



FILTER RESULTS CASE STUDY

LMS TECHNOLOGIES, INC.
JUNE 19, 2025

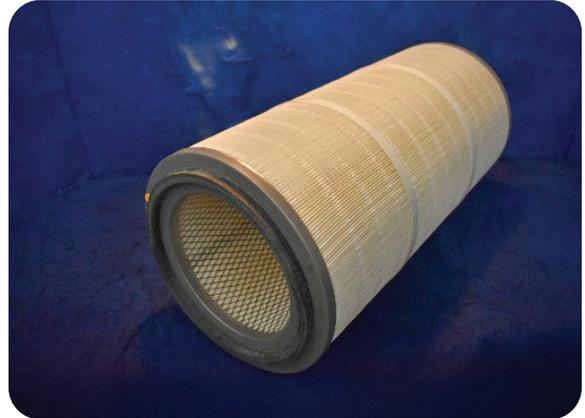


BREACH TEST REPORT

LMS#10138

DEVICE TESTED

Report Number:	T061925
Test Requested By:	FAB-TEX Filtration
Manufacturer:	FAB-TEX Filtration
Flow Rate:	700 cfm
Filter ID:	26" Nano FR Filter
Filter Shape:	Cylindrical
Filter Description:	White Pleated Cartridge Filter
Number of Pleats:	Mini Pleats
Test Sample Procurement:	Provided by FAB-TEX Filtration

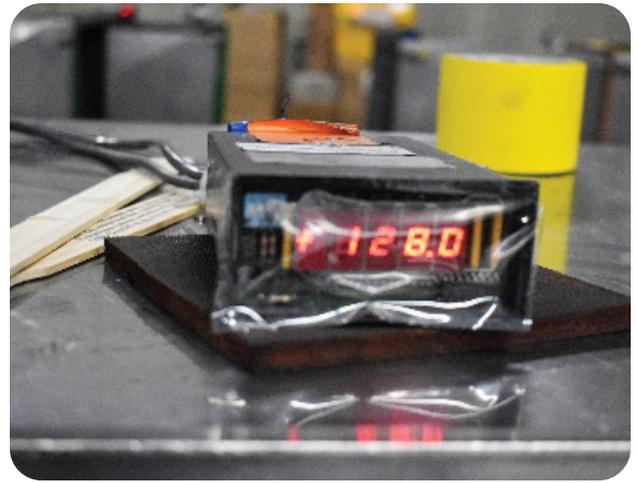
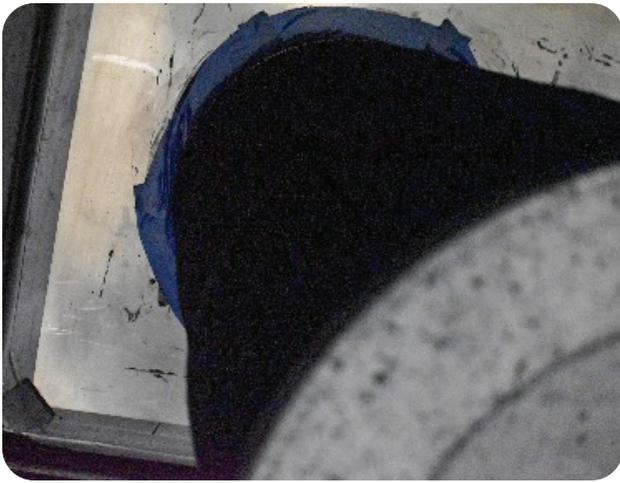


TEST CONDITIONS

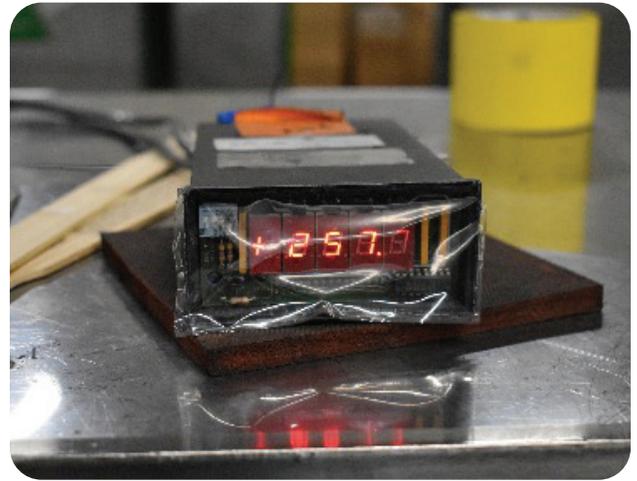
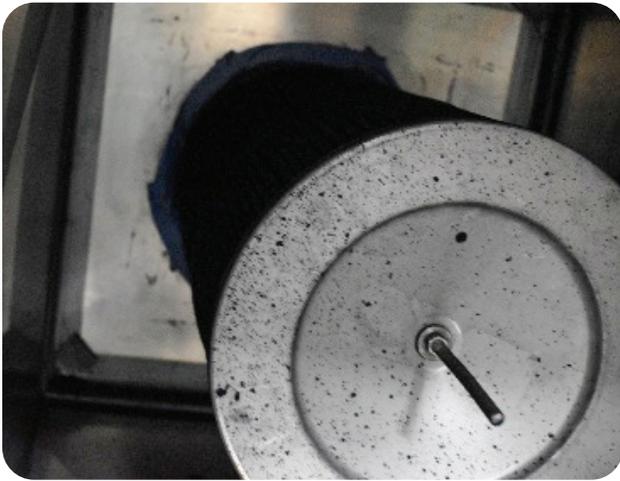
Test Airflow Rate	700 cfm
Initial Resistance	0.913" in w.g.
Test Dust	LMS Dust
Air Temperature	70° F
Relative Humidity	40%

TEST RESULTS

Device Resistance (in w.g.)	Observation
0.913"	✓ Filter intact and structurally stable ✓ Pleat alignment straight ✓ Test continued
2.00"	✓ Filter intact and structurally stable ✓ Pleat alignment straight ✓ Test continued
5.00"	✓ Filter intact and structurally stable ✓ Pleat alignment straight ✓ Test continued
10.00"	✓ Filter intact and structurally stable ✓ Pleat alignment straight ✓ Test continued
15.00"	✓ Filter intact and structurally stable ✓ Pleat alignment straight ✓ Test continued
	1400 grams dust used to get to 15"



Upstream @ 5.00"



Upstream @ 10.00"



Upstream @ 15.00"

INITIAL 52.2 TEST REPORT (NEW CLASSIFICATION)

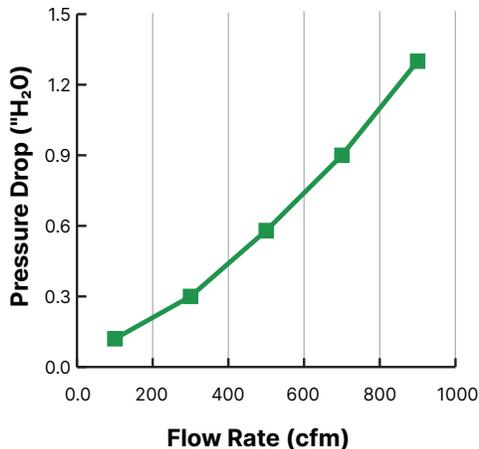
LMS #:	10138	Date:	June 19, 2025
Test Type:	Initial 52.2	Test Requested by:	FAB-TEX Filtration
Test Number:	T061925A	Filter Manufacturer:	FAB-TEX Filtration
Flow Rate/Velocity:	700 cfm	Filter ID:	26" Nano FR Filter
Test Aerosol:	KCl, Neutralized	Filter Description:	White Pleated Cartridge Filter
Filter Size:	Cylindrical	Number of Pleats:	Mini Pleats
Temp and Humidity:	70°F and 40%		

Flow Rate (cfm)	DP "H ₂ O	Size Range (µm)	Initial Fractional Efficiency (%)
175	0.124	0.3-0.4	80.2
350	0.307	0.4-0.55	83.9
525	0.577	0.55-0.7	86.6
700	0.913	0.7-1.0	89.6
875	1.300	1.0-1.3	91.5
		1.3-1.6	93.3
		1.6-2.2	95.0
		2.2-3.0	97.1
		3.0-4.0	98.6
		4.0-5.5	99.2
		5.5-7.0	99.6
		7.0-10.0	100.0



Data verified by LMS Calibration Filter (Patent Pending)

Pressure Drop vs. Velocity



Efficiency vs. Particle Diameter

