Lync

Complete Engineered System Solutions



Maximum Efficiency
Improved Water Quality



Expertly Designed Hot Water Solutions

Lync combines advanced technologies and innovative design with industry-leading manufacturing expertise to deliver complete, cost-effective commercial water technology system solutions from a single source.

Lync's complete, fully engineered system solutions address the growing concerns about degrading water quality conditions, the need to mitigate the risks of infection from waterborne pathogens, as well as the increasingly complex task of installing the best water system that provides maximum reliability, energy efficiency and low lifecycle costs while meeting rigorous building codes.

Our fully assembled, integrated solutions provide your building with maximum efficiency, superior safety and improved water quality while minimizing planning, design and installation time to reduce costs and increase your return on investment.

Our Full Range of Solutions:



Aegis®
CO₂ Heat Pump Water Heaters



LC Series
Water Heating Systems



Element®
All-in-One Domestic
Hot Water Solution



WQ SeriesWater Quality Systems



Accessories & Tanks UV-H, AquaSolve, DigiTemp Jr., Bolt



Engage[™]
Design Development and
Project Execution

Built to Provide Multiple Benefits



Save Money

• Reduced energy costs

Lync's high efficiency water heating solutions and state-of-the-art technologies help reduce energy and water flow for superior efficiency and savings

Lower cost of ownership

The fully engineered, pre-assembled systems provide increased equipment life expectancy, reduced maintenance needs and lower operational costs

· Compact footprints

The compact design of all the solutions can facilitate a smoother, less labor-intensive install process and free up more space to be used for other revenue and value-generating purposes



Simplify Planning, Installation and Maintenance

• Easy, quick installation

Fully designed and assembled solutions with known specs and dimensions are less skill intensive to install and simplify retrofits

Faster troubleshooting and service

Single-source solutions wholly designed and assembled by the manufacturer offer one point of contact for support and troubleshooting

• Reduced maintenance

Solutions are optimized for peak performance and feature low-maintenance components, and technologies that simplify operation and improve system efficiency



Increase Safety

Mitigates risks of Legionella and waterborne pathogens

- AquaSolve and sediment filtration mitigate scale and sediment buildup, which can help reduce the development of and the associated risks of developing bacteria and biofilm
- Thermal sanitization to help reduce the growth of waterborne pathogens
- UV disinfection of Legionella bacteria (99.9999% reduction)

Mitigates scalding

Precise temperature control reduces risks of scalding



Improve Efficiency and Sustainability

Superior efficiency

High thermal efficiency heaters; electric CO₂ heat pumps with a COP of 5.0 or higher

• Less chemical byproducts

Anti-scale media has no backwash cycle resulting in less water usage; UV disinfection creates no byproducts

Longer-lasting systems

Longer product lifespans with durable materials, expert design and construction, and scale prevention

Aegis A and Aegis W

Aegis high-efficiency, commercial heat pump water heaters leverage the superior qualities of natural refrigerant-grade CO₂ (R744) to produce reliable, domestic hot water up to 170°F at a wider ambient temperature range than most alternatives.

- CO₂ (R744) refrigerant
- 100% electric operation
- · Air and water sources
- Highly energy efficient (COP of 5.0+)
- Environmentally friendly
- Wide ambient operating range



Reliable, Year-Round Hot Water

The use of R744 enables Aegis to operate at a wider temperature range than commonly used refrigerants, R134a and R410a. This makes Aegis a reliable source of year-round hot water production at temperatures down to -4°F (14°F if water sourced) reducing or eliminating the need for a backup water heating system in colder months, as is typically the case with heat pump water heaters.



Superior Energy Efficiency

Powered by electricity and the superior qualities of R744, the Aegis heat pump water heaters are one of the most energy efficient ways available to heat domestic water with a Coefficient of Performance of 5.0 or higher. By absorbing the "free" ambient heat from either an air or water source, Aegis outperforms electric resistance and gas in terms of energy efficiency.



Safe and Eco-Friendly Refrigerant

Aegis leverages the CO_2 refrigerant R744, which is equally non-toxic and non-flammable with no negative impact on the ozone layer. This refrigerant-grade CO2 has a dramatically lower GWP (Global Warming Potential) with a value of 1 compared to 1,430 (R134a) and 2,088 (R410a).



Meets Strict Carbon Emission Codes

Aegis is a great solution in places with no-gas laws and meets ever stricter building codes regarding building decarbonization and electrification. The high COP can help reduce energy costs substantially and allow buildings to leverage 'load shifting' and 'load shaving' strategies to maximize their benefits.

Eco-Friendly CO₂ Heat Pump Water Heaters

Aegis A (Air Source)



A Variety of Applications

- Air, water, or air with water source recovery
- 250, 350, or 500 MBH*
- Ideal for new and retrofit applications
- Markets: multifamily, university, hospitality, office buildings, industrial, healthcare, and more

Energy Efficient and Eco-Friendly

- Coefficient of Performance of 5.0 or higher
- Non-toxic and non-flammable CO₂ refrigerant
- No negative impact on the ozone layer
- Global Warming Potential (GWP) of just 1.0
- 100% electric operation

Aegis W (Water Source)



Year-Round Hot Water Production

- Hot water production up to 170°F (77°C)
- Wide ambient operation from -4°F (-20°C) to 113°F (45°C) (from 14°F for Aegis W)
- Reduces or eliminates reliance on back-up heating
- Advanced defrost cycle with electric coil**

Options

- Electric storage tank increases system flexibility
- Corrosion-resistant outdoor tanks
- Cool recovery function**
- Fan coil coating for coastal areas**
- EC fan for additional energy savings**

Aegis heat pumps are the ideal solution to:

- · Adapt to no-gas laws
- Reduce CO₂ emissions
- Cut energy costs
- Improve the benefits of 'load shifting' and 'load shaving'
- Support ESG Initiatives
- Implement a hybrid heating solution

^{*}Varies with unit size and source temperature.

^{**}Applicable to Aegis A only

LC-N and LC-Q

The LC Series features complete, fully engineered domestic hot water systems combining high efficiency water heaters, precise digital tempering valves, and AquaSolve anti-scale technology in a redundant system for safe, reliable and energy efficient hot water.

- Pre-assembled and configurable systems
- Gas condensing heater, up to 97% efficiency
- Anti-scale technology
- · Highly accurate digital mixing valve
- Compact footprint with optimized piping



Configurable, Manufacturer-Built Systems

The LC Series offers several configurable options to meet a variety of site conditions. The systems are designed and built by the manufacturer and feature a seamless integration of sub-systems for greater performance and durability. The component uniformity simplifies a complex system design and makes it easy to drop into plans to minimize planning, design and installation time and costs.



High-Efficiency Water Heating

LC Series incorporates gas condensing water heaters with fire tubes and a large surface area for maximum efficiency. Made of duplex stainless steel, heaters are less prone to scale formation, reducing maintenance time and replacement costs as well as preserving heating efficiency.



Built-In Redundancy and Corrosion-Resistant Tanks

The systems feature built-in redundancy and internal buffer storage tanks that respond to regular short and high peak loads without oversizing the system. The corrosion-resistant tanks are made of duplex stainless steel to extend lifespan and eliminate the need for anode rods or tank lining.



Safer Water and Longer-Lasting System

The LC Series integrates AquaSolve's Media Assisted Crystallization (MAC) technology effectively reduces scale formation and mitigates the accompanying risks of Legionella and other waterborne pathogens. It's virtually maintenance free and helps protect the water heating system against corrosion for a longer system life and sustained heating efficiency.

Complete DHW Solutions with Redundancy

LC-N



Ideal for applications with occasional high load demands and in places tight on space.

- Gas condensing water heaters
- Configurable with 2 to 5 water heaters
- 398-995 MBH
- Up to 96% thermal efficiency
- 7:1 turndown
- 50-125-gallon internal buffer storage
- N+1 redundancy without oversizing
- Separate recirculation connection

LC-Q



Ideal for applications in larger commercial buildings with very short or high peak loads.

- Gas condensing water heaters
- Configurable with 2 or 3 water heaters
- 800-2,400 MBH
- Up to 97% thermal efficiency
- Seamless modulation prevents short cycling
- 260-390-gallon internal buffer storage
- Built-in redundancy
- Separate recirculation connection



Simplify Planning

Easily drops into design plans and reduces project timelines



Save Time

Quickly and easily installs in any space reducing downtime and revenue losses



Increase ROI

Provides superior energy efficiency, longer equipment life, and reduced maintenance needs and operational costs

Element Q

Element Q is an all-in-one hot water wellness solution that brings the complexity of a full mechanical room into a single, compact unit. It provides multiple layers of safety and protection against scalding and waterborne pathogens while improving water quality in a sustainable, environmentally friendly way.

- Sustainable, multi-barrier pathogen mitigation
- Improved energy efficiency and water conversation
- · Automates infection control monitoring
- Edge® SC controller with 100+ unique control points
- Real-time data reporting, alerts and remote access





Fully Engineered System in a Compact Design

With its ultra-compact design, Element Q provides 75% savings in footprint and reduces installation time by up to 65%. It simplifies service with an easy-to-access cabinet and single source of contact for technical assistance and support. Element Q's intuitive supervisory controller provides easy operation across all types of personnel including facility managers, service technicians and infection control.



Sustainable, Safer Water

Keep building occupants safe and protect the water heating system. Element Q provides extra layers of protection through multi-barrier scalding and pathogen mitigation without the use of toxic chemicals or byproducts via sustainable methods that include high-efficiency water heating, UV disinfection, Media Assisted Crystallization anti-scale technology, sediment filtration and digital mixing.



Infection Control Management with Confidence

Element Q automates all monitoring and record keeping, eliminating the need for 'clipboard' health mandate recording of critical control statuses. This internal Al can eliminate over 200 hours per year of manual ASHRAE 188 compliance monitoring freeing burdened maintenance personnel to concentrate on other critical functions.



All-in-One Supervisory Controller with Remote Access

The advanced controller provides a single point of responsibility for all aspects of the control system, significantly reducing installation and maintenance time as well as risks of application errors. It provides greater control by leveraging over 100 internal control points and refines big data into smart data with actionable recommendations.

Water Wellness - an All-in-One DHW Solution



Sustainable Pathogen Mitigation

- UV treatment of inlet and return water
- Sediment filtration to 5µm
- Scale reduction reaching >95% using TAC technology per DVGW W512
- Scheduled self-sanitization mode with timed high temperature flow and return to system setpoint
- Scheduled water heater blowdown to prevent biofilm build up and improve water heater efficiency
- Controlled system-loop thermal sanitization mode

Compact Design and Easy Installation

- Measures just 35.5 W x 90 L x 82.5 H and fits through standard doorway
- Reduce typical mechanical room footprint by 75%
- Integrated design reduces installation time by up to 65%
- Simplifies service with an easy-to-access cabinet



Smart and Connected

- Edge® SC with 100+ unique control points
- Intuitive user interface and fast navigation
- Full-system status overview
- Real-time data reporting across devices
- Alerts and maintenance reminders over email, text, and the myLync mobile app
- A record of events for each sub-system with comment option for contextual communication
- Automatic reports for ASHRAE 188 compliance

Energy Efficient and Durable

- Up to 97% thermal efficiency and seamless modulation to prevent short cycling
- Gas firetube heat exchanger with duplex stainless steel for greater corrosion resistance
- Dual temperature supplies for hot output and ASSE 1017-compliant tempered output
- Configurable systems from 600 to 1,000 MBH

ASHRAE 188 Compliance

Element Q eliminates "clipboard monitoring" to deliver over \$10,000 in savings every year. The data generated by the system results in insights, trends, recommendations and performed maintenance, all of which are summarized on a regular basis through the 'Water Wellness' report designed to complement periodic program audits.

WQ-AS, WQ-RS and WQ-SF

Lync's WQ Series consists of unique solutions engineered by our water quality experts to address a range of water quality issues that negatively impact water heaters, plumbing systems, building occupants and the environment.



- Effective, low-maintenance technologies
- Anti-scale technology
- UV disinfection and sediment pre-filtration
- Water softener with sodium and potassium
- Reverse Osmosis systems





Configurable Systems to Match Site Conditions

WQ Series are available in several configurations, and each system offers distinct features to meet specific site conditions, requirements, and water quality issues.



Pathogen Mitigation with No Added Chemicals

WQ-AS effectively mitigate the risks of pathogen growth in water systems without adding chemicals that can change the taste, smell, and safety of the water. They utilize a highly effective UV light to inactivate bacteria*. An integrated sediment pre-filtration ensures water clarity for greater effectiveness.



Long-Lasting, Low-Maintenance System

The systems are designed to require minimal maintenance. The anti-scale technology in WQ-AS operates with no backwashing, salt or chemicals and its UV disinfection system features automatic self-cleaning wipers and built-in purging to prevent fouling of the quartz sleeve. The metered control valves in WQ-SF maximize the softener regeneration efficiency and minimize the salt consumption.



Environmentally Friendly, Non-Toxic Solutions

Unlike chemicals-based disinfection processes, UV light disinfection, as utilized by WQ-AS is an entirely physical process. Highly effective yet non-toxic, it produces no harmful byproducts. The anti-scale media in WQ-AS requires no backwash cycle resulting in less water usage. WQ-SF can reduce soap and cleaning product consumption by up to 50% by softening the water.

^{*6-}log reduction of Legionella bacteria

Complete Systems for Optimal Water Quality

WQ-AS

Multi-Barrier Protection Against Pathogens and Scale

- · Scale mitigation with no backwashing or salt
- UV light disinfection for bacteria*
- Sediment pre-filtration (5 microns)
- 40, 70, and 100 GPM configurations
- Low-maintenance components
- Fully assembled and fastened onto steel skid



WQ-SF

Effective, Low-Maintenance Water Softener

- Configurable tanks hold ion exchange resin
- Brine tank for regeneration solution
- Metered control valves for automatic operation
- Twin Alternating models (25 and 50 GPM)
- Progressive Flow models (75, 100, 200 and 300 GPM)
- Fully assembled and fastened onto steel skid
- High flow versions available



WQ-RS

Efficient and Reliable Reverse Osmosis System

- Minimum 95% average ionic rejection of solids
- Digital controller for easy and exact operation
- Fiberglass-reinforced plastic membrane housings
- Membrane auto flush for scale prevention
- Fully assembled and fastened onto steel skid
- Configurable: 3,600 gallons per day to 120 gpm
- High flow versions available



^{*}Tested and validated for minimum of 6-log reduction of Legionella bacteria

Advanced UV Light Disinfection Solutions

Lync's UV-H provides an advanced, effective, and virtually maintenance-free UV light disinfection solution to treat inlet water for a variety of application types. It mitigates the presence of many waterborne pathogens and the buildup of biofilm to protect building occupant health and improve the longevity of the water system.

& Lync UV-H

Hard Water? No Problem!

The advanced design of the UV-H enables treating low-quality waters with hardness levels as high as 50 grains per gallon and iron levels up to 3 mg/L without the need to use softeners or other scale control solutions.



Protect Occupants and Plumbing Equipment

With a UV-H system in place, buildings can sustainably and effectively mitigate health concerns related to Legionella bacteria in the water coming into the building. Lync UV-H can effectively inactivate 99.9999% of Legionella bacteria (6-log). It can also help mitigate the risks of microbiologically induced corrosion and pitting corrosion (related to chlorine usage).



Trouble-free Maintenance

UV-H is engineered for trouble-free maintenance and minimum downtime. Automatic self-cleaning wipers and built-in purging prevents fouling of the quartz sleeve by mineral scaling and biofilm, making it up to 10 times more effective than conventional UV systems in difficult water applications. The UV lamps are placed in the front cabinet to make replacing them a simple task and to eliminate the need for maintenance clearance at top and bottom of the system for instant space savings.



Advanced, Proprietary Design

Through a state-of-the-art 360-degree UV light emission provided by Crossfire Technology[™] and a two-lamp design, the reactor leaves minimal opportunity for microorganisms to be blocked from the UV light by particles. UV-H remains effective at hardness levels as high as 50 grains per gallon and iron levels up to 3 mg/L.







Wireless Water Leak Detection

The Detection Group's innovative Trident™ wireless water leak detection system identifies leaks and their locations before they become a flood. When Trident's network of wireless sensors detects a water leak, it immediately communicates the precise location of the leak. Trident is so effective that it is the first and only

wireless water leak detection platform to receive FM Approval.

- Wireless water leak detection
- Real-time notifications of leaks
- Automated shutoff valves
- Prevent potentially expensive damage





Protect Your Property

Water leaks occur in virtually every building. When they happen, they can cause major damage and be expensive to remediate – on average, they result in \$10 billion in annual insurance claims.



Receive Real-time Notification of Water Leaks

As soon as Trident senses water where it shouldn't be, it sets off an on-site audible alarm and uses its own secure RF network throughout the building to send out real-time phone, email, and text alerts so immediate action can be taken. Trident can watch hundreds of locations within a single building and provide peace of mind.



Maintain, Update and Monitor Your System Remotely

Trident's automated shutoff valves can take action by shutting off water flow at the very first hint of a leak. If a larger area of a building needs more protection or has hard-to-reach areas, Trident water leak-sensing cables can detect water anywhere along its length for area or perimeter coverage.

Water Leaks Cause \$10 Billion in Damages Annually

- On average, water damage costs 3 times as much as a claim that does not involve water damage
- 300 water leaks in US commercial buildings daily
- 50% of all commercial real estate insurance claims are for water damage

Source: www.thedetectiongroup.com/10-quick-facts-about-water-leaks/

Engage[™] with Us

Complete design development and project execution with one convenient point of contact.



Finding the right, cost-effective system for your building can be a long, confusing, overwhelming process. With so many moving parts, it is often difficult to zero in on what exactly your building needs are in terms of energy efficiency, water safety, regulatory compliance, and water technologies.

With Lync's Engage, you get a planner, a designer and a single point of sourcing and responsibility to develop and execute your project tailored to your needs and circumstances.

As experts in heating, hot water, and water quality products and systems, we leverage decades of industry knowledge, our vast network of connections and direct insider access to a broad product portfolio to give you the best plan of action specifically tailored to your site.



Project Capabilities

Domestic Hot Water Systems • Hydronic Hot Water Systems • Water Quality Systems • More

For more info, visit lyncbywatts.com or email us at engage@lyncbywatts.com.

Serving a Variety of Commercial Markets



Education

Lync's energy-saving, low-emission water heating and water quality systems are the smart choice for educational facilities in need of a cost-efficient and easily maintained hot water systems. Our solutions help save on installation and operational costs, and ensure students and faculty have safe, reliable hot water.



Government and Military

Our engineered solutions are perfect for expansive military bases, federal office buildings and correctional facilities. Systems are simple to install and operate allowing personnel to easily maintain and service the systems while keeping costs down.



Healthcare

Keeping patients and medical staff safe and comfortable is key to us. Our complete, fully designed and pre-assembled solutions provide safe, dependable hot water for large hospitals and smaller healthcare facilities while mitigating risks of illnesses due to Legionella and other waterborne pathogens.



Hospitality

Maximizing uptime reliability and efficiency is at the heart of what we do. You'll see significant ROI and greater guest comfort and satisfaction. Our compact, quiet water heaters save energy and lower operating costs and provide safe hot water on demand while mitigating risks of illnesses due waterborne pathogens.



Manufacturing & Industrial

Our solutions provide continuous hot water conveyance for large-scale processing plants, laboratories, manufacturing facilities, food and beverage, oil refineries and more. Our units easily handle major load requirements and deliver the horsepower needed while maximizing energy efficiency and conserving water.



Multifamily Housing

Apartments, high-rises, condominiums, and townhouses need consistent, safe domestic hot water. Our hot water and water quality systems are easy to install and service and will provide you with big savings in energy and operating costs while keeping tenants happy.



Office Buildings

Our dedicated teams have decades of application expertise to help you select the best systems for your site. Beyond a substantial return on investment and savings on fuel bills, their low carbon emissions and high efficiencies can help you earn valuable LEED points for your project.

Complete Engineered System Solutions

Superior Safety. Maximum Efficiency. Improved Water Quality.



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Our fully assembled, integrated solutions provide your building with maximum efficiency, superior safety and improved water quality while minimizing planning, design and installation time to reduce costs and increase your return on investment.

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