

Hydronic News



of Southern California



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Cal Poly Pomona



Lochinvar Veritus™ Air Source Heat Pump Water Heater

By: Steve McCool, Facilities Group Manager

The California State University campuses are all implementing stringent Carbon Neutrality Initiatives. Cal Poly Pomona just started up their first Lochinvar Veritus™ AHP140 air-source heat-pump water heater, with more to come. The Lochinvar Veritus™ AHP models are available from the *60k BTU/hr AHP060, to the *325k BTU/hr AHP350. The Veritus™ AHP's use low GWP (Global Warming Potential) R513A refrigerant, and can operate down to 23°F outdoor ambient with some of the highest COP values in the industry. These units are 480/3 with transformers available for lower voltage electrical systems.

The Veritus™ Smart Touch control can cascade up to 64 heat pumps seamlessly, and integrates with BACnet MS/TP, Modbus, or a BAS 0-10VDC remote set-point signal. The Lochinvar Veritus™ heat pump water heaters are engineered and manufactured in Lochinvar's Lebanon, Tennessee assembly plant. Lochinvar also has a full compliment of water-source heat-pump water heaters from 60,000 BTU's – 2,000,000 BTU's.



The Veritus™ AHP140 was expertly installed by CPP campus facilities plumbing division, and managed by James Stansberry, Plumbing Supervisor and George Lwin Manager, Energy, Utilities & MEP Services. A big thank you goes out to Mr. Dan Rettig, Lochinvar Senior Product Manager for all of his support on this project.

*Based on 80°F ambient

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Inside Dawson

Dawson Company Earns Recognition at the: “Best Places to Work in Los Angeles” Awards 2023

Inside Dawson

On August 9, 2023, the 17th annual “Best Places to Work in Los Angeles” Awards took place, hosted by the Los Angeles Business Journal at the historic Biltmore Hotel. This event, which honors the top 100 companies in Los Angeles renowned for their ability to cultivate a positive work environment, has become a significant tradition in recognizing workplace excellence each year.



Partner Highlights

The distinction of being named among the “Best Places to Work in Los Angeles” is no small feat. Companies strive to create environments where employees thrive, and this recognition is based on a survey conducted by the Best Companies Group. Employees were invited to provide insights into their workplace experiences, and these surveys were analyzed and ranked based on topics of leadership, corporate culture, communication, and employee benefits.

Project Highlights

This year, Dawson Company proudly received the honor of being recognized as the 11th Best Small Business (with under 49 employees) to work at in all of Los Angeles County. The achievement reflects the company’s commitment to fostering a work atmosphere that not only drives business success, but also nurtures its employees’ well-being.

It’s worth noting that the “Best Places to Work in Los Angeles” program was open to all publicly and privately held companies with at least 15 employees working in LA County. This inclusivity ensures that a diverse range of organizations, from startups to established enterprises, have the opportunity to be recognized for their dedication to creating exceptional workplaces.

Product Highlights

Dawson Company joins the prestigious league of the 100 Best Places to Work in Los Angeles, a commendable achievement that reflects the dedication and commitment of its leadership and employees. This recognition is not just an honor but a testament to the company’s efforts in providing a positive, nurturing, and rewarding work environment.

Technical Matters



David Hernandez, P.E. Executive VP & Ric Serafin, President and CEO

For more information please visit:
BestPlacesToWorkLA.com

Inside Dawson

Pipe Movement Design in HVAC and Plumbing Systems Class

Taught By: Jim Clauss, President & Dan Kish, VP Engineered Sales of Metraflex

Dawson Company hosts a Metraflex Company class on HVAC & Plumbing System Design at least once a year. Topics covered include: product review, comparison, selection and installation best practices. Anchor design and pipe guide layout are also reviewed. Included are sample application exercises.

Instructed by Jim Clauss, President of Metraflex and Dan Kish, Vice President Engineered Sales. Jim has over 35 years of practical piping experience and Dan has over a decade of HVAC experience.



For more information on Metraflex products please email: sales@dawsonco.com

Lochinvar Service & Maintenance Class

Taught By: Steve McCool, Facilities Support Group Manager

A service class on Lochinvar high efficiency modulating condensing boilers and water heaters was recently presented in the Dawson Company Learning Center in Pomona by Facilities Support Manager, Steve McCool and our Field Service Manager Rick Palomar and service technicians Mark Mata and Connor Lucchesi.



A review of codes & standards was followed by instruction on Lochinvar Crest & Hellcat boiler combustion technology. Sequence of operations, product and component identification and explanation of the operating controls was discussed.

Steve has worked in our industry in various roles since 1985 and our field service team has a combined experience of over 30+ years.

Steve McCool can be reached at: smccool@dawsonco.com



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Inside Dawson

Dawson Company's Response to the Maui Wildfires

Inside Dawson

On August 8, 2023, the tight-knit island community of West Maui experienced a devastating wildfire that brought about an immense loss of life, homes, cultural sites, and local businesses. With FEMA estimating that 2,170 acres were consumed by the flames and over 2,200 structures suffered damage or were entirely destroyed, the impact of this disaster has been felt island-wide. It was in the face of this tragedy that Dawson Company stepped forward to offer a helping hand.



Dawson Company made a generous donation of \$5,000.00 to the Maui Food Bank and encouraged employees to also donate. This contribution aimed to provide immediate relief to those in need by providing food to those affected by the wildfires.

The Maui Food Bank, was able to step up to the challenge and distribute an impressive 250,000 pounds of fresh produce and 1.3 million pounds of food to those adversely affected by the disaster to date. Even in the face of adversity, we have the capacity to come together and make a meaningful difference in the lives of those in need. If you wish to donate as well, please consider visiting:

mauifoodbank.org/donate



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Dawson Co. Sponsors Smardan-Hatcher Golf Tournament

Dawson Company would like to extend our gratitude to Smardan-Hatcher for allowing us to be a featured sponsor of the 48th annual Smardan-Hatcher Golf Tournament at Santa Barbara Golf Club.

It was a beautiful day on July 22nd in sunny Santa Barbara, CA. From the drinks and lunch, all the way to the amazing dinner and awards ceremony, our hosts were extremely accommodating. With over 150 participants, the shotgun start got us all out on the course at the same time. This day was filled with tons of laughs as well as some really good, and not so good golf shots.



A special thanks and congratulations to tournament coordinator Danny Contreras. Danny was celebrated for his 50th year of service with Smardan-Hatcher and has long been a valued customer of Dawson Company. It was great to see so many of our fellow industry leaders as well as meet so many new ones. As we adjust to this ever changing industry in the future, we will continue to support you in any way we can. It was a special day!

Joe Vavasseur, Outside Sales:
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Inside Dawson

Dawson Company's 75th Diamond Anniversary: Celebrating 75 Years of Success

Inside Dawson

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On September 23, 2023, Dawson Company marked a significant milestone by celebrating its Diamond Anniversary, commemorating 75 years of continuous success in business. This remarkable achievement was honored at an elegant Awards Banquet held at the prestigious Pechanga Resort Casino in Temecula, California. The evening was a memorable occasion, recognizing the outstanding accomplishments of the Dawson Company team and showcasing the strong relationships the company has built with its valued partners.

The evening was not only a celebration of Dawson Company's internal successes, but also a platform to acknowledge the company's invaluable partnerships. Special guests included vendors from renowned companies such as Bell & Gossett, Lochinvar, and Metraflex. These vendors have been instrumental in Dawson Company's journey, providing essential products and services that have contributed to the company's growth and success. The event served as an opportunity to express gratitude to these partners for their unwavering support and collaboration over the years.

Dawson Company's 75th Diamond Anniversary celebration was a night to remember, filled with elegance, gratitude, and a deep appreciation for the journey of 75 remarkable years, reminding everyone of the extraordinary achievements that can be realized through hard work, dedication, and commitment.



Ric Serafin, President & CEO



Joe Wells, Salesman of the Year is presented with "The David M. Ford Award" by David Hernandez, Executive VP of Dawson Co. (L) and David Ford (R)



Mark Spears of Lochinvar presents Ric Serafin, CEO of Dawson Company with a gold record award "To Commemorate Gold Level Sales Performance in 2022"



**Employees of the Year:
Jose Ruizesparza & Maria Sanchez**



Partner Highlights

Dawson & Xylem Watermark support the Aloha Tree Alliance

Inside Dawson

In a meaningful collaboration with Xylem Watermark, Dawson Company is actively contributing to the restoration of hiking trails in Hawaii. The initiative involves volunteers dedicating their time to remove non-native, invasive plant species that harm the landscape. Simultaneously, native plants are replanted and watered to maintain the natural diversity of the area.

Volunteers play a crucial role in the restoration project by removing harmful non-native plants, which can disrupt the local ecosystem. Additionally, fallen trees are repurposed as barriers to prevent trail cutting, a practice that accelerates erosion and degrades the hiking paths. This collective effort includes activities such as clearing new areas, weeding, and transporting water up the mountain to safeguard against erosion and potential wildfires. They are making a positive impact on Hawaii's natural beauty, ensuring that hiking trails remain pristine for generations to come.

Partner Highlights

For more information please visit :
www.alohatreealliance.org



Project Highlights

Dawson Company wins 2nd Place in Xylem Watermark's "Walk for Water" Team Challenge

Product Highlights



During the month of June 2023, Xylem Watermark hosted its "Walk for Water" Team Challenge, bringing together 50 dedicated teams, including Dawson Company, for a shared cause. The "Dawson Co Walkers" as a team took an astounding 5,128,727 steps, earning them a well-deserved 2nd place amongst all of the competing teams.

Collectively, the participating teams raised over \$16,200, directly contributing to the Chris Long Waterboy's Foundation's mission to ensure access to clean drinking water for one million people across the globe.

Together, we connected with other CBS channel partners and Xylem employees, got some exercise while helping the community, and came together as a team encouraging one another every step of the way.

Technical Matters

A message from Ric Serafin, President and CEO: "I'm so proud of you all for your dedication to good health and for supporting a good cause by Xylem Watermark for water access for underserved places. I hope everyone had fun doing it. It's a game changer for me. It's my vision that we can continue internally at Dawson Co. and make it a friendly competition."



Project Highlights

C.E. Mechanical Inc. Elite Boilers Project

By: B. Allen Schneider, Outside Sales Representative

Inside Dawson

Dawson Company has been partnering with C. E. Mechanical Inc. on projects for over 24 years. C. E. Mechanical Inc. was tasked with providing reliable heating for the building by the client as the existing boiler system had continuous breakdowns without redundancy due to age. This caused issues with the anchor tenant who required reliable and efficient heating for their patients.

They worked with Dawson Co. to provide the client a reliable heating solution with redundancy for the tenants. The following items were selected from the design concept to be submitted to the client for approval and construction implementation with the consultation of the Dawson's sales representative B. Allen Schneider.

Partner Highlights

The equipment included: **2 new Lochinvar Copper-Fin II CHN0752-M9 outdoor boilers, a new Bell & Gossett inline e80 series pump which was built from Dawson Company's extensive inventory, a new Bell & Gossett B-200 bladder expansion tank and #87 air vent and a J.L. Wingert chemical pot feeder.**



The removal of the old equipment off the roof and new equipment back on via crane was done early in the morning to not impede traffic or egress by the public which was carefully executed by our crane partner and the rigging of the mechanical team.

Project Highlights

A new pad cover was installed to protect the existing curb and the new equipment was installed and anchored. Piping was completely redone above the roofline to accommodate the change from one to two boilers with the appropriate implements.

New piping and equipment were pressure tested prior to new insulation being installed as well and new venting for both boilers with seismic bracing. The electrical was rerouted for the new design with some utilities needing to be relocated for proper clearance and serviceability of the equipment.

Product Highlights



The boilers were tied together for sequencing as a single unit while providing the redundancy if one boiler is down for maintenance or servicing.

The boilers and implements were started up successfully and provided efficient seamless operation of heating for the building and tenants.

The client was very happy with the completed project which came in on time and budget with an attention to detail for which C.E. Mechanical Inc. is known and trusted.

Utilizing Dawson Company as a valuable and knowledgeable resource, the long term partnership between the two companies, **Providing Superior Solutions, Performance and Value Always**, is and always has been the ultimate goal to meet the needs of the customer.

Technical Matters

C. E. Mechanical Inc. project team members included:

Brian Sedoris - Piping Superintendent, **Adam Mehra** - Piping Apprentice, **Richard Lopez** - Sheet Metal Journeyman, **Phil Holtz** - Sheet Metal Superintendent, **Mike Walter** - Master Electrician, **Alex Villa** - Controls, **Richard Montijo** - Trucking, **Ramon Rivera** - Crane-Reliable Crane Services, and **Eddy Hall** - Insulation-P&E Insulation
Dawson Company Sales Representative - **B. Allen Schneider**
C.E. Mechanical Inc. General Manager - **Michael Martin**

B. Allen Schneider can be reached at:
baschneider@dawsonco.com

Project Highlights

UCSB North Hall & Student Affairs Buildings Crest with Hellcat Combustion Technology



Project Location: University of California Santa Barbara, CA
By: Steve McCool, Facilities Group Manager

University of CA Santa Barbara upgraded their North Hall and Student Affairs boiler rooms with Lochinvar Crest Hellcat™ boilers as part of the University of California's Carbon Neutrality Initiative. The Hellcat™ combustion technology maintains the highest low-fire combustion efficiency of any automatic O2 trimming burner system available on the market. The Crest Hellcat™ burner is programmable to maintain as low as 15% excess air at 4% low-fire. High combustion efficiency is only achieved at excess air levels below 30%, allowing the system to get the most btu per cubic foot of natural gas burned. The Crest Hellcat™ burner can also meet the most stringent 9 ppm NOx requirements, while maintaining high combustion efficiency.



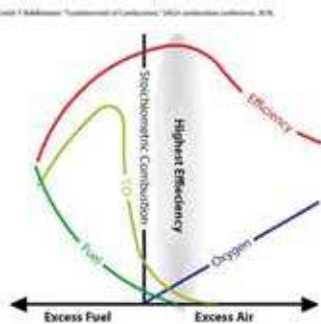
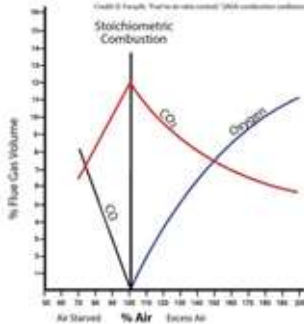
The new Bell & Gossett e-1510 2BD pumps were fitted with Metraflex Vane Flex suction diffusers. The BoilerMag XT Magnetic Filter will protect the boilers heat exchanger and magnetic ECM primary pump from system oxides and magnetite that could accumulate in the system during the service life of the equipment.



Bell & Gossett
a xylem brand

BoilerMag

Metraflex
for pipes in motion



Four radiant zone pumps on the upper floor of North Hall were replaced with Bell & Gossett Ultra Setter™ pressure independent control valves, to ensure optimized flow conditions to each zone.

The Crest Hellcat installations were overseen by Michael Linder, Senior Superintendent UCSB facilities management. UCSB has several more Crest Hellcat installations in planning.

HELLCAT
COMBUSTION TECHNOLOGY

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Inside Dawson

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Product Highlights



Dawson Company is proud to offer a new product innovation:

SioGreen Quartz Infrared Electric Tankless Water Heaters

The newest water heating technology innovation in over 100 years!

No Metal Heating Elements – No Corrosion – NO MAINTENANCE

SioGreen Inc. is based in Clearwater, FL, and spent over ten years developing and field-testing the next generation in electric tankless water heaters. From the original design in 2008, the patent issued in 2014, over 10 years of R&D, the final design was introduced in 2018. Since that time and after thousands of installations, there has been less than a 1% return rate...and most returns were the result of shipping damage or loose electrical connections.

The difference between the **SioGreen Quartz Infrared Tankless** design and technology is how the water is heated. SioGreen has developed and patented a revolutionary way to use **Space Age Quartz and Infrared Energy** to heat an unlimited supply of hot water through a maintenance free heat exchanger.

SioGreen Quartz Infrared Electric Tankless Water Heaters use no metal heating elements that corrode and fail. As a result, our heat exchangers are guaranteed to be **MAINTENANCE FREE for 10 Years!**

No other company in world can make this claim!

SioGreen has developed and patented a revolutionary way to use **Space Age Quartz and Infrared Energy** to heat an unlimited supply of hot water through a maintenance free heat exchanger. Inside, water flows through a series of quartz **heat exchanging elements**; clear tubes with a patented Nano-carbon coating that conducts, accelerates, and intensifies the infrared heat energy inside the tubes. The result is a highly efficient, maintenance free water heater.

Typical tank or tankless electric water heaters utilize **metal heating elements**. The common problem is that when water comes in contact with the metal heat source, they form scale and corrosion and ultimately fail unless costly maintenance is performed at least once a year, costing hundreds of dollars.

The SioGreen Performance Difference

24,637 Hours...that is how long this **SioGreen Quartz Infrared Heat Exchanger** was performing before it was removed for inspection at a nail salon. Constant on/off operation running 9 hours/day...365 days/year... for 7 1/2 years...That's equivalent to 22 1/2 years in a typical household!!

No corrosion...No maintenance...No failures.

www.siogreenpro.com



Inside Dawson

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Technical Matters

Unlocking the Potential of Heat Pumps for your DHW Needs!

By: Eric Decker, P.E., CPD, Manager - Business Development Group

Inside Dawson

The buzz around Heat Pumps (HPs) is undeniable, and here at Dawson Company, we have you covered with all your Domestic Hot Water (DHW) Heat Pump solutions.

Whether you're considering Tank-Type or Circulating-Type HP Water Heaters, we have the expertise to meet your requirements.

Partner Highlights

1. Tank-Type HP Water Heaters - Familiar and Reliable

For Tank-Type HP Water Heaters, the piping set-up is simple and straightforward, similar to a typical gas-fired tank-type water heater (as shown below). This familiarity makes it easy for installation and integration into your existing system.

Project Highlights

2. Centralized Heat Pump Water Heaters (CHPWH) - The Multi-Pass vs. Single Pass Dilemma

When it comes to Centralized Heat Pump Water Heaters (CHPWH), we offer two piping options: Multi-Pass and Single Pass.

Product Highlights

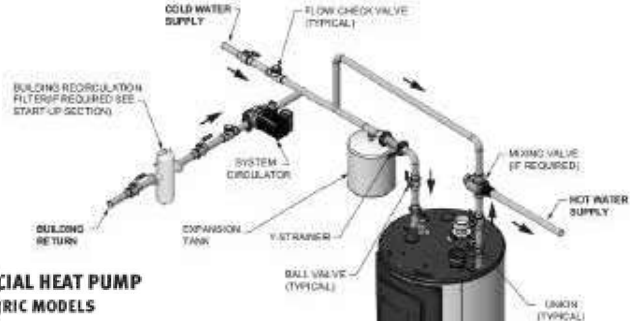
Multi-Pass
Comfortably Familiar

The Multi-Pass option provides plumbing engineers and contractors with a familiar setup, much like how a gas-fired circulating type water heater, such as the Lochinvar Armor, would be piped. However, it's important to note that the Multi-Pass design may result in a lower Coefficient of Performance (COP) due to mixed inlet water temperatures from the storage tank.

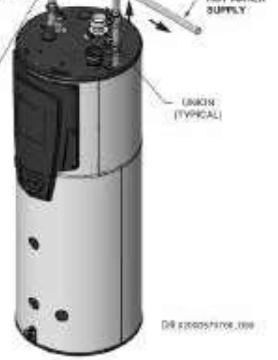
Technical Matters



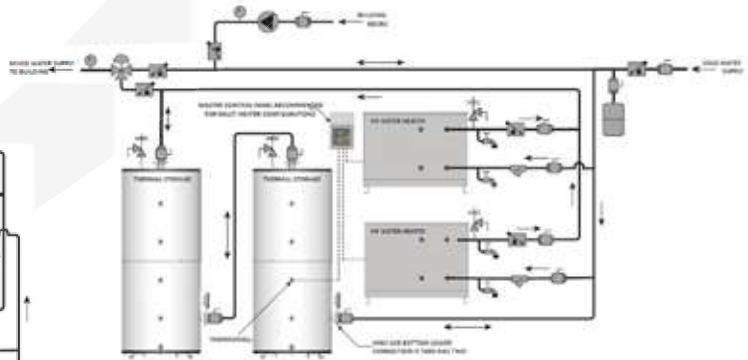
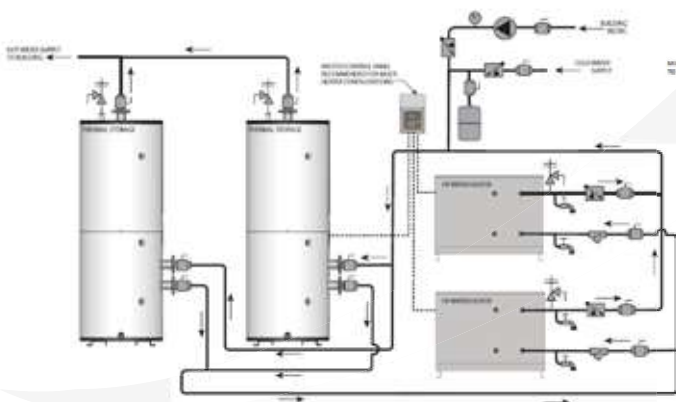
HEAT PUMP...HEAT PUMP...HEAT PUMP!



Single Pass
Optimal Efficiency



The Single Pass design, on the other hand, offers remarkable efficiency. By bringing in cold water (CW) directly from the CW supply to the HP, it operates at significantly lower inlet water temperatures compared to the Multi-Pass setup. As a result, the Single Pass design boasts a higher overall COP value, ensuring optimal performance and energy savings.



Technical Matters

Unlocking the Potential of Heat Pumps... (continued...)

By: Eric Decker, P.E., CPD, Manager - Business Development Group

Electric Swing Tank - Not Always Necessary

While some HP water heaters on the market may require an Electric Swing Tank for the recirculation line, our Lochinvar HP does not! Our HPs are perfectly capable of handling elevated inlet water temperatures, such as those from recirculated loads (~100°-110°F recirc return water temperature), without compromising performance.

Choosing the Right Tank for Your System

For Multi-Pass piping, you can use the same reliable DHW Storage Tank as its gas-fired equivalent - RGA for indoor installations and FVG or FHG with R16 outdoor foam option for outdoor installations.



RGA - Indoor



FVG - Outdoor

For indoors – RGA; for outdoors – FVG or FHG with R16 outdoor foam option.



Single pass HP, 55°F - 140°F/150°F temp rise



Essential Baffles for Single-Pass Piping

For Single-Pass HP systems, maintaining stratification in the storage tank during the recharging period is critical. To achieve this, an essential baffle must be placed on top of the tank. With Lochinvar Thermal-Stor Storage Tanks featuring a dual baffle design (one on the bottom and one on top), your Single-Pass system will maintain optimal stratification, ensuring efficient operation during peak demand periods.

(Low or No Demand)



During re-charging period

Unlock the Full Potential of DHW Heat Pumps with Dawson!

Choose Dawson for all your DHW Heat Pump needs, and experience the perfect blend of expertise, efficiency, and reliability. Our solutions are tailored to suit your specific requirements, ensuring a seamless transition to an energy-efficient and sustainable DHW system.

For inquiries or to learn more about our Heat Pump offerings, reach out to our dedicated team!

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