



**BEST-IN-CLASS  
THERMAL UTILITY SOLUTIONS**

PRODUCTS AND SERVICES LINE-UP



# FOR SUPERIOR THERMAL UTILITY PERFORMANCE AND A SMALLER CARBON FOOTPRINT, TURN TO ARMSTRONG

From system design for a new plant to diagnosing problems and creating custom-engineered solutions at existing facilities, Armstrong International handles it all. Our on-site system solutions, turnkey installations, hardworking products, groundbreaking technology, and expert engineering are all provided with responsive support and a collaborative spirit. We want working with us to be an experience you enjoy, every single time.

## **Our Experience Makes A World of Difference**

Founded in 1900, Armstrong International is a privately held, fifth-generation, family-owned company. Our unique heritage of sage knowledge and experience in thermal utilities enables us to serve you in ways no one else can. Today, Armstrong's industry-leading equipment is hard at work in more than 100 countries, saving time, money and energy for some of the world's largest, most efficient companies in industrial and institutional markets alike.

## **BRINGING NET ZERO WITHIN REACH**

Achieving net zero has become the shared goal of companies worldwide, but many are uncertain how to move forward. Wherever you are on your path to net zero, Armstrong will meet you at your point of need. Our experts can perform a comprehensive thermal utility analysis of your site, allowing us to develop and implement a pragmatic, tailor-made plan of action to accomplish your specific objectives. Armstrong can help you:

- | Improve your production process and performance
- | Reduce environmental emissions
- | Help you reach your net-zero goal
- | Increase safety and reliability

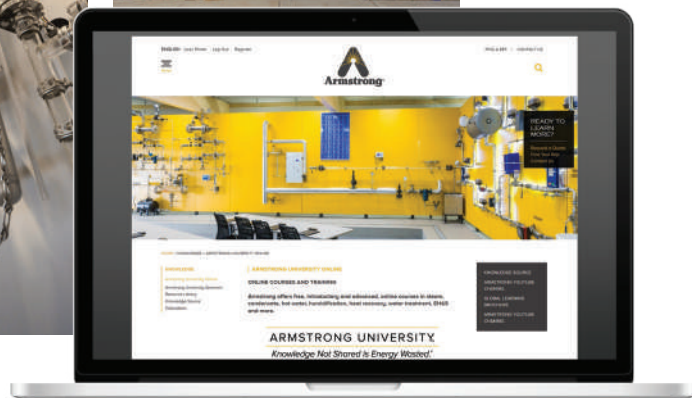
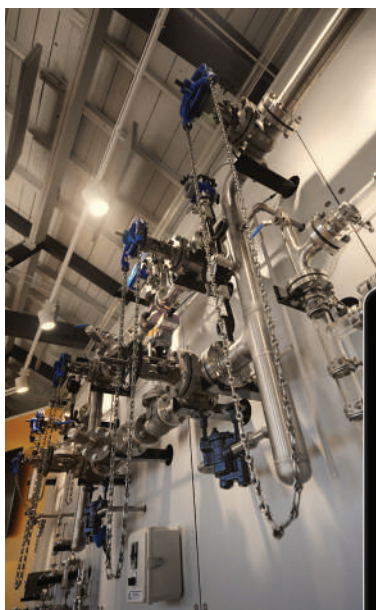




## ARMSTRONG UNIVERSITY

Armstrong University gives you easy, online access to more than a century of in-depth knowledge and experience. We offer online courses, seminars, webinars, skill development and training. Armstrong can even create a custom curriculum or seminar, tailored for your organization and industry. We also offer expert seminars, conducted at Armstrong Global Learning Centers all over the world, or at your facilities. Visit [www.armstronginternational.com/learning](http://www.armstronginternational.com/learning) for more information.

**Knowledge Not Shared is Energy Wasted.®**



# Industry-Leading Products and Services From Armstrong International

## PRODUCTS

### STEAM TRAPS

Our comprehensive range of steam traps provides energy efficiency, minimal steam loss, corrosion resistance, air and CO2 venting, operation against back pressure, freedom from dirt problems, and long, reliable service for your application and industry.

- Inverted Bucket Steam Traps
- Float and Thermostatic Steam Traps
- Controlled Disc (Thermodynamic) Steam Traps
- Thermostatic Steam Traps – Bellows, Wafer, Bimetallic
- Syphon Drainage Flash Steam Applications
- Superheated Steam Applications
- Clean Steam Applications



### STEAM QUALITY MONITORING

Faster, more accurate, and much safer than traditional methods, Armstrong's Steam QM® Series automatic steam quality monitoring provides reliable, state-of-the-art solutions for determining and communicating the dryness fraction of steam, amount of superheat present, concentration of noncondensable gases in steam, and more.



### STEAM TRACING

Armstrong offers tailor-made and completely pre-assembled packages that include steam distribution and condensate collection manifolds, Trap Valve Stations (TVS), steam traps, thermostatic start-up and freeze protection valves. Our steam tracing equipment gives you significant advantages, such as shorter installation time, easier maintenance, improved safety and higher energy savings.



### CONDENSATE RECOVERY EQUIPMENT

Armstrong offers a complete line of pumps to handle all your condensate recovery needs, including:

- Pump Trap Packages
- Double Duty® Steam Trap/Pump Combination
- Electric Pump Packages
- Boiler Feed Systems
- Flash Recovery Vessels



## PRODUCTS

### PRESSURE AND TEMPERATURE CONTROLS

Armstrong offers pressure and temperature controls and regulating valves to help you manage steam, air and liquid systems safely and efficiently, and ensure uninterrupted productivity.

- | Pressure Reducing Valves (PRVs) – Direct Acting, Piloted
- | Control Valves – Pneumatic, Electric



### STRAINERS AND FILTERS

Armstrong's Y-type, T-type and Fabricated Basket Pipe Strainers are available in a wide choice of sizes and materials to meet your pipeline straining requirements.



### LIQUID DRAINERS

Armstrong's Float-Operated Drain Traps are designed for draining heavy liquids from gases or light liquids (dual gravity drainers). These liquid drainers can operate to 1800 psig / 255 barg or specific gravity down to 0.40.



### AIR VENTS

Armstrong's Float-Operated Air Vent Relief Traps are designed to remove gases from liquids down to 0.40 specific gravity, and thermostatic devices are available to evacuate gases from steam systems.



### HUMIDIFICATION

Whatever your industry or application, Armstrong provides a variety of humidification solutions to help you achieve precision controlled trouble-free humidification.

- | Direct Steam Injection
- | Electronic – Electrode, Resistance
- | Gas
- | Steam-to-Steam
- | Evaporative
- | Fogging – Hydropneumatic



## PRODUCTS

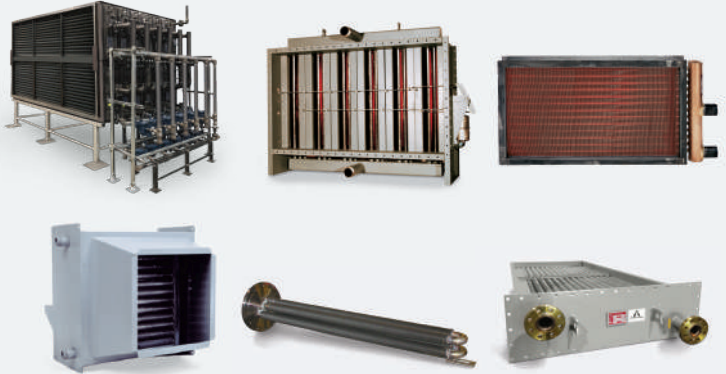
### FLOW MEASUREMENT

Accurate flow measurement is vitally important in many institutional and industrial environments, and for some operations, it can have a significant impact on the bottom line. Armstrong's VERIS flow measurement technology for steam, liquid and gas delivers exceptional accuracy and reliability in any application.



### HEAT TRANSFER COILS AND EQUIPMENT

Armstrong is a manufacturer of heavy-duty steam, water and glycol coils and equipment for industrial and institutional facilities, worldwide. We have the manufacturing capabilities and flexibility necessary to design and build coils and equipment for all types of air and gas applications, including process air heating and cooling, make-up air units, boiler air preheaters, heat recovery systems, unit heaters, door heaters, air cooled heat exchangers, insect heat treatment, tank heaters and more. Our experienced engineers can provide expert design and equipment selection, customized to your application requirements.



### HOT WATER GENERATION, MIXING, DISTRIBUTION AND CONTROL

Armstrong is a global leader in best-in-class hot water products and systems for institutional hygiene and industrial process applications. Our solutions can provide infection control, scald protection, scale removal and inhibition, sustainability, and compliance, while delivering dependable hot water at precision temperatures. We work closely with those tasked with hot water system design, operation and maintenance to optimize performance and user safety.

- | Water Heaters – Steam, Boiler Water, Gas
- | Water Temperature Controls – Digital, Thermostatic
- | Sense™ – Hands-Free Digital Water Temperature Controls
- | Hose Stations – Steam, Hot/Cold Water, Single Temperature
- | Scale Reduction Technology



### ARMSTRONG HEAT PUMP PACKAGES

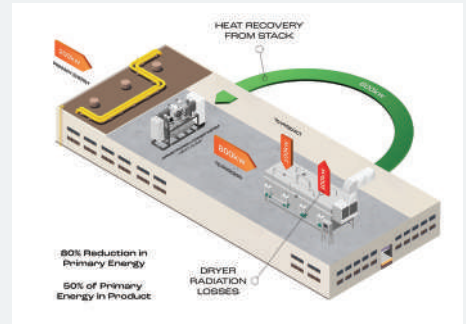
Armstrong heat pump packages deliver high-efficiency heating, cooling and hot water generation. Whether your goal is cutting energy costs, reaching net zero, or both, our custom heat pump packages provide a comprehensive, integrated solution for superior thermal efficiency, de-steaming, and decarbonization.



## SERVICES

### CIRCULAR THERMAL<sup>SM</sup>

By reclaiming your wasted heat and converting it for use in your industrial process, Circular Thermal<sup>SM</sup> significantly improves the thermal efficiency of your facilities and reduces your need for fossil fuels. Depending on your industry, overall energy consumption for your plant could decrease by nearly 50% — without reducing available energy for your processes or level of production.



### OPERATIONS AND MAINTENANCE SERVICES

As your thermal utility partner, Armstrong can keep your thermal utility system running smoothly, efficiently and safely, day after day. Whether it's short-term supervision, ongoing management of your entire thermal utility infrastructure, or training to help you manage your system more efficiently, we have the expertise to complete your project on time and on budget. Armstrong supports the following:

- | Thermal utility operation and maintenance
- | Project management
- | Constructability and installation guidelines
- | Start-up, commissioning and training
- | Oversight of subcontractors and vendors



### TRAP MANAGEMENT SERVICES

Proactive steam trap management is one of the most important steps you can take towards reaching your net-zero goal. Our best-in-class methodology is engineered to maintain low trap failure rates, which can lower energy use and environmental emissions, reduce production stoppages, and increase efficiency and safety.

- | SAGE<sup>®</sup> software for 24/7 steam system management from anywhere
- | SAGE UMT<sup>®</sup> wireless handheld steam trap tester
- | Wireless real-time steam trap monitoring (AIM<sup>®</sup>, SteamEye<sup>®</sup>)
- | Custom piping solutions for easier maintenance and faster, safer trap replacement—with no system shutdown



### Contact us

For more information or to find your representative, visit [www.armstronginternational.com](http://www.armstronginternational.com)



INTELLIGENT THERMAL UTILITIES SOLUTIONS FROM A GLOBAL  
LEADER IN ENERGY MANAGEMENT AND ENJOYABLE EXPERIENCES

**Armstrong International**

The Americas | Asia | Europe, Middle East, Africa

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