

Guard Against Attemperator Overspray Damage with Fisher™ ATST Desuperheaters



FISHER™

Achieve confidence in power plant steam temperature control with steam-atomized desuperheaters.

Varying load conditions can lead to damaging overspray.

The growing use of renewable energy sources has transformed the daily operations of combined cycle power stations. Fluctuating load demands have pushed gas turbines to operate at much lower loads, resulting in wide variations in steam temperature and flow in the heat recovery steam generator (HRSG). Many existing desuperheaters are being stretched beyond their capabilities, posing a serious threat to the operation and availability of the power station. Desuperheater liner failures, pipe damage, and poor temperature control are common.

A steam-atomized nozzle solution.

The Fisher ATST steam-atomized desuperheater can help combined cycle power plants maintain ideal steam temperature under load changes. It features an innovative spray nozzle enabled by additive manufacturing, which uses high speed vapor to atomize water into a fog-like mist over a wide operating range. The efficiency of the atomization at the ATST nozzle helps decrease piping wear and improves temperature control.



Fisher ATST steam-atomized desuperheater



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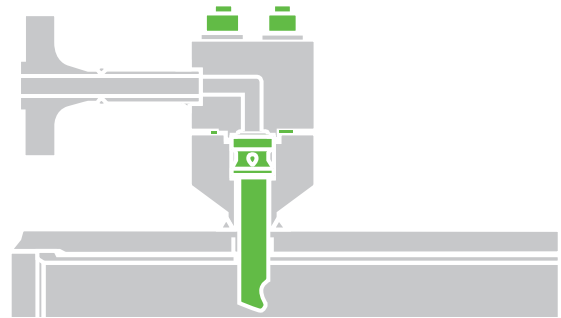
The ATST works by utilizing steam from the high-pressure steam system, typically saturated steam from the high-pressure drum. An atomizing steam control valve and an isolation valve are installed upstream of the nozzle.



Highly Resistant to Plugging

The ATST nozzle does not require small passages and sharp edges to create a fine spray. Much larger flow passages allow the ATST to pass large particulate without plugging.

► [Watch a video](#)



Quick Nozzle Replacement

When service is needed, the ATST nozzles are easily removable and replaceable, with no special tools required.

► [View the instruction manual](#)

Additional Product Benefits

- **No Moving Parts or Springs in the Nozzle:** There is no risk of nozzles sticking open or closed, and no spring to relax or fail.
- **Retrofittable Design:** The ATST desuperheater is specifically designed to be able to retrofit into existing Fisher TBX-T ring-style desuperheaters.
- **Highly Corrosion Resistant Nozzles:** The ATST nozzles are constructed from R31233 cobalt-chrome alloy, which has excellent resistance to corrosion in water, steam, and oxidizing environments.

Learn More

- [ATST Product Webpage](#)
- [Find an Emerson sales office near you](#)



Nozzle for the Fisher ATST steam-atomized desuperheater

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