MAXSWIRL® Demisting Cyclone

Mist Eliminator



The MAXSWIRL[®] Demisting Cyclone is a state-of-the-art, high-capacity, highefficiency demisting device which uses centrifugal forces to provide separation performance. This device can be used as a solution to handle high liquid and vapor loads while minimizing liquid carryover.

The cyclone tubes consist of a fixed swirl element to apply centrifugal force on vapor and mist to separate liquid from gas flow. In this axial flow cyclone, the resulting centrifugal motion forces liquid droplets outwards where they create a liquid film on the tube inner wall. The liquid passes through specially designed slots and collected at the bottom of the cyclone box, where it is drained to the bottom of the vessel. The dry gas concentrates in the center of the tube and exits downstream of the cyclone.

This device is a robust welded design with fixed elements that do not require maintenance. Our cyclones can be installed in both the vertical and horizontal configuration. AMACS' MAXSWIRL® Demisting Cyclone has been tested and performed effectively in high pressure systems using hydrocarbons.

Advantages:

- Very high gas and liquid handling capacity
- Very high separation efficiency
- No maintenance required
- Significantly reduces vessel size (greenfield) and improved capacity (brownfield)
- Reduce new vessel diameters
- Robust welded design

Applications:

- High pressure services
- Upstream and downstream (and midstream) gas/liquid separators
- Retrofit/debottlenecking for troubleshooting and/or capacity increase
- Revamp projects



