



Demister pads and packing

We offer demister pads and packing for liquid and gas separation.
Solutions for gas-liquid separations and flow conditioning.

COMPANY PROFILES

Founded in 2007, SINFT Filter is located in ShiJiaZhuang.

At SINFT, we specialize in the design and manufacture of high quality products for a wide variety of industries.

This combined with our mindset of continuous learning and improvement, ensures that we deliver high quality products and service at competitive prices.

We have strict quality control system ISO 9001 certification, CE Certification and enterprise QC department.

Our aim is to make you happy by satisfying all your filtration needs.

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Wire Mesh Demister Pad

Wire mesh droplet separators (Demister) are used for the removal of small liquid droplets (aerosols) from exhaust gases, exhaust air and steam.

The knitted mesh demister pad can be installed in different packed towers and equipment for different media and gas filtration and separation.

- Separation tower.
- Purification tower.
- Scrubber tower.
- Distillation tower.
- Refining tower.
- Desulfuration tower
- Absorbers
- Seawater desalination equipment
- Sulphuric acid plants

During separation, the droplets enter the knitted wire mesh and collide with the wire surface due to their moment of gravity. The collected droplets coalesce at the cross points in the mesh and fall back as larger droplets into the vessel.

We offers a wide range of metallic and plastics materials in order to be able to handle the temperature and/or corrosive conditions of the particular application



VANE TYPE MIST ELIMINATOR

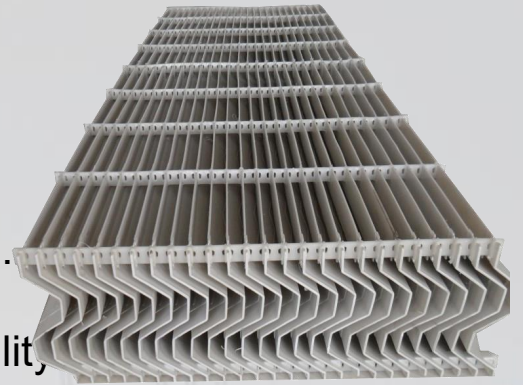
Vane type mist eliminator has similar but different working principle with knitted mesh demister pads. When the gases with particles or droplet mists rises and passing through the cane channels, the gas will change rising direction. The mist droplets momentum forces it to impact on the blades and coalesces to larger droplets and eventually drains off the blades when the gravity is larger than the gas lifting force and surface tension of liquid. The multi-channel structure improves separating and filtering efficiency during many times filtering and blocking.

Vane type mist eliminator can be divided into metal vane demister pad and plastic vane demister pad.

- Metal vane mist eliminator is available in stainless steel, carbon steel and other alloy steel. The stainless steel vane mist eliminator is the best popular because of its chemical and temperature stability,
- Plastic chevron mist eliminator is available in PVC, PP and other high performance plastics. This type vane mist eliminator are also popular because of its lightweight but high filtering efficiency for gas and liquid separating.

Key Characteristics

- High liquid loads . It can improve 30% to 100% more capacity than the wire mesh demister pad.
- High filtering and separating efficiency.
- Lower pressure drop.
- Durable and long service life.
- Ideal for fouling applications
- High tensile strength.



Fiber Bed Mist Eliminator

Depending upon design parameters, fiber mist eliminators can achieve high separation efficiency of all submicron liquid particles.

The custom designed and fabricated mist eliminators consist of a special media contained between either two concentric screens or two flat parallel screens.

How a Mist Eliminator Works

1. Mist-laden gases enter the vessel and pass horizontally through the fiber bed.
2. Separated liquids drain downward on the inside surface of the element.
3. Liquids pass through the drain leg and are collected at the bottom of the vessel.
4. Clean gases exit at the top of the vessel.

Advantages

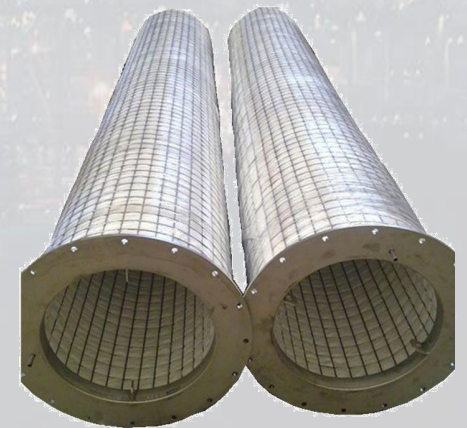
- Removes 100% of all aerosol mist particles, 1 micron and larger.
- Removes 99.5% of all aerosol sub-micron mist particles.
- Higher efficiencies are optional.
- The best protection available from air/oil separator collapse or condensate trap failure.
- Low operating and energy cost, with payback often within one year.
- Low pressure differential over element life, equals a lifetime of energy savings.
- Extends the life of desiccant dryer bed, if installed upstream, thereby reducing maintenance cost.

Materials of construction-gages:

Wide variety of metal alloys/Thermal-set plastics and plastics/FRP

Materials of construction-fiberbed media:

Special glass/PTFE/Polyester fiber/Special carbon fiber media



STRUCTURED PACKINGS

SINFT supplies a complete range of structured packing. Structured packing offers a high separation efficiency in combination with a low pressure drop and is used in the field of distillation, absorption and liquid-liquid extraction.

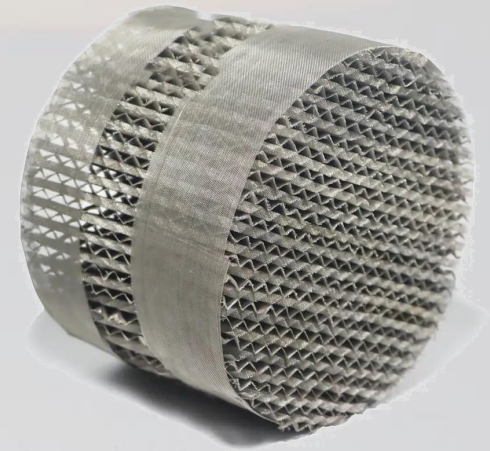
Structured packings are made out of corrugated sheets arranged in a crisscrossing relationship to create flow channels for the vapor phase. The intersections of the corrugated sheets create mixing points for the liquid and vapor phases. Wall wipers are utilized to prevent liquid and/or Vapor bypassing along the column wall. Rotating each structured packing layer about the column axis provides crossmixing and spreading of the vapor and liquid streams in all directions.

All types of structured packings are available in a variety of corrugation sizes, providing the versatility to optimize the packing configuration to best meet the efficiency, capacity and pressure drop requirements for any particular application.

MATERIALS:

Carbon steel/Stainless steel alloys/Aluminum/Titanium/Nickel alloys/Copper alloys/Zirconium/Plastic

- Using structured packing can provide:
- Lower pressure drop through the column
- Higher efficiency in the same tower height
- Higher capacity
- Excellent liquid spreading characteristics
- Reduced liquid hold-up



RANDOM PACKINGS

Random packing is designed to maximize the surface-to-volume ratio and minimize pressure drop. The efficacy of random packaging depends upon a few factors — efficiency, pressure drop and capacity.

Random packing makes use of a few different structures:

1. Raschig Rings

Raschig ring packing makes use of small pieces of tube to make a packing bed. They have low capacity and low efficiency, and they tend to cost more than other types of random packing. In situations where corrosive material is being separated, however, ceramic Raschig rings are effective thanks to their high corrosion-resistance.

2. Pall Rings

Pall rings include added internal support structures and external surfacing. Pall rings work particularly well for distillation and absorption applications.

3. Saddle Rings

Saddle rings As their name suggests, they're shaped like tiny saddles. Their length exceeds their diameter. Saddle rings, with their increased surface area for liquid and vapor contact, offer increased capacity and efficiency. They are ideal for chemical distillation, stripping and absorption.

4. Lessing Rings

Lessing rings are made of ceramic. They have internal partitions to increase surface area and enhance efficiency. They are highly resistant to heat and corrosion. These qualities make them ideal for applications such as regenerative oxide systems.

5. Tri-Packs

Thanks to their spherical shape, they are not prone to nesting and settling. Tri-Packs are commonly offered in a range of plastics, providing corrosion and temperature resistance.

Random packing materials were made of ceramic, metal and plastic or some other materials used in specialized applications.

