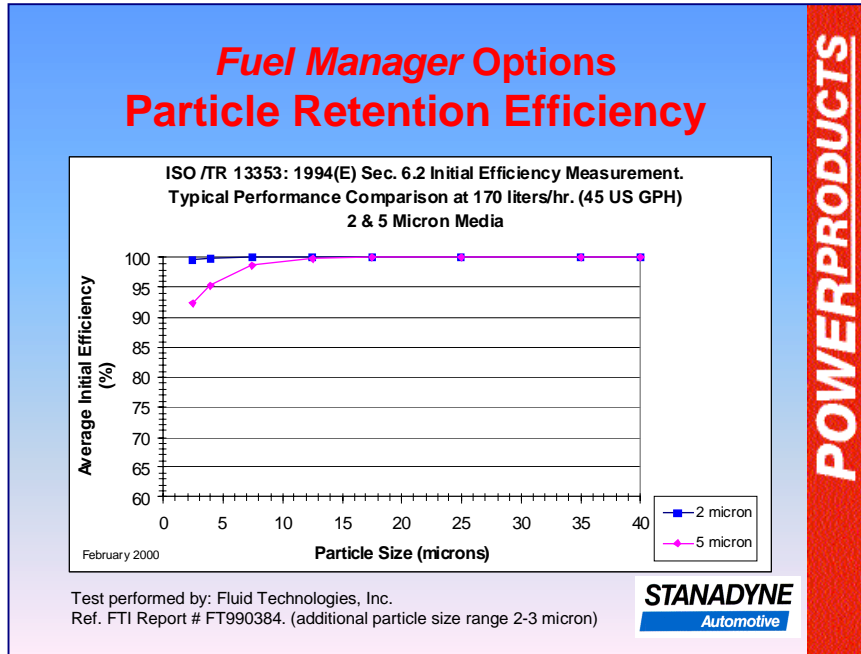




Stanadyne Fuel Manager Diesel Fuel Filter/Water Separators
Efficiency and Performance Figures



#1 ISO TR 13353 Particle Retention, 5 & 2-micron media

Fuel Manager Options
Particle Retention Efficiency

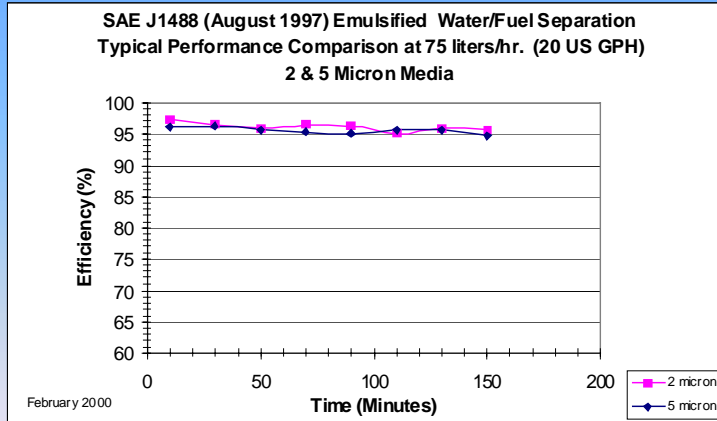
<u>Media</u>	<u>Average Particle Retention Efficiency</u> <u>Per ISO TR 13353, Sec. 6.2</u>
5 micron	>97% @ 170 lph (45 gph)
2 micron	>99% @ 170 lph (45 gph)

STANADYNE
Automotive

POWERPRODUCTS

#2 Summary of ISO TR 13353 Particle Retention, 5 & 2-micron media

Fuel Manager Options Emulsified Water Removal Efficiency



STANADYNE
Automotive

POWERPRODUCTS

#3 SAE J1488 Emulsified Water Removal, 5 & 2-micron media

Fuel Manager Options Water Removal Efficiency Emulsified Water

<u>Media</u>	<u>Average Water Separation Efficiency Per SAE J1488 (emulsified water)</u>
5 micron	>95% @ 75 lph (20 gph)
2 micron	>96% @ 75 lph (20 gph)

STANADYNE
Automotive

POWERPRODUCTS

#4 Summary of SAE J1488 Emulsified Water Removal 5 & 2-micron media

Fuel Manager Options
Water Removal Efficiency
Whole Water

<u>Media</u>	<u>Water Separation Efficiency Per SAE J1839 (whole water)</u>
150 micron	>90% @ 75 lph (20 gph)
30 micron	>98% @ 75 lph (20 gph)
5 micron	>98% @ 75 lph (20 gph)

POWERPRODUCTS

STANADYNE
Automotive

#5 SAE J1839 Whole Water Removal 150, 30, 5 micron

In addition, Stanadyne can provide the following diesel fuel filter/water separator test information:

1. Vibration Test: Assembly cycled for 10 million cycles at its natural frequency, in three mutually perpendicular axes.
2. Combined Thermal Cycle (-40 °F - 250 °F) and Impulse Test (0-60 psi) for 100K impulse cycles.
3. Assembly Burst Test: ISO 4020/1, Section 6.7, Burst Test of Complete Filters.
4. Element Collapse/ Burst Test: ISO 4020/1, Section 6.6, Burst Test of Complete Filter Element.
5. ISO 4020/1, Section 6.4, Particle Retention Test.
6. 500 Hour Durability Test, Assembly exposed to 75% diesel fuel and 25% water at 150 °F for 500 hrs.
7. Flow Vs Pressure Drop Test: Pressure drop across assembly is recorded up to maximum flow rate.
8. Drop Test/ Impact Resistance
9. Salt Spray Test: Assembly exposed to salt spray mist
10. Dust Sealing Integrity: Assembly exposed to dust cloud
11. External Resistance to Fluids

Should you require we could provide further detailed information on any particular test, please contact:

Vince Attianese, Applications Engineering Manager, Power Products Div. Stanadyne Automotive Corp.
Phone (860) 525 0821, X 5435, Fax (860) 683 4587, E-mail vattianese@stanadyne.com

Simon Garner, Director of Sales & Marketing, Power Products Div. Stanadyne Automotive Corp.
Phone (860) 525 0821 X 5172, Fax (860) 683 4587, E-mail sgarner@stanadyne.com