

# AIR FUSION TECHNOLOGY



**Product Overview** 



An ISO 9001:2015 Cer

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### SCHROEDER INDUSTRIES

#### Next-Gen Defense Against Air Contamination

Air Fusion Technology, or the AFT, is Schroeder's next generation in-tank air filtration solution. AFT filters are engineered to increase machine reliability & efficiency, protect components, and even allow for a downsized hydraulic reservoir!

#### AFT Vs. Traditional Return Line Filters

The AFT's sophisticated design enhances performance and can allow **up to a 60% decrease in reservoir size** with **up to a 30% increase in deaeration**:



#### 40 gpm (151 L/min) 100 psi (7 bar)





- High velocity into the tank
- Minimal dwell time
- Requires baffles to manage high fluid velocity & utilize full volume of the tank
- Increases cost/complexity of tank
- Turbulent flow into tank creates sloshing and unfavorable air bubbles

12 gallon tank utilizing AFT

- Radial exit velocity with exceptional air bubble coalescing
- Significantly longer dwell time in a smaller space
- Unconventional flow path design to smoothly remove air from the fluid
- Laminar Flow = No Sloshing

#### Two Filter Head Configurations Available:

Learn More About Air Fusion Technology!





#### AFT

Head swivels independently of the port for toolless element change-outs



The best qualities of Air Fusion Technology with fixed-head porting

## AIR FUSION TECHNOLOGY

#### 20% Less Air in Suction Strainer

The AFT reduced the amount of air which entered the suction line on the first pass by 20% more compared to a standard out-to-in flow in-tank filter.

To see Air Fusion Technology in action, view this time-lapse comparison between the AFT and a standard in-tank filter.



SCAN

Percent of Air Buddles De-derated			
Air Bubble Size	Standard Return Line	AFT Return Line	AFT Performance Increase
1 mm	28%	65%	37%
2 mm	64%	99%	35%
3 mm	83%	100%	17%



#### Dynamic Duo: Pair AFT with TNK Series for Maximum Tank Optimization

The exceptional deaerating filtration of Air Fusion Technology and optimized, lightweight, durable design of the Schroeder Industries TNK series combine to form the ideal reservoir system. **Significant reservoir downsizing may be possible!** 



#### Tank Optimization Summarized:



Maximize the dwell time of the fluid in the tank for optimal de-aeration of the returning fluid.



Minimize the total fluid in the tank to meet optimal operation functionality defined by our customer's parameters.

#### Tank Optimization Benefits:



- More space for new features
- Reach operating temperature faster
- Save on new hydraulic fluid and fluid recycling expenses
- Reduce your carbon footprint by reducing oil consumption
- And much more!

#### SCHROEDER INDUSTRIES' AIR FUSION TECHNOLOGY

#### AFT is Coalescing Savings for You!

Reducing your tank size can substantially reduce your expenses. In a scenario where a **9-gallon reservoir is downsized to a 2-gallon reservoir**, over a 10 year span **we can save our customer up to \$750,000**! This assumes an annual usage of 400 units.





7 fewer gallons of hydraulic oil saves 165 lbs/CO2 per machine. Our Tank Optimization with Next Gen Filtration will reduce your carbon footprint over the year by 66,000 lbs of carbon dioxide per year!

#### Work with the Tank Optimization Experts at Schroder Industries

Through CFD analyses we can provide our customers with real world data on flow, de-aeration, sloshing, thermal and structural characteristics and develop optimization solutions for your application.



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Scan to learn more about how Tank Optimization can benefit you!

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**OVER** \$750K

TOTAL SAVINGS!