

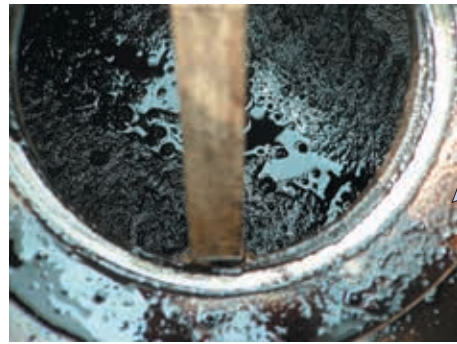
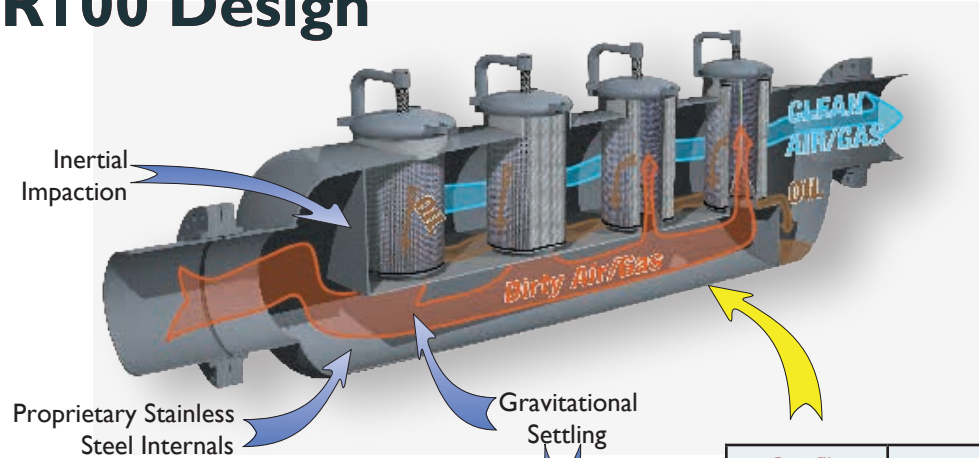
# Series R100™ Coalescing Filter

## Alfafilter®

Filtrations und Separationstechnik

Horizontal vessels with vertical orientated coalescing filter elements, multi-stage 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



View below filter elements - particulate & liquid removed prior to filter elements.

R100™		Competitor
Yes	Service in 1-2 Hours	No
Yes	Inline Connection	No
Yes	Inertial Impaction	No
Yes	Gravitational Settling	No
Yes	Slug Catching	No
No (not needed)	Secondary Sump	Yes

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

R100™ replaced a competitive horizontal element unit that required seven 4" x 36" elements, with change out needed every two weeks. The new R100™ series 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.

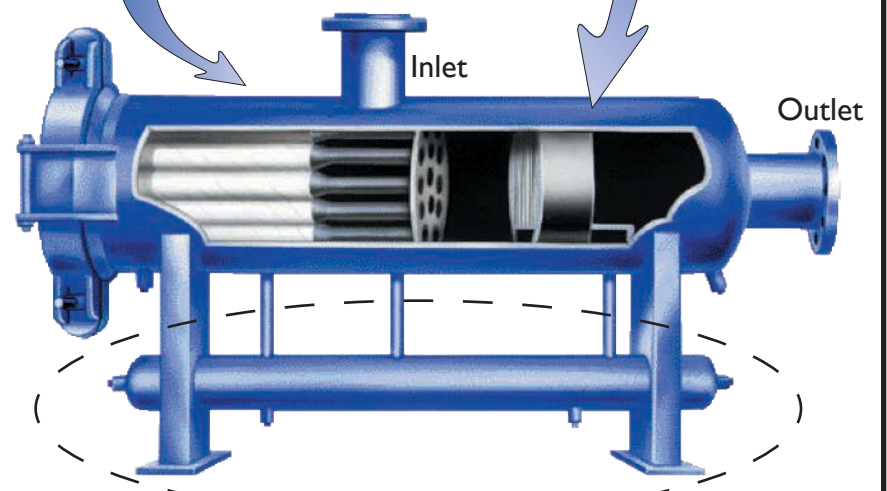
**Centrifugal & Cyclone** - Lower efficiency than vane separators. A trap device is needed for liquid collection. Limited liquid handling capacity.



Vane Separators look great when first fabricated - but not so great after a few months in service, 10-20 micron at best.

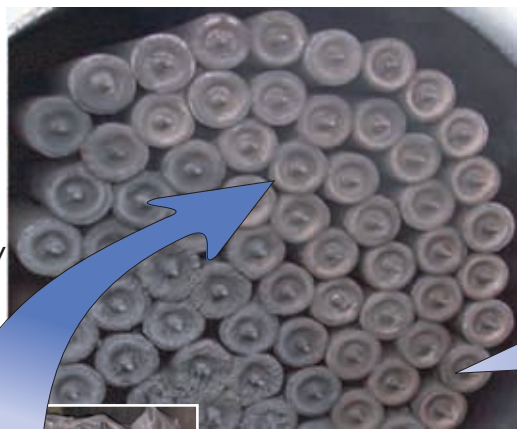


Similar or Current Design for most competitors:



Not required with the R100™

	Case A		Case B		Case B	
	R100™	Competitor	R100™	Competitor	R100™	Competitor
Vessel OD	36"	36"	36"	42"	36"	48"
# Of Elements	3	31	4	38	5	56
Element Length	30"	72"	30"	72"	30"	72"
Total Sq. Ft.	243	224	325	274	405	404



How many are totally wet or useless?

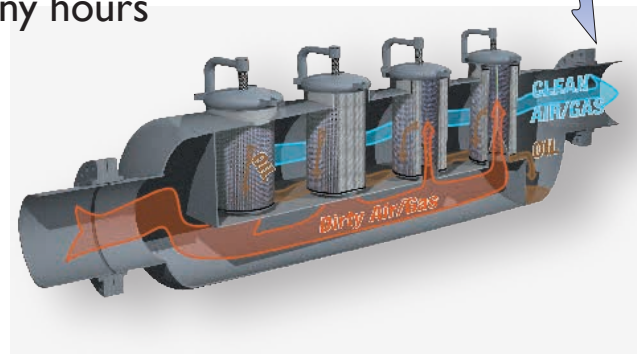
Multiple Horizontal Tubes lose efficiency and quite often by pass at the seals.

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.



Vertical filters drain towards the bottom - only 1-2" are wet.



### Efficiencies:

Independant Lab Tested:

Particulate:	Liquid:
99% 0.7 Micron	99% 0.7 Micron
99.5% 1 Micron	99.3% 1 Micron
99.9% >5 Micron	99.9% >5 Micron

I The Handbook of Evaporation Technology (Paul E Minton)