

PT Demister

peltech offer a wide range of demisters with different wires and materials to suit your application and requirement. This demister is available in various shapes, sizes, dimensions and can be customized according to your specifications.

Most demisters are replaced on a regular basis due to fouling or corrosion. Very often the same style of demister that was installed originally is specified for the replacement. However, our technical team can offer advice to assure optimum performance for your new or replacement demister.

We deliver cost effective demister solutions. Many common materials are in stock, demister for replacement can be quickly manufactured and to get equipment back on line in shortest time.

peltech has designed, manufactured, and supplied demisters for marine, oil & gas, petrochemical plants, oleo-chemical plants, chemical plants, power generating plants, and other various industrial plants for many years.

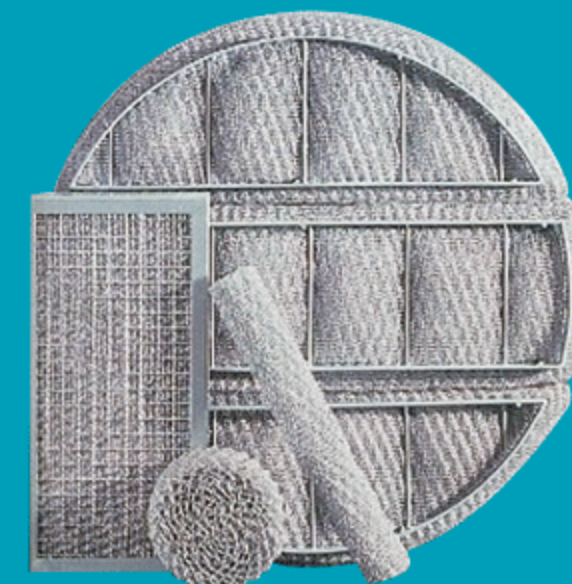


What is Demister?

Demister is also known as mist eliminator, wire mesh separator or wire mesh blanket. It separates mist or dust contained in a fluid. This is a kind of high efficiency separation devices, is essential in many process operations to remove liquid droplets from gas or vapor streams.

Wire mesh demister pads are used in chemical, petroleum, sulfate, medicine, metallurgy, marine and environment protection. Demister pad is mainly used to eliminate streams with diameter of more than 3µm to 5µm. It can be fabricated in any desired size and shape.

Along with wire diameter and mesh density, another important parameter in design and operation is the vapour velocity. This can be controlled by careful selection of the mesh area. Optimal area will depend on operating temperature, pressure and pressure drop. Under normal operating conditions, 99% removal efficiency can be achieved with a very low pressure drop.



Demister Selection

Available in various materials: SS 304, SS 316, SS 316L, SS 317L, SS 904L, Monel, Inconel, Incoloy, or other special steel.

Demister Type	Density (kg/m ³)	Surface Area (m ² /m ³)	Voidage (%)	Application
DS-50	50	90	99.4	Heavy Fouling e.g. Evaporators
DS-80	80	145	99.0	Moderate Fouling
DS-110	110	200	98.6	Light Fouling
GP-145	145	265	98.2	Heavy Duty e.g. Oil & Gas Separators
GP-170	170	310	97.9	General purpose, not totally clean
GP-195	195	355	97.6	Optimum efficiency & pressure drop
GP-240	240	443	97.0	High density with high separation efficiency
HED-112	112	375	98.6	General purpose, clean service
HED-145	145	480	98.2	Fine droplet removal in clean service
HED-195	195	650	97.5	Very high efficiency in clean service
HED-400	400	1284	95.1	Special application

Operating Principle

The operating principle of the mist eliminator is simple. As the wet vapour stream rises through layers of contracting surfaces within the knitted and crimped wire mesh demister pad, entrained as they continuously impact each surface. The gas within the vapour stream continues to rise and passes easily as the heavier liquids separate, attach and coalesce into droplets within a mesh. As the droplets grow and become heavier until they fall to the bottom of the vessel due to gravity. Liquid accumulations can then be drained out of the bottom as the overhead gas is free of entrained liquid and routed through the top of the Vessel.



Applications

Industries using demister pad and mist eliminator includes:

- Desalination
- Oil & Gas
- Petrochemical
- Chemical
- Pharmaceutical
- Sugar Manufacturing
- Pollution Control

Typical applications using demister pad:

- Absorption columns
- Distillation columns
- Steam Boilers
- Gas and Air scrubbers
- Oil Mist Separation
- Effluent gas treatment in Sulphuric Acid Factories
- Vacuum Towers and Drying Towers



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your preferred filtration partner

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