Horizontal and vertical installation

No thermal liners required

Low pressure drop

High turndown capacity 20:1 with appropriate control valve

Butt weld ends or flanged to ANSI 150, 300, 600, 900, and 2500 Or DIN PIN 10, 16, 40, 64, 100

All materials of construction available

The Equalizer™ Module

The Komax Desuperheater utilizes a different style of cooling compared to conventional desuperheaters on the market. Using a low pressure spray nozzle rather than a high pressure nozzle, we are able to inject a cone of cooling water (or cooling fluid) upstream to begin the cooling process. Steam then interacts with the cooling water, forcing it downstream and through our patented Equalizer™ mixing module. The water is then violently mixed with the steam, cooling the steam to the desired temperature.

The Equalizer™ is outfitted with six mixing chambers, each of which with their own helical mixing element. These mixing chambers create an ideal environment for the water to be absorbed by the steam. As the mixing element forces the water particles to break up more fine in order for the steam to absorb, the six mixing chambers are combined at the outlet of the Equalizer™ and recombined into the stream with a uniform temperature profile.

*Ideal for power plants, LNG plants, and the cooling of gas and steam, the Komax desuperheater is an excellent option.*
Your Best Option

The three stages of mixing utilized by the Komax Desuperheater ensure for a rapid and efficient heat transfer between cooling fluid and superheated fluid. As the Equalizer™ forces near complete absorption of the cooling liquid almost instantaneously, large straight pipe lengths are not required to normalize the temperature profile as they are with typical desuperheaters. The Komax Desuperheater requires only 5-10 pipe diameters downstream before the next part of your process.

The Desuperheater has no moving parts and offers high levels of consistency. Thermal cycling and fatigue in the pipeline are not of any concern, as the Equalizer™ forces the absorption of the cooling liquid before even being able to collect on the bottom of the pipeline. Maintenance is virtually eliminated with the Komax Desuperheater, as the low pressure spray nozzles do not wear out.

Our patented Komax Desuperheater will exceed your expectation by increasing the efficiency and effectiveness of your gas desuperheating application at a price you can afford. Fill out an RFQ form on our website today, or contact Komax Systems, Inc. a dedicated Applications Specialist in your industry will begin designing a desuperheater to directly suit your individual application’s requirements.