



AIR FILTER TESTING LABORATORIES, INC.

4632 Old LaGrange Road • Buckner, Kentucky 40010

Phone (502) 222-5720 • Fax (502) 222-9881

ASHRAE STANDARD 52.2-2007

REMOVAL EFFICIENCY BY PARTICLE SIZE (0.3 to 10.0 µm; KCI)

REPORT NO.

14015

TEST NO.

1

SHEET NO.

1

DEVICE TESTED

Test Requested By FILTRATION MANUFACTURING, INC.
Manufacturer FILTRATION MANUFACTURING, INC.
Test Sample Procurement FURNISHED BY MANUFACTURER
Product Name PRACTICAL PLEAT
Model No. MERV 14 PLEATED
Dimensions 24" H X 24" W X 5" D (NOMINAL)

DEVICE DESCRIPTION

Generic Device Classification / Type		PLEATED PANEL	
Number Of Pleats / Pockets		21	no.
Number Of Banks		N/A	no.
Face Dimension (Nom. Height)		24	in.
Face Dimension (Nom. Width)		24	in.
Depth Dimension (Nom. Depth)		5	in.
Media Area (Net Effective)		3.50	m²
Type Of Media		SYNTHETIC	
Type And Amount Of Adhesive		NONE	
Product Description			

TEST CONDITIONS

Test Airflow Rate	2006	m ³ /hr
Test Aerosol Type	KCI	
Test Dust Type	ASHRAE	
Test Dust Feed Rate	71.0	mg/m ³
Device Test Section Duct Size	24 x 24	in.
Final Device Resistance	250	Pa
Air Temperature	23.0	°C
Relative Humidity	50	%
Optical / Aerodynamic Particle Counter(s); OPC / APC	CLIMET INST. / CI-500 (laser)	
Remarks/ Note		

TEST RESULTS - see attached performance curves

Initial Device Resistance				40	Pa
Final Device Resistance				250	Pa
Composite Average Minimum Efficiencies	E1 (0.3 - 1.0 µm)	E2 (1.0 - 3.0 µm)	E3 (3.0 - 10.0 µm)	% 	
	77	92	99		
Minimum Efficiency Reporting Value (MERV)				MERV 14 @ 2006 m ³ /hr	
Average ASHRAE Dust Weight Arrestance				99	%
ASHRAE Dust Holding Capacity				254	g





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PERFORMANCE CURVES

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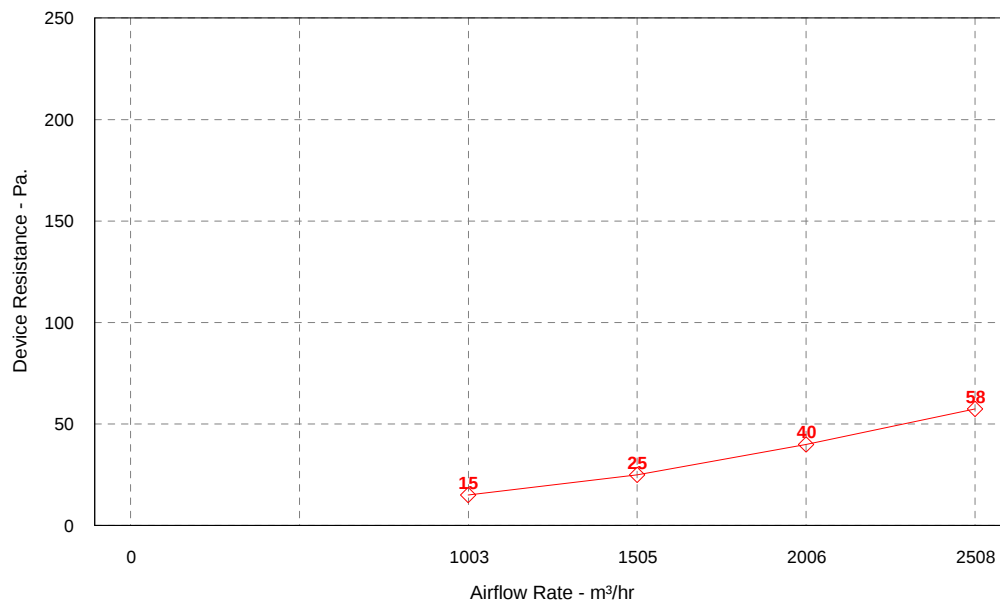
1

SHEET NO.

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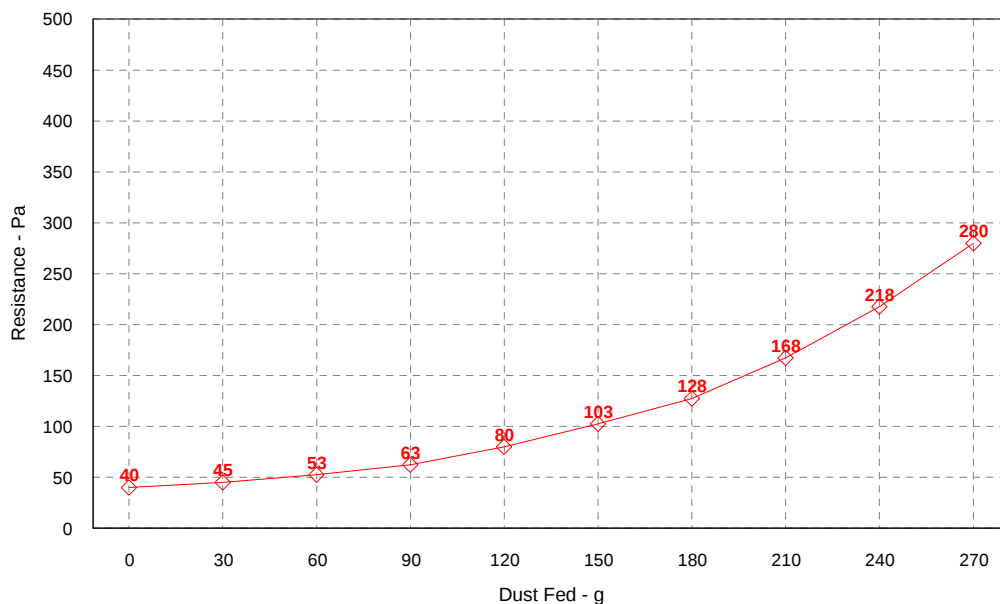
CLEAN DEVICE

Airflow Rate -vs- Initial Device Resistance



DUST FED -vs- RESISTANCE

Dust Increment - 30 g ASHRAE



DATE

05-30-2012

TEST SUPERVISOR

M.A.M.

ADMINISTRATIVE

APPROVAL

Michael A. Murphy





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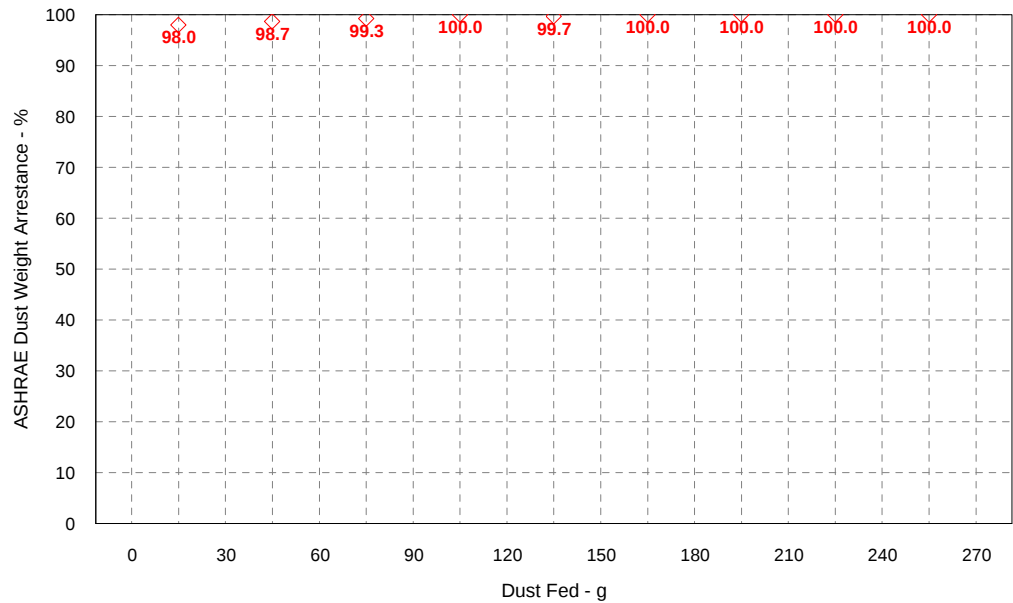
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PERFORMANCE CURVES

DUST FED -vs- ARRESTANCE

Dust Increment - 30 g ASHRAE



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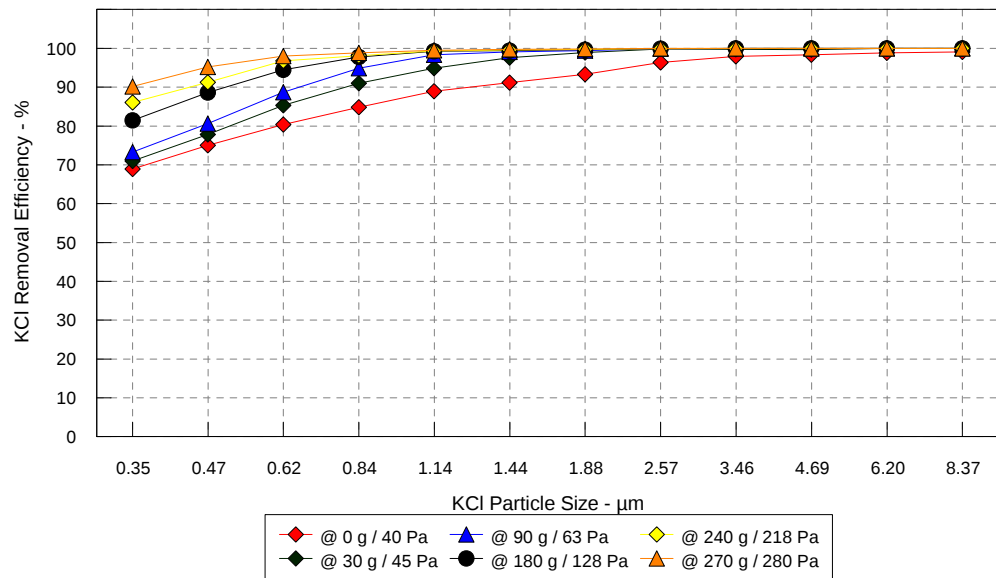
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PERFORMANCE CURVES

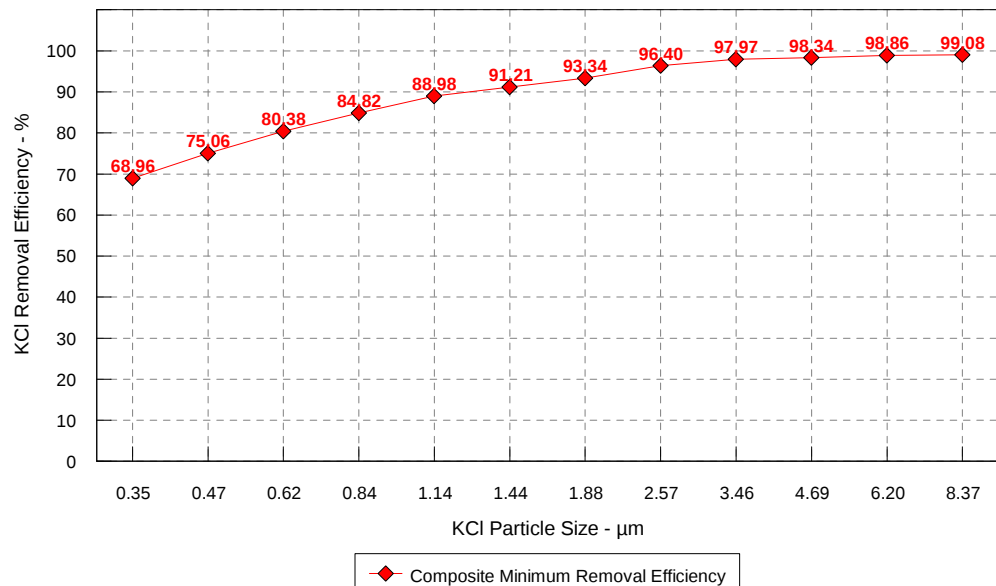
PARTICLE SIZE -vs- REMOVAL EFFICIENCY

Incremental KCI Particle Size Removal Efficiency



PARTICLE SIZE -vs- REMOVAL EFFICIENCY

Composite Minimum KCI Particle Size Removal Efficiency



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