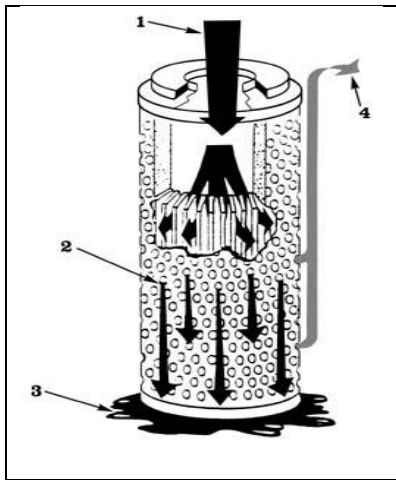


## Specification Sheet

### MOISTURE -OIL REMOVAL COALESCING FILTER CARTRIDGE FOR AIR & GAS



Coalescing filter cartridges are especially designed for moisture, oil & particulate removal from air and gases. The cartridge has stainless steel shell and support components. Stainless steel outer core supports the filter media since the flow differential pressure is from inside to outside. The cartridge is made from HEPA filter media which in gas service will remove better than 0.3 micron particles. HEPA filter media is supported by SS wire mesh to take care of high pressure differentials.

#### **WORKING:**

1. Compressed air or gas enters the inner core of the cartridge & flows outward through the extended area filter media & perforated metal casing.
2. Airborne droplets are coalesced by the filter media & subsequently concentrated on the outer surface.
3. Gravity forces the coalesced liquid to the bottom of the filter housing where it can be drained easily.
4. The air or gas stream continues on virtually free of oil, moisture and particulates.

#### **PRINCIPLE:**

Flow is from the inside to the outside of the cartridges. Oil, water & other liquid aerosols pass through the filter media where their reduced velocities allow them to “wet” the filter fibers thus forming large droplets. These cartridge droplets continue moving through the filter media. The droplets collect on the outer cartridge and drain, by gravity, to the bottom of the filter cartridge housing where it is collected through an extended sump outside.

Although the cartridges will remove particulate, it is recommended that a particle filter be installed upstream of the coalescing filter, operating in the standard outside to inflow configuration. This will significantly extend the life & improve the removal efficiency of the moisture - oil removal coalescer filter cartridge.

## **FEATURES & BENEFITS:**

- High performance filter media provides effective particle removal and coalescence in a wide range of applications.
- Extremely low pressure drops.
- Stainless steel construction handles most corrosive environments.
- Low operating costs.
- Continuously traps and drain liquids.
- Service flow ranges from a few SCFM to over 65,000 SCFM.
- Removes all traces of oil vapor with carbon adsorbent cartridges.
- Pleated media offering long filter life.
- Are long-lived, even in dirty air or gas systems.
- Completely resistant to water, compressor oils, and virtually every other liquid or gas.
- Operate at temperatures up to 450° F.
- Complete range of port sizes, from 15 mm to 300 mm lines sizes.

## **CONSTRUCTION:**

Coalescent filter cartridges are also constructed as per customer specifications.

## **APPLICATIONS:**

Coalescer cartridges are used primarily to coalesce emulsified water and remove particles from hydrocarbon fluids. Major applications are: -

- Filtration of aviation jet fuel
- All types of other fuels
- Process streams in refineries and petrochemical plants
- Condensate streams where natural gas is produced
- As prefilter for compressed air & gas dryers.
- Pulp and paper industry
- Turbine oils
- Transformer oils
- Hydraulic oil
- Power generation
- Chemicals, resins, and solvents
- Final filter for air operated instruments, Paint spray equipment.
- Other applications requiring oil and liquid free compressed natural gas or air.