Series R100TM Coalescing Filter

¶hawndra Products™, Inc.

Makers of Sparks Filters™

Horizontal vessels with vertical orientated coalescing filter elements, multistage filtration utilizing gravitational settling and inertial impaction. Filter elements incorporate particulate and coalescing sub micron filtration. Integral slug catcher with (2) sump holding chambers with ease in maintenance and service - Hundreds in successful service - Vertical filtration (not horizontal or vane packs). A proven vertical coalescing system, new technology improving efficiency and maintenance down time while expanding element life. Quick opening closures - no tools required, no compressors or impact tools required.

R100 Design Inertial Impaction Gravitational **Proprietary Stainless** Settling Steel Internals

Competitor Service in 1-2 Hours Yes No No Yes Inline Connection Yes Inertial Impaction Gravitational Settling Yes No Slug Catching No Yes No (not needed) Secondary Sump

Improved Efficiency, Reduced Maintenance Cost, **Reduced Operating Costs**

R100TM replaced a competitive horizontal element unit that required seven 4" x 36" elements, with change out needed every two weeks. The new SparksTM series R100TM filter with only three elements operated continuously for six months without needing any service saving the owner seventy-five hours of remote field maintenance and over \$20,000 in replacement filter elements. Payback on investment in as little as 9 months - Similar success stories continue.

Vane Separators - Pockets and drain piping can

easily plug with solids. Difficult to clean. Relatively expensive.

Mesh separators - Very susceptible to plugging. Highly susceptible to corrosion. Expensive.

Centrifugal & Cyclone

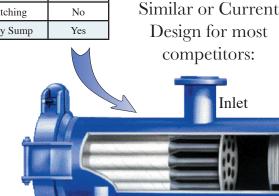
- Lower efficiency than vane separators. A trap device is needed for liquid collection. Limited liquid handling capacity.



Vane Separators look great when first fabricated - but not so great after a

few months in service, 10-20 micron at best.

Outlet



Case A Case B Case B Competitor R100TM Competitor R100TM Competitor Vessel OD 36" 48' # Of Elements 31 4 38 3 5 56 72" 30" 72" 72" Element Length 30" Total Sq. Ft. 243 224 325 274 405 404

View below filter elements - particulate &

liquid removed prior to filter elements.

Not required with the R100TM

Multiple Horizontal Tubes lose How many are totally wet or useless? Vertical filters drain towards the

efficiency and quite often by pass at the seals.

Service 2 to 5 elements in less than (1) hour,

OR

up to 75 in many hours

Long tube type horizontal coalescing filters can "wet" out and lose up to one third useful area - Element installation and maintenance can be extremely tedious, time

consuming and

costly.

bottom - only 1-2" are wet.

Efficiencies: Independant Lab Tested:

Particulate: Liquid:

99%99%0.7 Micron 0.7 Micron 99.5% 1 Micron 99.3% 1 Micron 99.9% >5 Micron 99.9% >5 Micron

1 The Handbook of Evaporation Technology (Paul E Minton)

