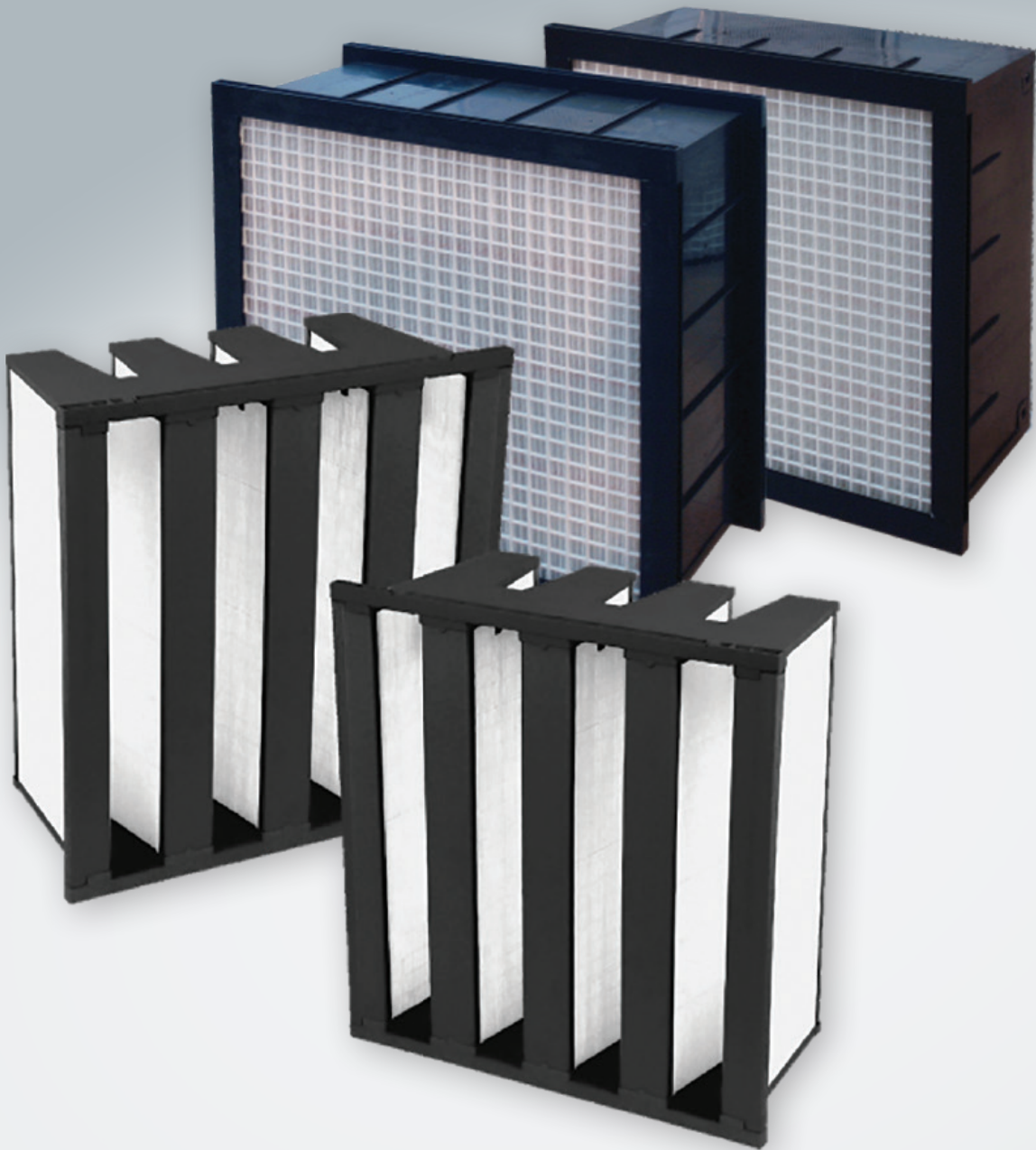




NORTHERN STATIC FILTERS

NorrVee and NorrCel Filters

Gas Turbine Systems



Donaldson®
northern®

NorrVee Series

KEY BENEFITS

Higher Power Output and Increased Turbine Availability

The filter elements optimize power output by eliminating performance-reducing deposits in your compressor section. Their outstanding filtration efficiency reduces power loss while improving fuel economy. Machine availability and reliability are significantly increased as off-line compressor washing frequency is reduced.

Reduced Fuel and Maintenance Costs

The filter elements significantly reduce maintenance costs while increasing compressor and turbine life. Unlike current air intake filters, they provide increased efficiency which reduces unexpected failures and major outages by preventing fine and corrosive particulate from reaching the compressor blades.

Water and Oil Resistant Media

All NorrVee series filters are composed of water and oil resistant media and can withstand exposure to free moisture in the air-stream. When wet, the moisture accumulates over the media and drains down the vertical pleat packs. The design minimizes moisture carry-over.



Grade M6 – E12

FEATURES

- High efficiency static filter element
- Water and oil resistant media
- High dust holding capacity (DHC)
- Ease of installation
- Durability
- Low initial and operating pressure drop
- Operational under severe environmental conditions
- Long filter life - fewer filter replacements
- Plastic framed
- Marine grade, water repellent media available

TECHNICAL AND CONSTRUCTION DATA

Standard Version (592 mm x 592 mm x 292 mm / 24" x 24" x 12")	NV 60	NV 90	NV 95	NV 98	NV 100	NV 110	NV 120
Filter Area	18.2 m ² / 196 ft						
Initial Efficiency	30% @ 0.4µm	50% @ 0.4µm	70% @ 0.4µm	80% @ 0.4µm	>85% @ M.P.P.S.	>95% @ M.P.P.S.	>99.5% @ M.P.P.S.
Avg. Efficiency (0.4µm)	60–80%	68–90%	90–95%	>95%	>99%		>99.9%
Initial DP							
@3400 m ³ /hr / 2000 CFM ("wg)	80 Pa / 0.32	95 Pa / 0.38	105 Pa / 0.42	125 Pa / 0.5	158 Pa / 0.63	170 Pa / 0.68	280 Pa / 1.12
@4250 m ³ /hr / 2500 CFM ("wg)	105 Pa / 0.42	120 Pa / 0.46	130 Pa / 0.52	155 Pa / 0.62	200 Pa / 0.90	210 Pa / 0.94	350 Pa / 1.40
Rec Final DP / ("wg)	635 Pa / 2.5	635 Pa / 2.5	635 Pa / 2.5	635 Pa / 2.5	635 Pa / 2.5	635 Pa / 2.5	635 Pa / 2.5
Avg. Arrestance	>98%			>99%			>99.9%
Grade							
EN779:2012	M6	F7	F8	F9			
EN1822:2009					E10	E11	E12
Burst DP / ("wg)	3800 Pa / 15	3800 Pa / 15	3800 Pa / 15	3800 Pa / 15	3800 Pa / 15	3800 Pa / 15	3800 Pa / 15

Deep Version (592 mm x 592 mm x 440 mm / 24" x 24" x 17")	NV H60	NV H90	NV H95	NV H98	NV H100	NV H110	NV H120
Filter Area	33.0 m ²						
Initial Efficiency	30% @ 0.4µm	50% @ 0.4µm	70% @ 0.4µm	80% @ 0.4µm	>85% @ M.P.P.S.	>95% @ M.P.P.S.	>99.5% @ M.P.P.S.
Avg. Efficiency (0.4µm)	60–80%	68–90%	90–95%	>95%	>99%		>99.9%
Initial DP							
@3400 m ³ /hr / 2000 CFM ("wg)	62 Pa / 0.25	70 Pa / 0.28	80 Pa / 0.32	95 Pa / 0.38	120 Pa / 0.48	126 Pa / 0.51	225 Pa / 0.90
@4250 m ³ /hr / 2500 CFM ("wg)	80 Pa / 0.32	90 Pa / 0.36	100 Pa / 0.40	117 Pa / 0.47	150 Pa / 0.60	160 Pa / 0.64	280 Pa / 1.12
Rec Final DP / ("wg)	635 Pa / 2.5						
Avg. Arrestance	>98%			>99%			>99.9%
Grade							
EN779:2012	M6	F7	F8	F9			
EN1822:2009					E10	E11	E12

NorrCel Series

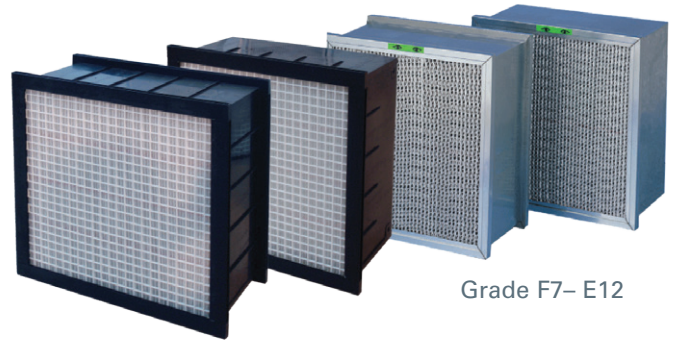
KEY BENEFITS

Higher Power Output and Increased Turbine Availability

The filter elements optimize power output by eliminating performance-reducing deposits in your compressor section. Their outstanding filtration efficiency reduces power loss while improving fuel economy. Machine availability and reliability are significantly increased as off-line compressor washing frequency is reduced.

Reduced Fuel and Maintenance Costs

The filter elements significantly reduce maintenance costs while increasing compressor and turbine life. Unlike current air intake filters, they provide increased efficiency which reduces unexpected failures and major outages by preventing fine and corrosive particulate from reaching the compressor blades.



Grade F7- E12

FEATURES

- High efficiency static filter element
- High dust holding capacity (DHC)
- Ease of installation
- Durability
- Low initial and operating pressure drop
- Operational under severe environmental conditions
- Long filter life - fewer filter replacements
- Plastic framed (standard), metal framed available

TECHNICAL AND CONSTRUCTION DATA

Standard Version (592 mm x 592 mm x 292 mm / 24" x 24" x 12")	RM 90	XL 90	RM 95	XL 95	XN 98	XN 120
Filter Area	9.6 m ² / 103 ft ²	12.6 m ² / 136 ft ²	9.6 m ² / 103 ft ²	12.6 m ² / 136 ft ²	20.0 m ² / 215 ft ²	
Initial Efficiency	59% @ 0.4µm	59% @ 0.4µm	71% @ 0.4µm	71% @ 0.4µm	>80% @ M.P.P.S.	>99.5% @ M.P.P.S.
Avg. Efficiency (0.4µm)	80-90%	90-95%	90-95%		>95%	>99.9%
Initial DP						
@ 3400 m ³ / @2000 CFM ("wg)	180 Pa / 0.72	170 Pa / 0.38	190 Pa / 0.42	180 Pa / 0.5	200 Pa / 0.63	350 Pa / 0.68
@ 4250 m ³ / @2000 CFM ("wg)	250 Pa / 1.00	240 Pa / 0.96	270 Pa / 1.08	250 Pa / 1.00	260 Pa / 1.04	380 Pa / 1.53
Rec Final DP / ("wg)	635 Pa / 2.5					
Avg. Arrestance	>98%		>99%			>99.9%
Grade						
EN779:2012	F7	F7	F8	F8	F9	
EN1822:2009						E12
Burst DP / ("wg)	3000 Pa / 12					
Nominal Flow Rate	3400 m ³ /hr / 2,000 cfm					

Maximum Operating Temperature: 60 ° C / 140 ° F

Header and Side Plates: Galvanized or Polystyrene

Separators: Aluminum or Hot Melt

Media: Fiberglass



Donaldson Gas Turbine Systems

Donaldson Gas Turbine Systems is the leading global provider of inlet air systems, replacement parts and technical services.

Global Support

- Facilities in 37 countries
- 40 manufacturing plants and 14 distributor centers

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- Inlet Filters
- Evaporative cooler media
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