

Steam Ancillary Equipment

Primary Steam System, Water Treatment and Auxiliary Steam System Equipment



TYPICAL STEAMS WITH ANCILLARY EQUIPMENT



STEM SCHEMATIC





Feedwater Pump Deaerator Tank Water Softening

STEAM SYSTEM ANCILLARY EQUIPMENT

A COMPLETE SYSTEM

An 80 HP VMP Steam Boiler packaged with a feed system, blowdown separator and water treatment equipment. In addition, a stainless steel unfired steam generator was incorporated to use RO/DI water for clean steam generation.

CATEGORIES

- Primary Steam System Equipment
- Auxiliary Steam System Equipment
- Water Treatment Equipment

OUR UNIQUE APPROACH

A steam boiler is just one part of a well-designed steam system. Means to collect condensate and handle blowdown water are necessary processes for nearly all steam systems. In addition, some level of water treatment is required to ensure system durability and reliability. Many steam applications are unique and will require specific types of accessories engineered to work in unison to provide a solution to a customer's needs. Fulton makes all of the ancillary equipment to the same high standards as our boilers. It's all designed and built specifically for you.

SELECTED ANCILLARY EQUIPMENT

RETURN SYSTEMS / FEED SET

Fulton feedwater / condensate return systems provide safe, trouble-free condensate return for boilers. Return systems are completely assembled with tank, stand, highpressure pump, motor strainer, float valve, shut-off valve, gauge glass assembly with overflow and drain openings. Systems are available for boilers from 1 to 500 HP.

2 BLOWDOWN TANKS

Constructed with the finest quality materials, all compact Fulton Blowdown Separators and Tanks meet or exceed ASME Code and include special features to ensure safe boiler blowdown. They also operate with minimum maintenance. Blowdown Separators are available for boilers from 1 to 400 HP. Blowdown Tanks are available for boilers up to 1,000 HP.

3 UNFIRED STEAM GENERATORS

Horizontal or vertical tanks with heating coils utilize high-pressure steam or hot oil to generate steam. When supply water is RO/DI, the generator will be manufactured from stainless steel and will produce very high steam quality. ASME Section VIII. Up to 17,250 lbs/hr output.

4 TRAPSETS

Steam traps provide a system barrier between steam and condensate piping. The trapset has an isolation valve, strainer and a size-specific steam trap. Fulton engineering will ensure the right type of trap is designed into your system.

5 WATER SOFTENERS

Water softeners remove calcium and magnesium (hardness) and replace them with sodium. Hardness removal is critical to prevent scale formation on the waterside of the boiler. Scale can decrease boiler efficiency by 10% and create premature pressure vessel failure. Fulton softeners are duplex systems with autoregenerating features sized for each application.









EQUIPMENT THE PURPOSE

TO

- Deaerators
- Feed Sets / Return Tanks
- Condensate Surge Tanks
- Blowdown Separators
- Flash Tanks

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Control Systems

Proper delivery of feedwater and collection of condensate is essential to the operation of a steam system. All of the vessels designed to perform these specific tasks can be built to ASME code or non-code, depending on the requirements in your area or system. Whether the solution is a standard option or custom application, Fulton engineering can help design and size a system to perform any combination of tasks you need. All of our equipment is built to the same standard as our boilers.

=Fulton

SYNEX

EQUIPMENT THE PURPOSE

Water Softeners

- Chemical Feed Systems
- Sample Collection
- Automatic Blowdown Systems
- Carbon Filters
- pH Neutralizing Systems
- RO/DI Systems

The quality of the water used in a steam boiler will affect its life. It is strongly recommended that a competent water treatment program be implemented as a part of the steam system design.

Fulton can provide the full range of equipment needed to extend the life of your boiler system through proper water treatment. Products are available to supply high-quality feedwater to the boiler, which minimizes the formation of scale, foaming, solids in steam, corrosion, and fouling caused by the solids and gases present in natural feedwater. Based on your system's specific requirements and the water quality at the installation site, Fulton can help you identify the equipment you need to prevent corrosion and deposition in the boiler, increase boiler efficiency, and ensure you're getting the most out of your boiler.



AUXILIARY EQUIPMENT

ALLER

EQUIPMENT

- Unfired Steam Generators
- Accumulators
- Superheaters
- Steam Separators / Filters
- PRV Stations
- Trapsets
- Heat Recovery Systems

THE PURPOSE

Our auxiliary equipment is used to control the quality, pressure, storage capacity and enthalpy (heat content or temperature) of steam. Fulton engineers can match equipment to just about any challenge you can send our way. The units are sized and matched to your specific application and can be skid-mounted with other equipment to ensure you have a system that creates the quality and quantity of steam your application requires. A skid-mounted system greatly increases the ease of installation with single point connections. This saves you time and money.

Fution The heat transfer innovators. **The Fulton Companies** 972 Centerville Road, Pulaski, NY 13142

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