

Application: Waste & Vent Steam Condensation

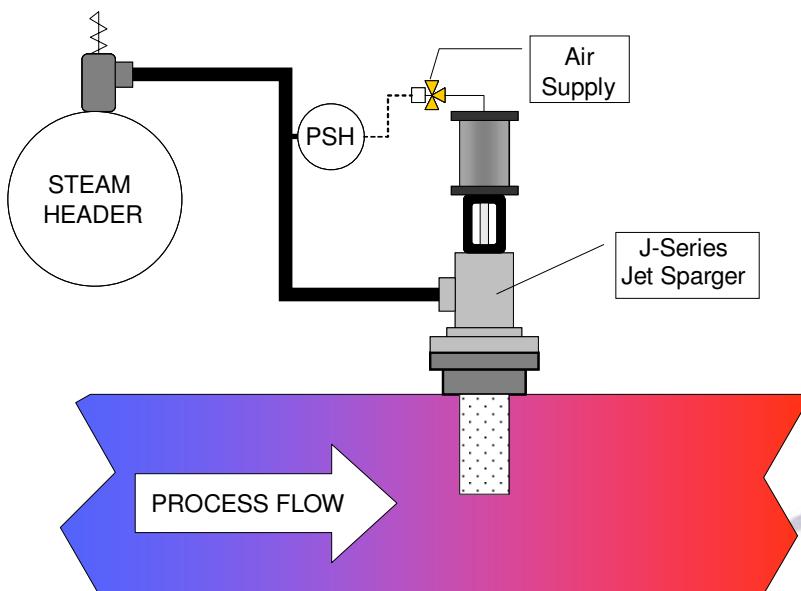
It is often desirable to utilize vent or waste steam rather than simply release it to the atmosphere or condense it into water to eliminate the steam. The difficulty has been finding a way to safely and stably condense the steam into a process fluid so the energy can be used in a productive manner. Vent steam is often variable in pressure and availability. Traditional heat exchangers often have trouble functioning in this manner making them problematic.

Some issues associated with heat exchangers:

- Sizing the exchangers to handle the liquid and steam flow results in the heat exchangers overly large, adding expense and pressure drop to the system
- Sizing the trap system for the heat exchanger is difficult to accomplish without the potential of overloading the system with live steam.

ProSonix Solution

The ProSonix J-Series Jet Sparger allows the vent steam to be utilized in a safe and simple manner. The flexibility in mounting the heater allows the steam to be condensed in a wide range of pipe sizes, or into a tank or other vessel. Control of the steam addition can be accomplished in a simple manner. Often, a pressure switch is utilized on the vent steam line, activating the PSX heater to quickly condense the steam. An air cylinder on the ProSonix heater quickly opens to allow the steam to disperse quickly and quietly into the flowing fluid. When the steam vent closes, or the pressure drops, the air cylinder on the ProSonix heater closes.



Features & Benefits

- **Energy Savings** – Reduce cost of waste steam that is vented or flashed and sent to drain
- **Flexible Installation** – Can be installed inline in the pipe or on a tank or vessel wall
- **Positional Steam Inlet** – Steam inlet rotates 360 degrees allowing for simplified steam pipe connection
- **Compact Design** – Can be installed directly in the pipe or on a tank eliminating the need for floor space or expensive re-working of piping
- **Single or Multiple Unit Configurations** – For tank heating, multiple units can be installed to allow for large volume heating and then trim heating with a single unit open

For additional information, please visit ... www.pro-sonix.com