
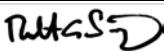
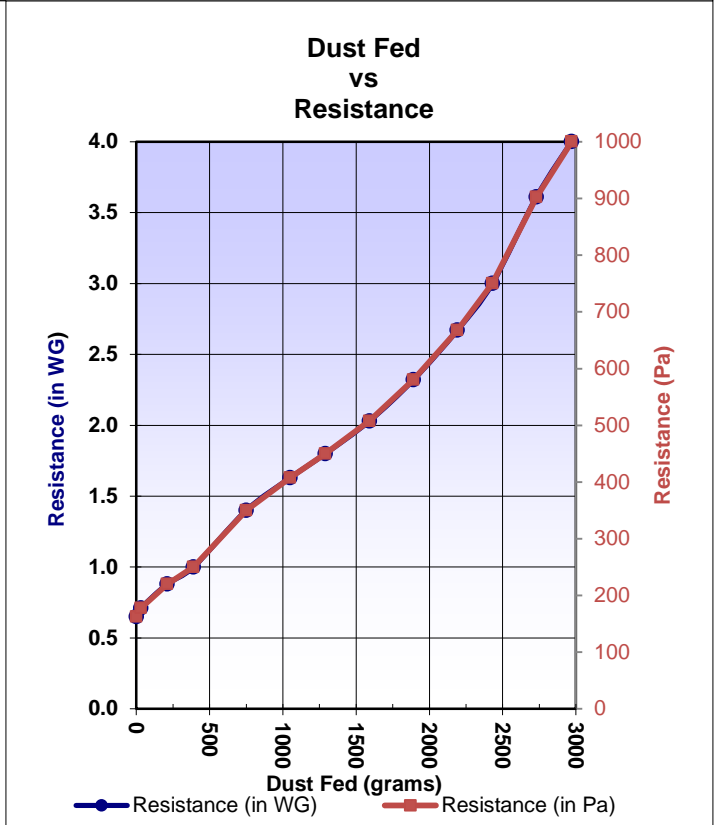
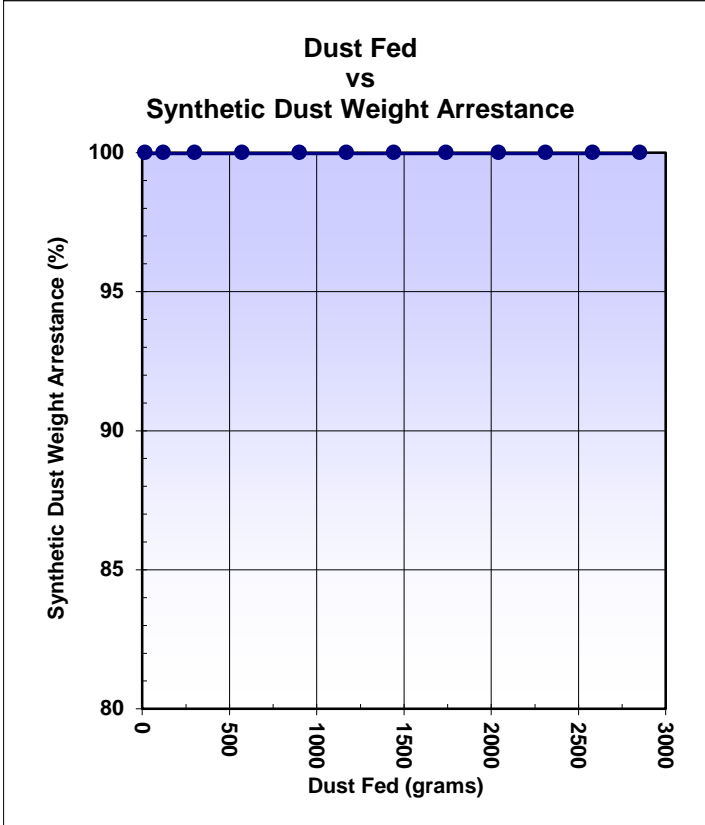
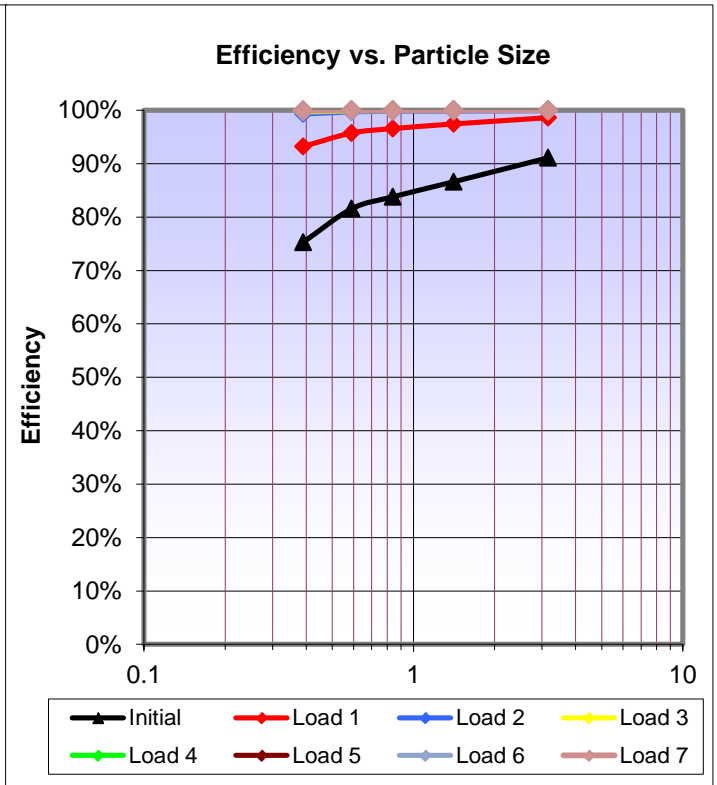
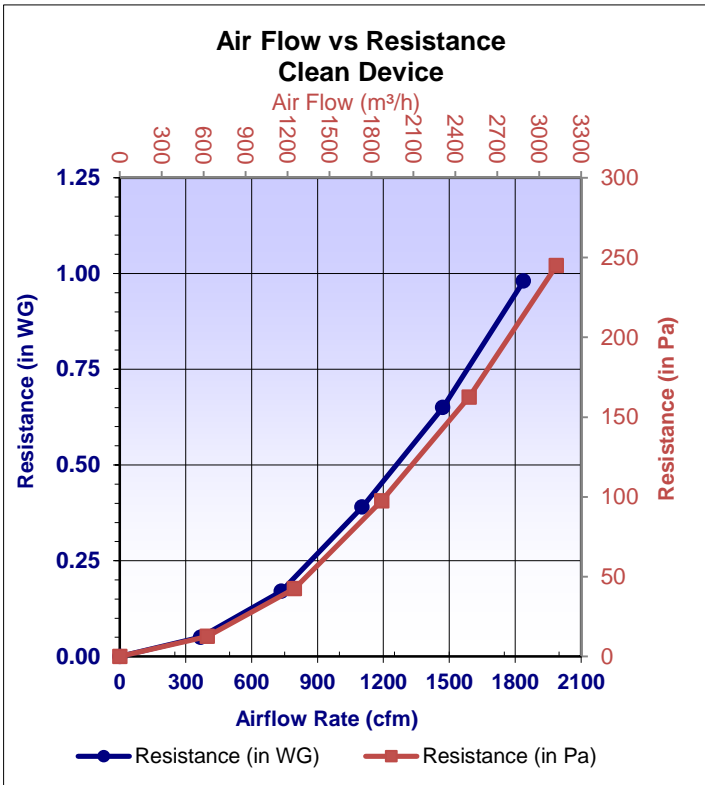
 2820 S. English Station Road - Louisville, KY 40299		<b>DATE:</b> 10-Jun-15 <b>TEST NO.</b> 15-0756F			
		<h2>EN 779:2012 Test Report</h2>			
page 1 of 5					
<b>Filter Description</b>	<b>Manufacturer</b>	S.E.W. North Filtration A/S			
	<b>Filter Model</b>	SEW840NANO			
	<b>Part Number</b>	Z61445660840482343/Z21356608404821023			
	<b>Filter Type</b>	Conical / Cylindrical Pair			
	<b>Nominal Face Dimensions (in)</b>	17.5"x12.75"x52"			
	<b>Nominal Face Dimensions (mm)</b>	445 mm x 324 mm x 1321 mm			
	<b>Est. Gross Media Area (ft<sup>2</sup> / m<sup>2</sup>)</b>	Standard			
	<b>Media Type</b>	Nanofiber Coated Cellulose / Synthetic Media			
	<b>Adhesive/Amount</b>	N/A			
<b>Test Conditions</b>	<b>Dust Type</b>	ASHRAE			
	<b>Aerosol</b>	DEHS			
	<b>Test Air Flow Rate (cfm / m<sup>2</sup>/h)</b>	1470 / 2499			
	<b>Test Air Temp (°F / °C)</b>	71 / 21.7			
	<b>Relative Humidity (%)</b>	58			
	<b>Barometric Pressure (In. Hg.)</b>	29.5			
<b>Test Results</b>	Initial Resistance ("w.g. / Pa)	<b>0.65 / 163</b>			
	Final Resistance ("w.g. / Pa)	<b>1.8 / 450</b>			
	Initial Efficiency at .4 microns (%)	<b>75%</b>			
	Average Efficiency at .4 microns (%)	<b>99%</b>			
	Initial Arrestance (%)	<b>&gt;99</b>			
	Untreated / Discharged Efficiency of Media (%)	<b>80 / 80</b>			
	Average Arrestance (%)	<b>&gt;99</b>			
	Dust Holding Capacity (grams)	<b>1290</b>			
Classification (final dp in pascals)	<b>F9 @ 450 Pa</b>				
					
<b>REMARKS</b>		<u>Avg. Eff. @ .4µm</u>	<u>Avg. Arrestance</u>	<u>DHC</u>	
	<b>750 Pa</b> <b>1000 Pa</b>	<b>99.9% (F9)</b> <b>99.9% (F9)</b>	<b>&gt;99%</b> <b>&gt;99%</b>	<b>2430 gms.</b> <b>2970 gms.</b>	
<b>Requestor Information</b>	Test Requestor	LP		Phone	+45 54 60 20 80
	Company Name	S.E.W. North Filtration A/S		Email	<a href="mailto:Sales@northfiltration.com">Sales@northfiltration.com</a>
	Company Address	Vesterbrogade 1C DK-4930 Maribo		Date Requested	1-Jun-15
<b>Test Performed by:</b> JPS	<b>Approved By:</b> 				



Test No. 15-0756F  
 Date: 10-Jun-15

**Data - Initial Resistance**

Airflow (CFM)	Resistance (in WG)	Airflow (m³/h)	Resistance (in Pa)
0	0.00	0	0
368	0.05	625	13
735	0.17	1250	43
1103	0.39	1874	98
1470	0.65	2499	163
1838	0.98	3124	245

**Data - Dust Fed vs. Resistance**

Dust Fed (gms)	Resistance (in WG)	Resistance (in Pa)
0	0.65	163
30	0.71	178
210	0.88	220
390	1.00	250
750	1.40	350
1050	1.63	408
1290	1.80	450
1590	2.03	508
1890	2.32	580
2190	2.67	668
2430	3.00	750
2730	3.61	903
2970	4.00	1000

**Data - Dust Fed vs. Arrestance**

Dust Fed (gms)	Arres %
0	
15	100.0
120	100.0
300	100.0
570	100.0
900	100.0
1170	100.0
1440	100.0
1740	100.0
2040	100.0
2310	100.0
2580	100.0
2850	100.0

**Data - Particle Removal Efficiency**

Particle Size Range (um)	Geometric Mean Diam (um)	Particle Removal Efficiency (%)								
		Initial	Load 1	Load 2	Load 3	Load 4	Load 5	Load 6	Load 7	
0.30 - 0.50	0.39	75.3%	93.2%	99.3%	99.7%	99.9%	100.0%	99.9%	99.9%	
0.50 - 0.70	0.59	81.5%	95.7%	99.7%	99.9%	100.0%	100.0%	100.0%	100.0%	
0.70 - 1.00	0.84	83.8%	96.6%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%	
1.00 - 2.00	1.41	86.6%	97.4%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	
2.00 - 5.00	3.16	91.1%	98.6%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	
Resistance after Dust Load (in WG) ----->		0.71	0.88	1.00	1.40	1.80	3.00	4.00		
Resistance after Dust Load (in Pa) ----->		178	220	250	350	450	750	1000		
Dust Load (gms) ----->		30	210	390	750	1290	2430	2970		
Average Efficiency to Final dp			96.8%	98.2%	99.0%	99.4%	99.5%			



2820 S. English Station Road - Louisville, KY 40299

DATE: 10-Jun-15

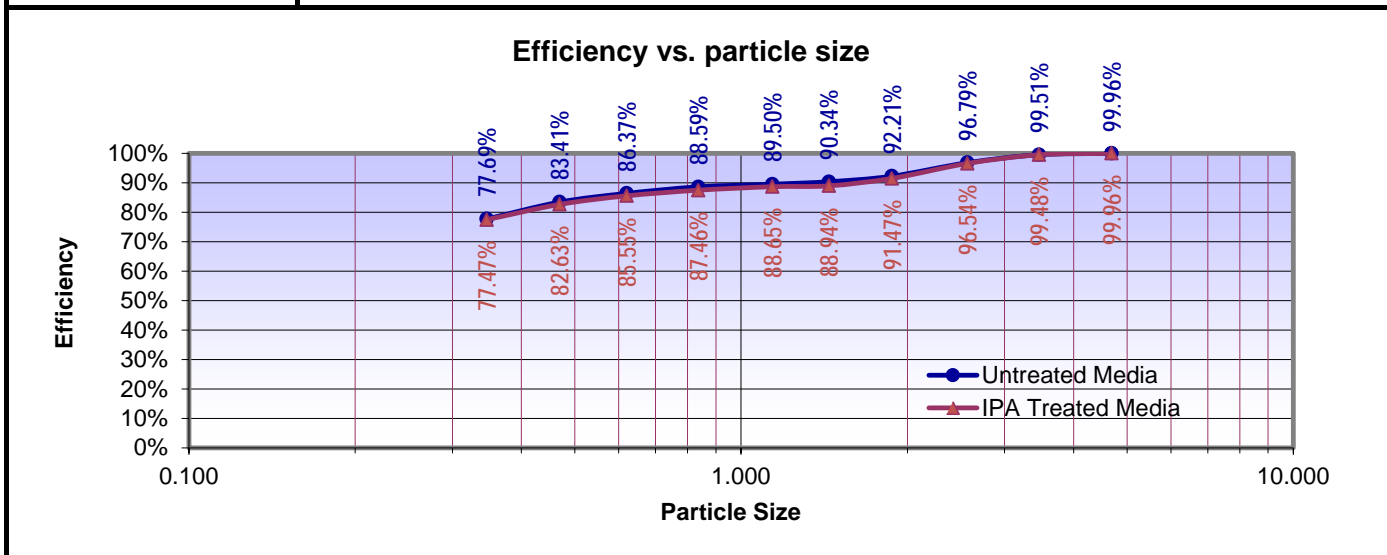
TEST NO. 15-0756F

# EN 779:2012 Initial Efficiency

## Flat Sheet Initial Efficiency Test

page 4 of 5

Filter Description	Manufacturer	SEW	
	Filter Model	SEW840NANO	
	Part Number	Z61445660840482343/Z21356608404821023	
	Nominal Face Dimensions (in)	17.5"x12.75"x52"	
	Nominal Face Dimensions (mm)	445 mm x 324 mm x 1321 mm	
	Media Type	Nanofiber Coated Cellulose / Synthetic Media	
Test Conditions	Test Air Flow Rate (FPM/m/h)	6 / 1.8	
	Test Air Temp (°F/°C)	70 / 21.1	
	Relative Humidity (%)	40	
	Barometric Pressure (In. Hg.)	29.5	
Test Results		<b>Untreated</b>	<b>IPA Treated</b>
	0.35 Micron Range Efficiency	77.69%	77.47%
	0.45 Micron Range Efficiency	83.41%	82.63%
	0.55 Micron Range Efficiency	86.37%	85.55%
	0.69 Micron Range Efficiency	88.59%	87.46%
	0.89 Micron Range Efficiency	89.50%	88.65%
	1.22 Micron Range Efficiency	90.34%	88.94%
	1.73 Micron Range Efficiency	92.21%	91.47%
	2.45 Micron Range Efficiency	96.79%	96.54%
	3.46 Micron Range Efficiency	99.51%	99.48%
4.69 Micron Range Efficiency	99.96%	99.96%	
<b>Average Efficiency at 0.4 micrometers</b>		<b>80.19%</b>	<b>79.73%</b>



NOTES: Filter samples discharged via IPA vapor method

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Requestor Information	Test Requestor	LP	Phone	+45 54 60 20 80
	Company Name	S.E.W. North Filtration A/S	Email	<a href="mailto:Sales@northfiltration.com">Sales@northfiltration.com</a>
	Company Address	Vesterbrogade 1C DK-4930 Maribo	Date Requested	N A

Test Performed by: GT      Approved By: 



DATE: 10-Jun-15

TEST NO. 15-0756F

# EN 779:2012 Initial Efficiency

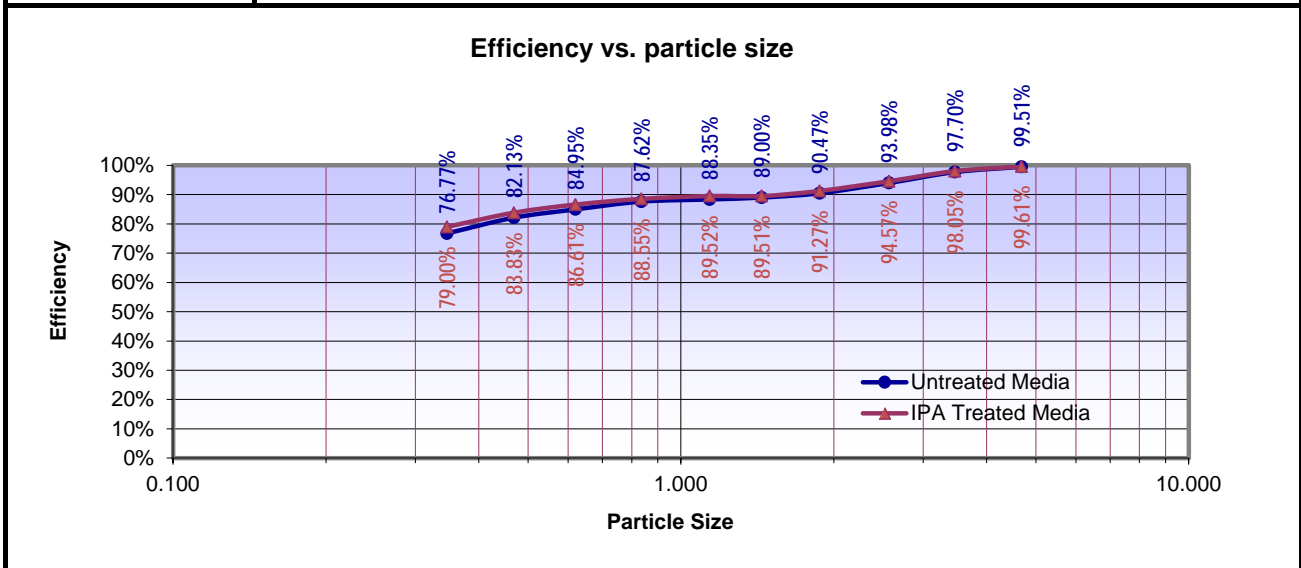
Flat Sheet Initial Efficiency Test

page 5 of 5

Filter Description	Manufacturer	SEW
	Filter Model	SEW840NANO
	Part Number	Z61445660840482343/Z21356608404821023
	Nominal Face Dimensions (in)	17.5"x12.75"x52"
	Nominal Face Dimensions (mm)	445 mm x 324 mm x 1321 mm
	Media Type	Nanofiber Coated Cellulose / Synthetic Media

Test Conditions	Test Air Flow Rate (FPM)	6 / 1.8
	Test Air Temp (degrees F.)	70 / 21.1
	Relative Humidity (%)	40
	Barometric Pressure (In. Hg.)	29.5

Test Results	Untreated	IPA Treated
	0.35 Micron Range Efficiency	76.77%
0.45 Micron Range Efficiency	82.13%	83.83%
0.55 Micron Range Efficiency	84.95%	86.61%
0.69 Micron Range Efficiency	87.62%	88.55%
0.89 Micron Range Efficiency	88.35%	89.51%
1.22 Micron Range Efficiency	89.00%	90.47%
1.73 Micron Range Efficiency	90.47%	91.27%
2.45 Micron Range Efficiency	93.98%	94.57%
3.46 Micron Range Efficiency	97.70%	98.05%
4.69 Micron Range Efficiency	99.51%	99.61%
<b>Average Efficiency at 0.4 micrometers</b>		<b>79.11%</b>
		<b>81.11%</b>



NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Requestor Information	Test Requestor	LP	Phone	+45 54 60 20 80
	Company Name	S.E.W. North Filtration A/S	Email	Sales@northfiltration.com
	Company Address	Vesterbrogade 1C DK-4930 Marib	Date Requested	N A

Test Performed by: GT      Approved By: *[Signature]*