & SCD-1000
Natural Gas, Liquid Propane, or Dual Fuel with NURO® Control

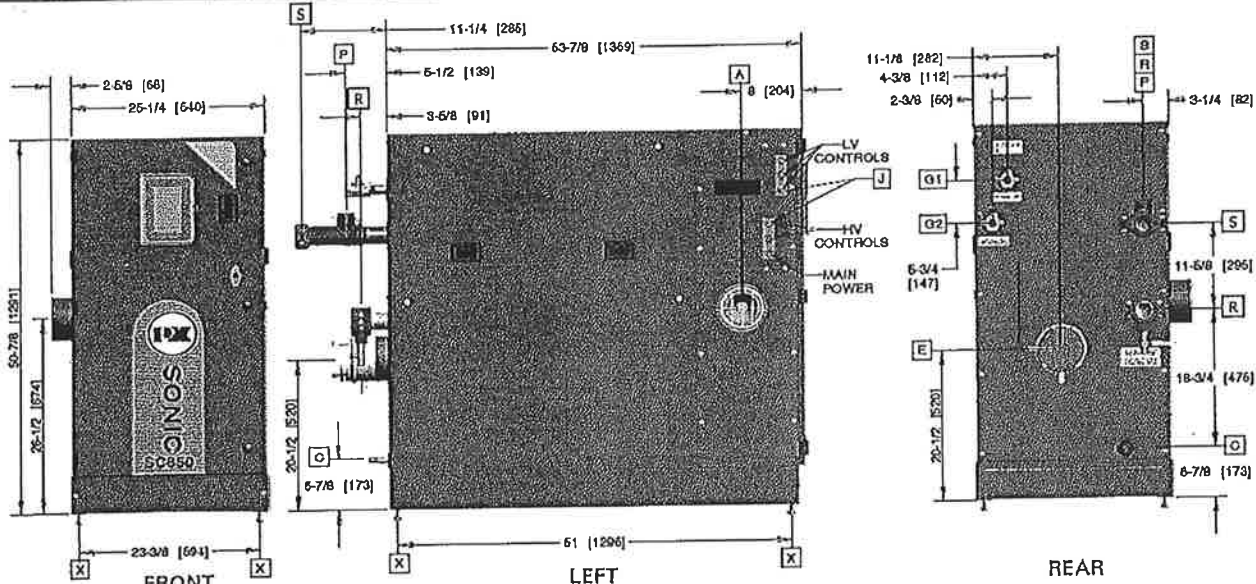


Rep Name: _____

Email: _____

Phone Number: _____

Date: _____



Primary dimensions are in inches. The secondary dimensions, [in brackets], are in millimeters.

This SONIC boiler requires Category IV venting (condensing-positive pressure) or Category II venting[†] (condensing-negative pressure as defined in ANSI Z223.1/NFPA 54/CSA-B.149 latest edition.
[†]Category II venting must include the optional combustion air damper

Category II venting must include the optional combustion air damper

BOILER CONNECTIONS		
A	Combustion Air Inlet	6" dia. stub
C	Condensate Drain	3/4" hose
E	Exhaust Vent	6"
G1	Propane Gas	1" NPT-F
G2	Natural Gas	1" NPT-F
J	Wiring Junction Boxes	inside cabinet
P	Pressure Relief Valve	see list for options
R	Boiler Return, Victaulic® clamp	2" pipe, grooved
S	Boiler Supply, Victaulic® clamp	2" pipe, grooved
X	Anchor Bolt Locations	(4) 1/2" Bolt Holes

*SCD Hot Water Supply Boiler models terminate with 2" copper tube, grooved

BOILER CONTROLS		
ASME CSD-1 is standard		
Complies with: GE GAP (IRI) guidelines GAP.4.1.0 and GAP.4.1.3		
FM Global 6-4 Section 1.0		
Main Gas Train with Dual Shut-off		
Integrated Boiler Control, NURO Series		
Operating Thermostat, 42°-195°F (6.6°-91°C)		
High Limit Thermostat, Manual Reset, 100°-187°F (38°-92°C)		
High Exhaust Back Pressure Switch		
LWCO/Flow Switch, Paddle Type (Optional: LWCO, Probe Type)		
Combustion Air Proving Switch, Differential Pressure Type		
Combustion Blower, Variable Speed, 350 Watt (SC650-750-850)		
& 850 Watt (SC-1000)		

A.S.M.E. SECTION IV DESIGN DATA				
	SC-650	SC-750	SC-850	SC-1000
	SC-6500	SC-7500	SC-8500	SC-10000
Max Pressure		160 PSIG		
Max Allowable Temperature		210°F		
Max Operating Temperature		194°F		
Heated Wet Surface Area	76.2	78.2	87	87
Flow Rate @ 20°FAT	62	72	82	92
Min Flow Rate @ All Firing Rates (Flow Switch Setting)	25	25	30	30

MODEL SELECTION					
Boilers	<input checked="" type="checkbox"/> SC-650	<input type="checkbox"/> SC-750	<input type="checkbox"/> SC-850	<input type="checkbox"/> SC-1000	
Hot Water Supply Boilers	<input type="checkbox"/> SCD-650	<input type="checkbox"/> SCD-750	<input type="checkbox"/> SCD-850	<input type="checkbox"/> SCD-1000	
	<input type="checkbox"/> DUAL FUEL	<input type="checkbox"/> DUAL FUEL	<input type="checkbox"/> DUAL FUEL	<input type="checkbox"/> DUAL FUEL	
Fuel Options	<input checked="" type="checkbox"/> NG <input type="checkbox"/> LP	<input type="checkbox"/> NG <input type="checkbox"/> LP	<input type="checkbox"/> NG <input type="checkbox"/> LP	<input type="checkbox"/> NG <input type="checkbox"/> LP	
Min Inlet Gas Pressure	3.5" w.c.				
Max Inlet Gas Pressure	14" w.c.				
Max Input (BTU/hr)	650,000	750,000	850,000	1,000,000	
Max Output (BTU/hr)	612,000	708,000	800,000	923,000	
Boiler HP	18.3	21.1	23.9	27.5	
Min Input (BTU/hr)	125,000	125,000	141,000	143,000	
Turndown Ratio	5.2:1	6:1	6:1	7:1	
Operating & Shipping Weight †	780 lbs.	780 lbs.	800 lbs.	810 lbs.	
Recovery Rate (gph)	734.4	847.2	960	1107.6	
Boiler Water Content	<10 gallons				
Shipping Dimensions	84"x36"x57" (LxWxH)				
Power Supply	120V 1ph 60 Hz				
Operating Current	< 5 Amps				< 10 Amps
Recommended Minimum Circuit Capacity	10 Amps				

†Add 50 lbs. to the listed values when considering a dual fuel model.

PRESSURE RELIEF VALVE/PRESSURE-TEMPERATURE GAUGE	
Shipped Loose for Field Installation	
<input type="checkbox"/> 30 PSIG 1"x 1"	0-100 psi/30-240°F
<input type="checkbox"/> 50 PSIG 1"x 1-1/4"	0-100 psi/30-240°F
<input checked="" type="checkbox"/> 60 PSIG 1"x 1"	0-100 psi/30-240°F
<input type="checkbox"/> 75 PSIG 1"x 1"	0-240 psi/30-240°F
<input type="checkbox"/> 80 PSIG 1"x 1"	0-240 psi/30-240°F
<input type="checkbox"/> 100 PSIG 1"x 1-1/4"	0-240 psi/30-240°F
<input type="checkbox"/> 125 PSIG 1"x 1"	0-240 psi/30-240°F
<input type="checkbox"/> 150 PSIG 1"x 1"	0-240 psi/30-240°F

RECOMMENDED CLEARANCE FOR SERVICE ACCESS					
Front - 25"	Rear - 0"	Top - 12"	Left Side - 24"	Right Side - 0"	

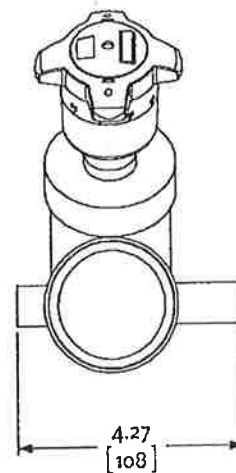
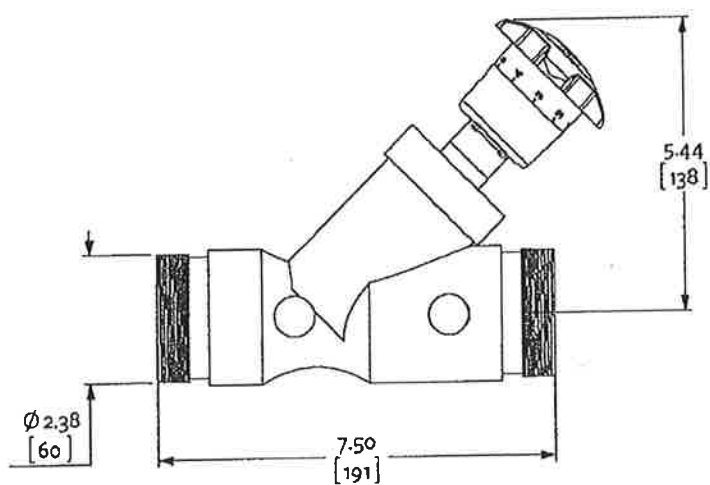
Notes:
- Victaulic is a registered trademark of Victaulic Company, Easton PA, USA
- Harsco Industrial Patterson-Kelley reserves the right to make changes at any time without notification
- Dual fuel models are not designed to run both fuels simultaneously



PROUDLY
DESIGNED & ASSEMBLED
IN THE U.S.A.

Side view

Front view



Not to scale

Units of measure: inches [millimeters]

Tolerance of ± 0.125 Inch (± 3 mm) should be used

For certified dimensions, please contact your Armstrong representative



Submittal

Ref. #: 712623.1 rev1

E.2 series dry motor circulator

Part number: 182212-653

Model: Series E24.2 cl 120V

Project name: JEFFERSON COUNTY HUMAN SERVICES

Location:

Date submitted: 2/9/2019 12:08:23 PM

Engineer:

Contractor:

Representative: Heat & Power Products Inc

Phone number:

e-mail: Csachs@gohpp.com

Submitted by: Chuck Sachs

Application design data

Tag number:	BP-1, BP-2	Pipe orientation:	Single
Service:	BOILER CIRCULATORS	Suction pressure:	0 ft
Location:		Fluid:	Water:
Quantity:	2	Operating temperature:	60 F
Duty flow per pump:	64 USgpm	Viscosity:	31 SSU
Duty head:	18 ft	Specific gravity:	1.0000
Total dissolved solids:	0 ppm		

Materials of construction

Construction:	STD125	Impeller:	30% Glass-filled Noryl
Rating:	Not applicable	Bearings:	Permanently lubricated SS
Connections:	1.5 in. Dia. 2-Bolt flanges		

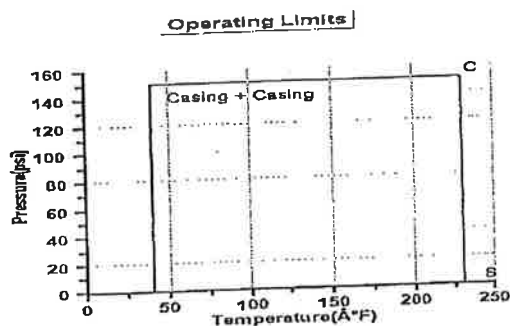
Mechanical seal data

Manufacturer:	Armstrong	Seal:	Silicon Carbide
Seal type:	Bellows-style Silicon Carbide		

Motor electrical data

Supplier:	Factory Choice	Insulation class:	Not applicable
Size:	0.4 hp	Inverter motor type:	Not applicable
Frame number:	Not applicable	Efficiency:	Std
Enclosure:	ODP	Speed:	3350 rpm
Motor Electrics:	115/1/60		

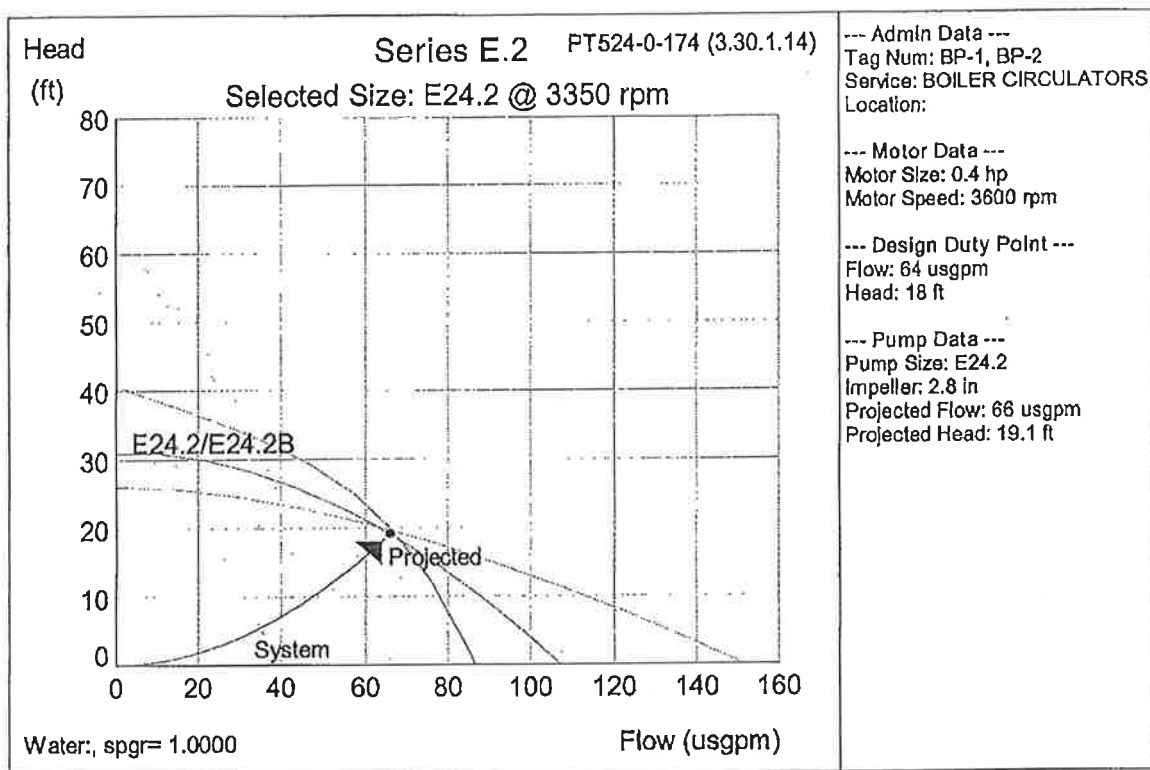
Operating limits (temperature - pressure)



Maximum pressure: 150 psi

Maximum temperature: 230 F

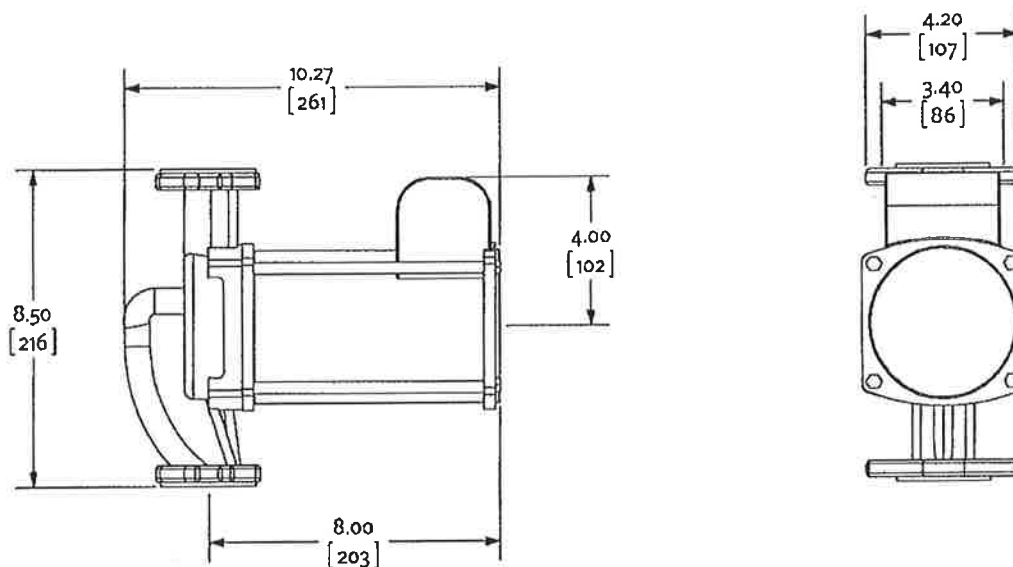
Performance curve



Dimensional data (not for construction)

Side view

Top view



Weight: 23 lb

- Not to scale
- Units of measure : Inches [millimeters]
- Tolerance of ± 0.125 Inch (± 3 mm) should be used
- For certified dimensions, please contact your Armstrong representative

Connection details

Connection	Size	Rating	OD	Bolt quantity*	BCD	Bolt size
Inlet	1.5	N/A	5	4	3.88	0.5
Outlet	1.5	N/A	5	4	3.88	0.5

*Equally spaced straddling centreline

Special instructions

Submittal

Ref. #: 712623.1 rev1

Flo-trex valve

Model:

Project name: JEFFERSON COUNTY HUMAN SERVICES

Location:

Representative: Heat & Power Products Inc

Date submitted: 2/9/2019 12:08:23 PM

Phone number:

Engineer:

e-mail: Csachs@gohpp.com

Contractor:

Submitted by: Chuck Sachs

Application design data

Tag	Qty	Model	Size	Config	Flange rating	Design flowrate	Pressure Drop*	Associated pump
BP-1, BP-2	2	FTV-2TS	2 in	Straight Threaded	None	0.0 USgpm	0.0 psi	

*at design flow

Materials of construction

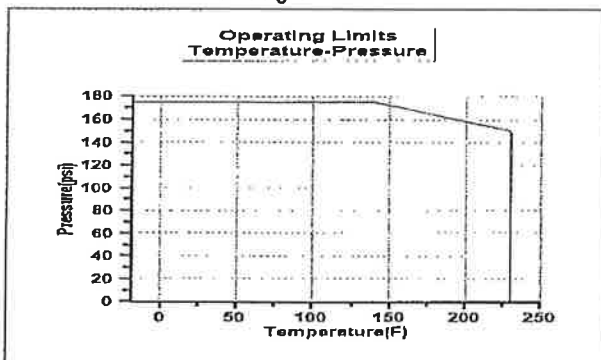
FTV-2TS-Flo-Trex Valve-Straight Threaded

FTV1.25-2

Body:	SS 304 A351	Spring:	SS ASTM A-313 TYPE 302-(18-8)
Disc:	Brass C46500	O rings:	EPDM
Stem:	Brass C46500	2 metering ports:	Brass Body with EPDM Check and Gasketed Cap
		2 drain tapplings:	1/4" NPT with SS 304 Plug

Operating limits (temperature - pressure)

FTV-2TS-Flo-Trex Valve-Straight Threaded



Maximum pressure: 175 psi

Maximum temperature: 230 F

Dimensional data (not for construction)

**2019 WDC
Boiler
Replacement
Tally**

	Scope of work	General Heating	Sun Mechanical	Illingworth-Killgust	Richter	1901
PK, direct replacement	Compliant with RFP specifications	✓	✓	✓	✓	✓
	Remove boilers, pumps and tripple duty valves	✓	✓	✓	✓	✓
	Install 2 - PK Velox, N750-VX	✓	✓	✓	✓	✓
	Install 2 new pumps and 2 new tripple duty valves	✓	✓	✓	No tripple duty valves	✓
	Modify gas, venting, H2O piping as needed per installation	✓	✓	✓	✓	✓
	Patch insulation	✓	✓	✓	✓	✓
	Start up with controls contractor	✓	✓	✓	✓	✓
	New gas pressure regulator	✓	Reuse old regulators	✓	✓	
	Notes	\$900/boiler deduct if bacnet not needed	Add \$170/boiler if bacnet cards are needed	Full modulating PK non Cond, Add \$625/boiler if bacnet cards are needed	Boilers are bacnet capable from factory	Add \$1,100/boiler for bacnet cards
Estimate Total		\$ 46,950.00	\$ 40,100.00	\$ 49,165.00 credit of 2,235.00 Alt. pump	\$ 52,703.00	\$ 49,280.00
H.E. Upgraded replacement	Remove boilers, pumps and tripple duty valves	✓	✓	✓	✓	✓
	Install 2 - Lochinvar FTX725	✓	✓	✓	Install 2 PK H.E.	
	Install 2 new pumps and 2 new tripple duty valves	✓	✓		✓	✓
	Stainless steel venting	NA	NA	✓	NA	NA
	Modity gas, demo venting, new pvc venting, H2O piping as needed per installation	✓	✓	No pvc venting	✓	✓
	Patch insulation	✓	✓	✓	✓	✓
	Start up with controls contractor	✓	✓	✓	✓	✓
	Notes	\$400/boiler deduct if bacnet not needed	Add \$170/boiler if bacnet cards are needed	credit of \$2,235 Alt. pump, Add \$625/boiler if bacnet cards are needed	Credit of \$915/boiler if not using bacnet cards	No backnet card needed
	Focus on energy credit included	No	No	No	No	No
Estimate Total		\$ 53,995.00	\$ 50,500.00	\$ 65,483.00	\$ 64,968.00	\$ 58,250.00

Committee Meeting Sign-In Sheet

Committee/Board Name:

Date of Meeting:

[illegible]