

# Vapor Condensing Systems Cooling Technology



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### **Operating Principle**

Solberg's vacuum filter systems are designed to protect equipment from harmful vapors and liquids that can break down pump oils and destroy a pump's inner workings. Vapor removal is accomplished through transitioning a substance from a gaseous state to a liquid or solid state and collecting any condensed material that accumulates.

- Process flow containing vaporized contaminant enters chilled vessel.
- Flow is directed through an efficient heat exchanger pack and coolant jacket combination or a cooling coil system which reduces temperatures below a contaminant's boiling point and facilitates condensing of vapor.
- Final stage dual-type activated carbon filter element or demister captures residual uncondensed vapors and particulate
- Note: System effectiveness depends on several factors including the physical properties of the compound being transitioned, concentration levels, process temperature, process flow and pressure levels.



### **Technical Specifications**

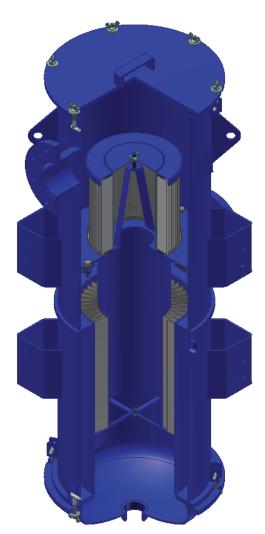
- Vacuum Rating: Helium leak tested for 1 x 10 -3 mbar liter/ sec leakage rate (Std.)
- Replaceable Filter Element: Dual-type activated carbon for greater efficiency with particulate filtration layer.

#### **Features**

- Removable heat exchanger fin pack for ease of cleaning and long lasting optimum performance
- Coolant Jacket System
- Durable carbon steel construction
- Coolant entry and discharge ports
- Removable bottom for full accessability
- 1" liquid level port
- 2" drain port
- 1/4" inlet/outlet taps on 3" and DN65 and larger

### **Options**

- ATEX, PED, ASME
- Wire mesh strainer element
- Stainless steel construction (304, 316)
- Additional ports, vacuum gauges
- Electronic drain package
- Leg supports
- Davit arm





## JST / JCT Series

### **Features**

- Removable heat exchanger fin pack for ease of cleaning and long lasting optimum performance
- Coolant Jacket System
- Stainless steel demister pad
- Compact housing for minimal footprint
- Removable bottom for full accessibility
- Coolant entry and discharge ports
- 1" drain port
- JCT Series: Carbon steel holding bucket
- JST Series: Durable see-through bucket

### **Options**

- Additional ports
- Vacuum gauge
- Bracket/leg supports
- Extended bucket available on 3" & 4" connections

# Filters with Cooling Coil Technology

#### **Features**

- Corrosion resistant 304 stainless steel tubing
- Coil tubing maximizes cooling surface area
- Coolant entry and discharge ports
- Stainless steel fittings incorporate a bore through design with an o-ring groove so the coil is removable and serviceable
- Multiple connecion sizes and types available for process flow and water coolant tie points
- Cooling coils may be integrated on a variety of standard Solberg vacuum filter models



# Protecting your Equipment Protecting your Environment



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