



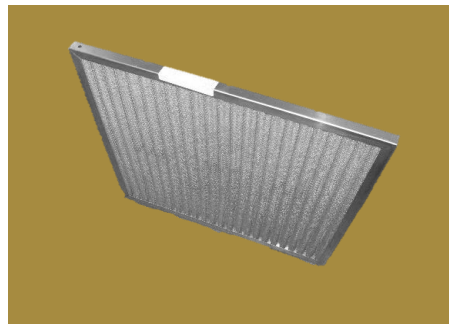
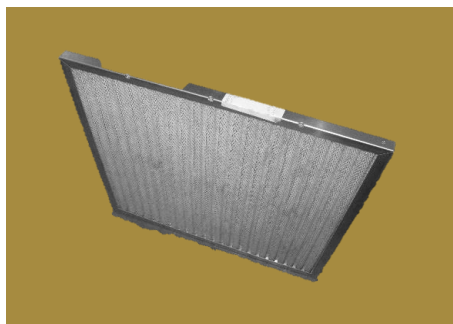
2820 S. English Station Road - Louisville, KY 40299
 Tel: (502) 357-0132 Fax (502) 267-8379

Date: 28-Feb-19 TEST NO. 19-062-1

Test Report ANSI/ASHRAE Standard 52.2-2017

Filter Description

Manufacturer	Smith Filter Corporation
Filter Model	1" Metal
Part Number	N A
Generic Filter Type	Pleated
Nominal Dimensions (H x W x D)	24" x 24" x 1"
Pocket / Pleat Quantity	24 Pleats
Media Type	Synthetic
Est. Gross Media Area	7.04 Ft ²
Adhesive Type	N/A



Test Conditions


Loading Dust Type	ASHRAE	Test Air Temp (degrees F.)	73
Barometric Pressure (In. Hg.)	29.35	Relative Humidity (%)	53

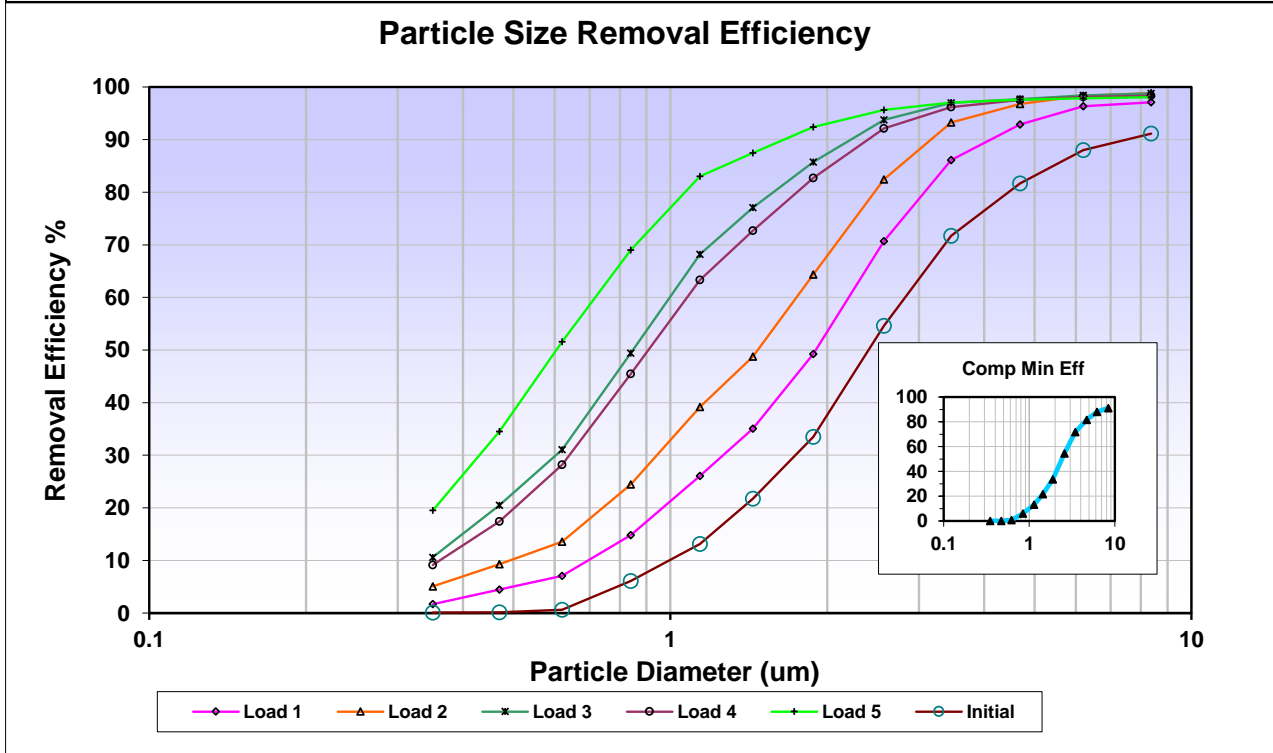
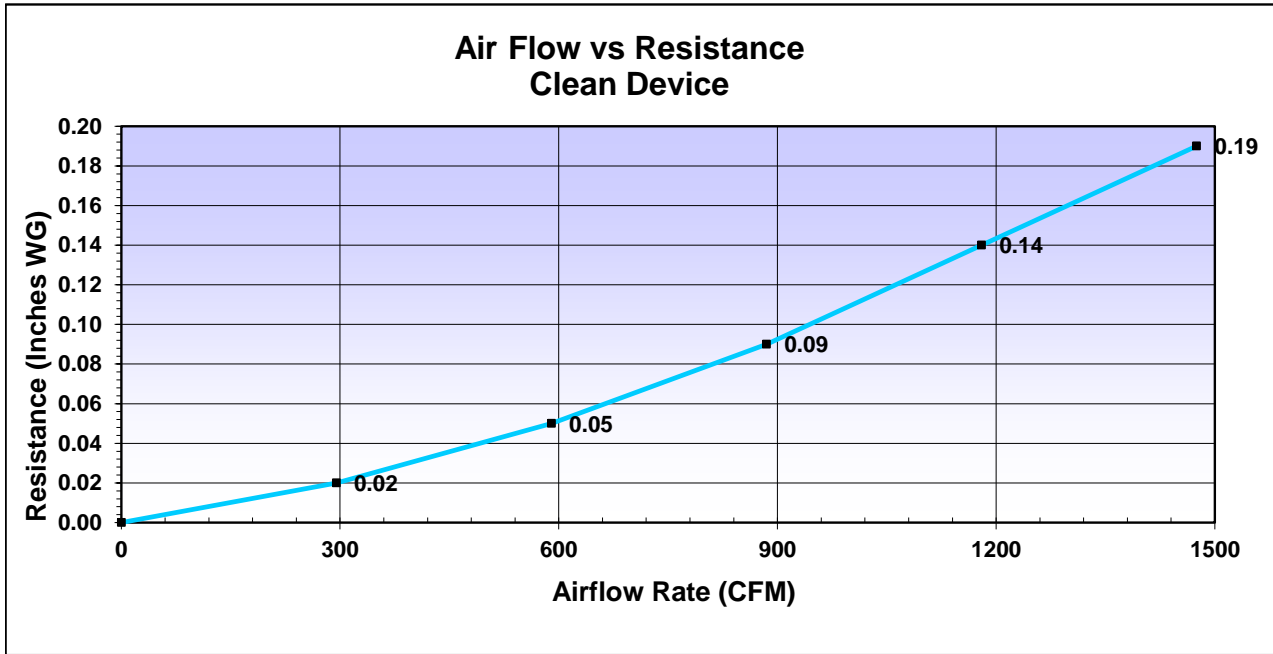
Test Results

Airflow Rate (CFM)	1180
Nominal Face Velocity (fpm)	295
Initial Resistance (in WG)	0.14
Final Resistance (in WG)	1.00
Dust Fed (gms) to Final Resistance	77
E1 (%) Composite Minimum Avg. Efficiency 0.30 - 1.0 um	2
E2 (%) Composite Minimum Avg. Efficiency 1.0 - 3.0 um	31
E3 (%) Composite Minimum Avg. Efficiency 3.0 - 10.0 um	83
Minimum Efficiency Reporting Value (MERV)	MERV 8 @ 1180 CFM

Remarks

Comments Tested For: Smith Filter Corporation
 Final Pressure Drop ("w.c.) 1.00" w.c.
 Dust Holding Capacity (gms) 67
 Average Arrestance (%) 86.8

Test Performed by: JPS **Approved By:**  **Test Completed:** 28-Feb-19



Data - Initial Resistance

Airflow (CFM)	Resistance (in WG)
0	0.00
295	0.02
590	0.05
885	0.09
1180	0.14
1475	0.19

Data - Particle Removal Efficiency

Particle Size Range (um)	Geometric Mean Diam (um)	Particle Removal Efficiency (%)							
		0.1	0.1	1.7	5.1	10.6	9.1	19.5	
0.30 - 0.40	0.35	0.1	0.1	1.7	5.1	10.6	9.1	19.5	
0.40 - 0.55	0.47	0.1	0.1	4.5	9.3	20.5	17.4	34.5	
0.55 - 0.70	0.62	0.6	0.6	7.1	13.6	31.1	28.2	51.6	
0.70 - 1.00	0.84	6.1	6.1	14.8	24.5	49.4	45.5	69.0	
1.00 - 1.30	1.14	13.1	13.1	26.1	39.2	68.2	63.3	83.0	
1.30 - 1.60	1.44	21.7	21.7	35.1	48.8	77.0	72.7	87.5	
1.60 - 2.20	1.88	33.5	33.5	49.2	64.3	85.7	82.7	92.4	
2.20 - 3.00	2.57	54.6	54.6	70.7	82.4	93.7	92.1	95.6	
3.00 - 4.00	3.46	71.7	71.7	86.1	93.3	97.0	96.2	97.0	
4.00 - 5.50	4.69	81.6	81.6	92.9	96.8	97.7	97.5	97.6	
5.50 - 7.00	6.20	88.0	88.0	96.3	98.3	98.4	98.1	97.9	
7.00 - 10.00	8.37	91.1	91.1	97.1	98.8	98.8	98.3	98.1	
		CME	Initial	Load 1	Load 2	Load 3	Load 4	Load 5	
Resistance after Dust Load (in w.c.) ----->				0.18	0.36	0.57	0.79	1.00	
Dust Load (gms) ----->				9	35	53	68	77	

Test Data for Release Rate (%)						
Size Range No.	Geometric Mean of Particle Size Range, μm	Release Rate After Loading Stage 1	Release Rate After Loading Stage 2	Release Rate After Loading Stage 3	Release Rate After Loading Stage 4	Release Rate After Loading Stage 5
1	0.35	0.038	0.035	0.050	0.056	0.067
2	0.47	0.036	0.029	0.038	0.048	0.061
3	0.62	0.032	0.029	0.035	0.036	0.039
4	0.84	0.034	0.028	0.033	0.031	0.032
5	1.14	0.040	0.029	0.029	0.028	0.038
6	1.44	0.036	0.024	0.035	0.017	0.015
7	1.88	0.022	0.012	0.024	0.011	0.020
8	2.57	0.017	0.009	0.033	0.006	0.021
9	3.46	0.006	0.011	0.049	0.013	0.042
10	4.69	0.014	0.009	0.056	0.000	0.086
11	6.2	0.000	0.028	0.065	0.000	0.090
12	8.37	0.000	0.037	0.066	0.000	0.134