

OVERVIEW OF 3 PHASE GAS COALESCING

3 PHASE GAS COALESCING **FILTERS**

SERIES 343, 383, 393 Patent No. 7,332,010

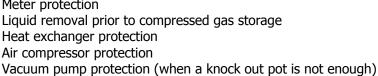
TM Filtration's three-phase coalescing filter vessels are used where high loadings, and highly saturated gasses are at their worst.

TM Filtration's pleated GFC coalescing element ensures maximum removal of liquid and particulate, while minimizing frequent and expensive element change outs by utilizing our standard patented high capacity element. It also reduces your future costs of spare elements, as our elements may be ultrasonically cleaned.

The three-phase separator/filter combines the functionality of a vane or mesh separator, with the high efficiency, high capacity GFC coalescing filter; thus removing the need for separate vessels, and their additional cost.

APPLICATIONS:

Turbine protection Gas compressor oil & water removal Meter protection Liquid removal prior to compressed gas storage Heat exchanger protection Air compressor protection



DESIGN INFORMATION:

- Gas radial velocity impacting on the surface area of the coalescing element ≤ 0.5 ft / sec
- Clean pressure drop inlet to outlet ≤ 1 psid Vessels are available in full ANSI class ratings
- All vessels are designed per ASME code Section VIII Div. 1 (Latest addendum)
- ASME "U" Stamp available upon request



Notes: Body material, connections, available options, and dimensions are completely customizable. Dimensions and options availablility are subject to change without notice. Please consult the TM Sales Department or your local sales representative for certified drawings, or additional information.



2 STAGE (PHASE) GAS FILTRATION



3 STAGE (PHASE) GAS FILTRATION

PATENT NO. 7,332,010

Second Stage:

Coalescing filtration using TM's patented pleated coalescing element with "New Flow Technology" where gas flows through the element from outside to in.

Third Stage:

Coalescing filtration using TM's patented pleated coalescing element with "New Flow Technology" where gas flows through the element from outside to in.

$-FLOW \rightarrow$

Centrifugal separator that removes large particles of liquid and slows the velocity to less than 3 ft/sec (1 m/sec).

First Stage:

Second Stage:

Mesh scrubber (not included in 2 Stage) for collecting moisture in micron size and creating droplets to fall to the bottom.

First Stage:

Centrifugal separator that removes large particles of liquid and slows the velocity to less than 3 ft/sec (1 m/sec).

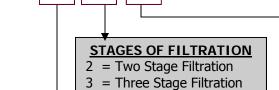


CREATING A 300 SERIES CLEANABLE GAS COALESCING PART NUMBER

300 SERIES PART NUMBER PATENT NO. 7,332,010

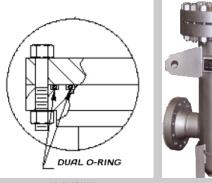






COVER STYLE

4 = Double O-ring cover 8 = Posi-Sealoc II[®] quick release cover 9 = Bolted cover



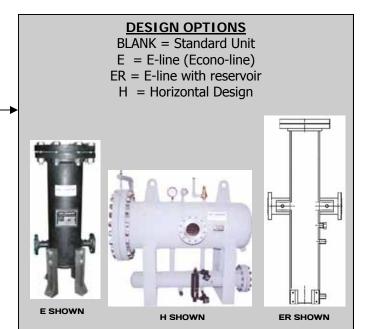
4 SHOWN



9 SHOWN



8 SHOWN



Examples

383 3 Stage Coalescing Filter with a Posi-Sealoc II® quick release cover

392ER Economy line, 2 Stage Coalescing Filter with a bolted cover and reservoir

342 2 Stage Coalescing Filter with Double O-ring cover

Note: It is possible to assemble codes that have not previously been designed. Please contact the sales department if you cannot find your model code in this catalog.