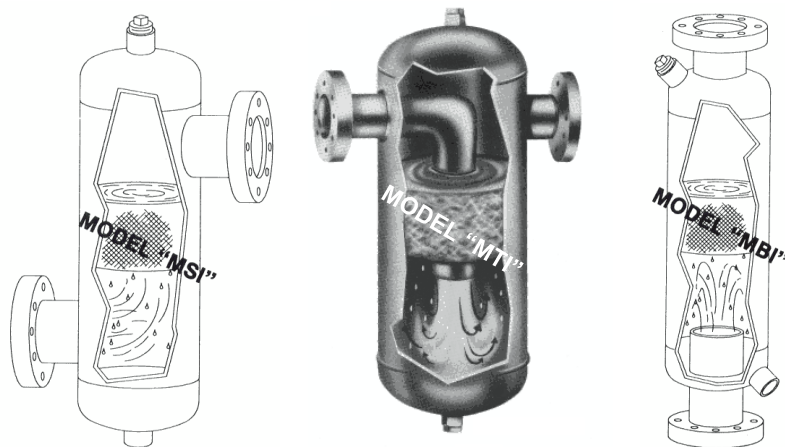


13 MIST SEPARATOR

High Efficiency Entrainment Separators for Process, Vacuum, and Environmental Applications.

Mist Separators are a ASME Code pressure vessel body with a mesh pad “Mist Eliminator” separating element located in the center of the unit. The flow is slowed as it travels upward through the element. The small droplets collect on the element until they are large enough to fall free of the flowing steam, air or gas flow. Our original designed was for low pressure boilers. Now the Mist Separator is available in special individually designed units for most liquid from gas applications.

- 99% or better efficiencies for 10 micron liquid droplets and separation as small as 2 micron size.
- ASME Code construction in carbon and stainless steel. Custom designed for each application.
- Different Styles include “MSI” side inlet & outlet, “MTI” T Type, or “MBI” bottom inlet top outlet to accommodate most piping situations.



Mist Separator Sizing For Low Pressure Boilers:

LBS. PER HOUR OF STEAM

	MODEL	500 #/hr.	1,000 #/hr.	1,500 #/hr.	2,500 #/hr.	5,000 #/hr.	7,500 #/hr.	10,000 #/hr.
5 psig	MSI	3"-8"-38"	5"-10"-46"	6"-14"-50"	6"-18"-58"	8"-24"-70"	8"-30"-78"	10"-36"-90"
	MBI	3"-8"-26"	5"-10"-30"	6"-14"-34"	6"-18"-38"	8"-30"-52"	8"-30"-52"	10"-36"-58"
	MTI	3"-8"-32"	5"-12"-40"	6"-16"-48"	6"-18"-52"	8"-30"-74"	8"-30"-74"	10"-36"-84"
10 psig	MSI	3"-8"-38"	5"-10"-46"	6"-12"-50"	6"-16"-58"	8"-24"-70"	8"-30"-78"	10"-30"-84"
	MBI	3"-8"-26"	5"-10"-30"	6"-12"-32"	6"-16"-36"	8"-24"-44"	8"-30"-52"	10"-30"-52"
	MTI	3"-8"-32"	5"-12"-40"	6"-14"-44"	6"-16"-48"	8"-24"-64"	8"-30"-74"	10"-30"-76"
12 psig	MSI	3"-6"-34"	5"-10"-48"	6"-12"-50"	6"-14"-50"	8"-20"-64"	8"-30"-78"	10"-30"-84"
	MBI	3"-6"-24"	5"-10"-30"	6"-12"-32"	6"-14"-34"	8"-24"-44"	8"-30"-52"	10"-30"-52"
	MTI	3"-8"-32"	5"-12"-40"	6"-14"-44"	6"-16"-48"	8"-24"-64"	8"-30"-74"	10"-30"-76"

Model No. “Inlet Size-Diameter-Height”. Other sizes are available in our Complete Catalog.

Mist Separator Sizing Other Applications:

The proper selection of a Mist Separator for your specific application can best be obtained by presenting detailed information to Penn Separator. Include the following information where possible. With this information Penn can offer a proposal on a separator for your specific needs.

1. Flow Rate.
2. Vapor Density.
3. Liquid Density.
4. Liquid Viscosity
5. Liquid Partical Size.
6. Process and System Description.
7. Operating Pressure and Temperature.
8. Line Size Horizontal or Vertical.

Mist Separator Suggested Specifications:

Furnish and install as shown on plans a Mist Separator Style MTI, MSI, or MBI constructed of Carbon or Stainless Steel built according to ASME Code for 150 psig @ 450 deg. F. or _____ psig as required for the application. The mist separator will include a fine wire 304 stainless steel mist eliminator element centrally located and selected to provide a 99+% efficiency for entrained liquids 10 micron size and larger with a pressure drop not exceeding 3” of water.

The separator is to include a 150# Flanged inlet and outlet _____” size to match the line size. Couplings are included for the entrainment drain, inspection ports, and element backwash connection. The exterior of the unit includes a coat of shop primer.