SPECIFICATION	API / IP SPECIFICATION 1581, 5th EDITION			MIL-PRF-52308H (SUPERSEDING MIL-PRF-52308G and MIL-F-8901E)	MIL-PRF-52308J (SUPERSEDING Mil-PRF-52308H)
MEDIA MIGRATION	10% rated flow for 30 minutes			100/80/60/40/20/115% rated flow - 10 minutes each rate	Same as for API/IP 1581
Initial differential pressure:	6 psid maximum across filter/coalescer stage, 10 psid across vessel with new elements at rated flow			5 psid at 115% of rated flow	6 psid maximum across cartridges at rated flow (total DP across f/s vessel with cartridges minus total DP across f/s vessel without cartridges)
Maximum fiber content:	10 fibers per liter maximum			Average 10 Fibers per liter max, single sample 15 fibers per liter max	
WATER REMOVAL	**TYPE S**	**TYPE S-LW**		0.01% @ 115% rated flow - 60 mins	Same as for API/IP 1581
	0.01% @ 100% rated flow - 30 minutes (after 30 minute conditioning run @ 10% rated flow)			1.0% @ 100/80/60/40/20/115% rated flow - 10 mins each rate	
	0.01% @ 100% rated flow - 90 minutes (after first solids addition test)			3.0% @ 100% rated flow with solids add - 70 mins	
	3.0% @ 100% rated flow - 15 minutes	1/2% @ 100% rated flow - 15 minutes		5.0% @ 115% rated flow - 30 mins	
Maximum free water:	15 ppm by Aqua-Glo			5 ppm - Aqua-Glo	15 ppm by Aqua-Glo
Maximum fuel in sump water:	No specification requirement			0.5% by volume	No specification requirement
CONTAMINANT REMOVAL	90% Ultrafine Test Dust + 10% Red Iron Oxide R-9998				
	TYPE S	**TYPE S-LD**		143 milligrams per gallon dry solids - 1st set of elements	Same as API/IP 1581
	72 milligrams per gallon solids run follows first 0.01% water run			143 milligrams per gallon solids with 3.0% water - 2nd set of elements (part of water/water+solids /water sequence)	
Capacity - per rated flow:	5.4 grams per gpm	No specified capacity (solids are added until 22.5 psid is reached, then fuel flow continued for remainder of 45 minute solids time)		10 grams per gpm	5.4 grams per gpm
Max differential pressure:	15 psid max @ 50 minutes 45 psid max @ 75 minutes			20 psid max @ 30 mins 40 psid max @ 70 mins	Same as for API/IP 1581, Type S
Maximum solids content:	1.0 milligrams per gallon max			Average 1.9 milligrams per gallon max Single sample 3.79 milligrams per gallon max	Average 1.0 milligrams per gallon max Single sample 1.9 milligrams per gallon max
Structural strength:	75 psid for 5 minutes at rated flow with no rupture, bypassing, or bleeding through pinhole leaks			75 psid for 5 minutes without structural failure	75 psi without structural failure or permanent deformation
INHIBITED FUEL ADDITIVES	**CATEGORY C**	**CATEGORY M**	**CATEGORY M100**	All tests include: 2 milligrams per liter STADIS 450 (or more to reach 150 pS/m minimum), 0.2% Di-EGME, 0.19 pounds per 1000 gallons DCI-4A, and 0.4 milligrams per liter Petronate L	Same as for API/IP 1581, Category M and Category M100
Additive 1:	1.0 milligrams per liter STADIS 450	2.0 milligrams per liter STADIS 450			
Additive 2:	15 milligrams per liter DCI-4A				
Additive 3:	N/A	0.15% Di-EGME			
Additive 4:	N/A		256 milligrams per liter SPEC AID 8Q462		
FUEL TEMPERATURE	5 deg C minimum to 32 deg C maximum. Temperature shall be maintained within +/- 6 deg C of starting temperature for any individual test series.				
LIFE TEST	No specification requirement			125 hours when specified. Includes addition of 0.1% water, 5% water, and solids addition at various times	No specification requirement
ENVIRONMENTAL	No testing specified. The manufacturer shall guarantee the unit shall not be adversely affected by exposure to temperatures varying from -54 deg C to +71 deg C, and element media, gaskets, and sealing material and any internal coating shall not deteriorate as a result of exposure to fresh water, salt water, or aviation fuels and shall not promote the growth of fungi.			100 hours fuel soak, then 72 hours salt water soak, then .01% water at rated flow for 30 mins	Drop each packaged element onto flat concrete surface from 48 inches - no evidence of cracks or deformation or damage. 100 hours fuel soak at temperatures ranging from -46 deg C to +71 deg C, then 72 hours salt water soak. Elements shall show no evidence of swelling, corrosion, separation of components, dissolving of adhesives, or deformation.
COMPATIBILITY	Separate soaks for 336 hours (plus additional 336 hours for solutions 1, 2, and 4) in the following solutions, followed by Structural Test to 75 psid at rated flow: 1. Jet A (or Jet A-1); 2. Jet A (or Jet A-1) + 12 mg/l HITEC E-580 + 3 mg/l STADIS 450; 3. 100% Di-EGME; 4. 30% toluene / 70% iso-octane			No specification requirement	
WSIM:	Minimum 85 after soak				
Water Reaction:	Maximum 1B after soak				
Color:	Maximum decrease 4 units after soak				