

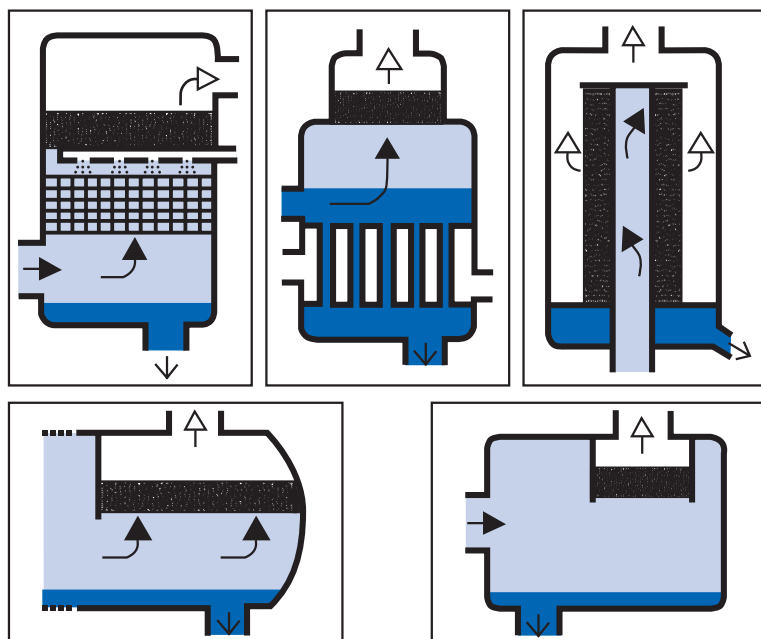
# Demister

## APPLICATION

STRIKO wire mesh pads are used throughout the whole process industry in all applications where liquid and vapour or gas have to be separated. This gives applications in the processes of distillation, gas absorption and stripping condensation, gas compression, dehumidification and drying, the removal of spray and desalination.

In the petrochemical industry demisters are widely used again in distillation processes related to olefin production, methanol production, oxo alcohols and derivatives and in condensation from and compression of liquefied petroleum gas. In gas scrubbing systems for gas treatment to remove sulphur compounds.

### TYPICAL INSTALLATIONS



### STRIKO-Advantage

- Available in various Metall- and Plastic material
- High liquid removal efficiency
- Low pressure Drop
- Easy installation and maintenance
- Can be fabricated in many different shapes
- Most cost effective solution including Frame work
- Complete supply including vessel or housing

## BENEFITS AND OPERATION

The Specifications offered by STRIKO cover an enormous range with surface areas from 35 ft<sup>2</sup> to 1300 ft<sup>2</sup>/ft<sup>3</sup> (150 m<sup>2</sup> to 4400 m<sup>2</sup>/m<sup>3</sup>) and free volumes from 99 ½ % to 75 %. Normally, the demister will remove 99 % of all droplets down to 5 microns and over 99 ½ % of those above 10 microns and is still very effective down to 2 microns. This can be obtained at usual operating conditions with a pressure drop normally less than 1" (25 mm) water gauge. The separation action of a demister is largely that of impingement and only knitted mesh elements can provide the effective surface areas and large free volumes necessary.

The vapour easily finds the open path through the mesh; but the liquid droplets with greater inertia at sufficient velocity, contact the wire target area. The liquid particles are held when they strike the wire surfaces. The drops flow downwards and collect at adjacent wires, flowing downwards again when these collecting points become overloaded. Surface tension holds the liquid at the bottom surface of demister until drops are formed which are large enough for the force of gravity to exceed the combined forces of velocity and surface tension. The drops will then fall away against any reasonable velocity.

## Design Range in Stainless Steel

TYPE No.	Application	free volume	Density		surface area	
			lb/ft <sup>3</sup>	kg/m <sup>3</sup>	ft <sup>2</sup> /ft <sup>3</sup>	m <sup>2</sup> /m <sup>3</sup>
<b>980-0,28</b>	Dirty Service Minimum pressure drop	<b>99,0 %</b>	5	80	44	145
<b>9110-0,28</b>	high velocity	<b>98,6 %</b>	7	110	61	200
<b>9130-0,28</b>	Standard, general	<b>98,3 %</b>	8	130	72	236
<b>9145-0,28</b>	Standard; purpose media	<b>98,1 %</b>	9	145	80	265
<b>9175-0,28</b>	Standard; dirty service	<b>97,8 %</b>	11	175	98	320
<b>9192-0,28</b>	high efficiency	<b>97,5 %</b>	12	192	107	350
<b>9240-0,28</b>	high efficiency; clean service	<b>97,0 %</b>	15	240	133	435
<b>9240-0,14</b>	for agglomeration	<b>97,0 %</b>	15	240	265	868
<b>9200-GSF</b>	very high efficiency	<b>94,8 %</b>	12,5	200	1520	5000
<b>9432-0,12</b>	Distillation Media; smallest droplets	<b>94,5 %</b>	27	432	560	1835

## Design Range in special Material

Material	TYPE No.	Application	free volume	Density		surface area	
				lb/ft <sup>3</sup>	kg/m <sup>3</sup>	ft <sup>2</sup> /ft <sup>3</sup>	m <sup>2</sup> /m <sup>3</sup>
Polypropylen	<b>950-0,40</b>	Standard for Acid mists; low pressure drop	<b>94,5 %</b>	3	50	170	550
Polypropylen	<b>970-0,40</b>		<b>92,3 %</b>	4,4	70	235	770
Polypropylen	<b>9100-0,40</b>	high efficiency	<b>89,0 %</b>	6,2	100	335	1100
Polypropylen	<b>9100-0,22</b>	high efficiency for fine Acid mists	<b>89,0 %</b>	6,2	100	610	2000
PVC	<b>9100-0,30</b>	high corrosive media	<b>92,9 %</b>	6,2	100	290	952
PVDF	<b>980-0,27</b>	at higher temperatures	<b>95,5 %</b>	5	80	200	665
HM	<b>9100-0,27</b>		<b>94,2 %</b>	6,2	100	265	870

Stockmaterial in wires: Steel, galvanised, aluminium, copper, stainless steel 304, 321, 304L, 316 Ti  
Monel 400 (2.4360); Nickel 200 (2.4066); Incoloy DS (1.4864); Incoloy 825 (2.4258)

Stockmaterial in filaments: Glaswolle, Polypropylen, Nylon, Teflon FEP, Hostafion E. T.

Stockmaterial for supports: Stainless steel 316 Ti, 304, 321

Further material on request

Technische Änderungen vorbehalten \* 330.0406