

DISCOVER THE DIFFERENCE IN PERFORMANCE AND VALUE

Applications: Gas Turbine Inlet Filtration, Industrial Dust Collection micronic cylindrical and conical cartridge air filters are Nano coated technology depend on Nanofiber Based Technology.

Keep your equipment running efficiently and energy smart with high-quality cartridge filters from micronic for Industrial Air. Available in our proprietary nanofiber medias—Micro M-19 Nano coated technology for industrial filtration and Micro NanoFlat™ for gas turbine inlet filtration—our nanofiber cartridge filters lead the industry in performance, efficiency and value.

Our nanofiber filters feature a special surface nanofiber layer made from cellulose and polyester so extremely fine they are measured in fractions of a micron (nanometers). This ultra-thin layer traps dust and fume particulate on the filter's surface before it can embed deeper in the media leading to better cleaning efficiency with fewer pulses and significantly less compressed air use.

Our competitor is using needle method to make hole on the layer of the material. That cause dust and fume particulate embed deeper in the media. That is why pressure drops and life time of the filter increase. Additionally, this production method causes deformation that can not be detect. And, there is not a technology to check and find such defects on each filter. On the other hand, our nanofiber filter media has enabled new levels of air filtration performance in several diverse applications within a broad range of environments due to its unique properties including small fiber diameter, high specific surface area, high porosity and small pore size. Our nanofiber filter media offers increased dust holding capacity, enhanced filtration efficiency, low pressure drop, excellent durability and improved filter life.

Outside of our filters are spiral cast eva based polyolefin hot-melt. This hotmelts feature does not undergo deformation in oil. It is resistant to desert and polar conditions.

Our advanced nanofiber technology filters have been independently proven to achieve 20 %higher initial efficiency, cleaner air, lower pressure drop and greater energy savings than commodity filter media. This will reduce your cost for filter and cost for energy efficiency at your facilities.

GAS TURBINE FILTERS

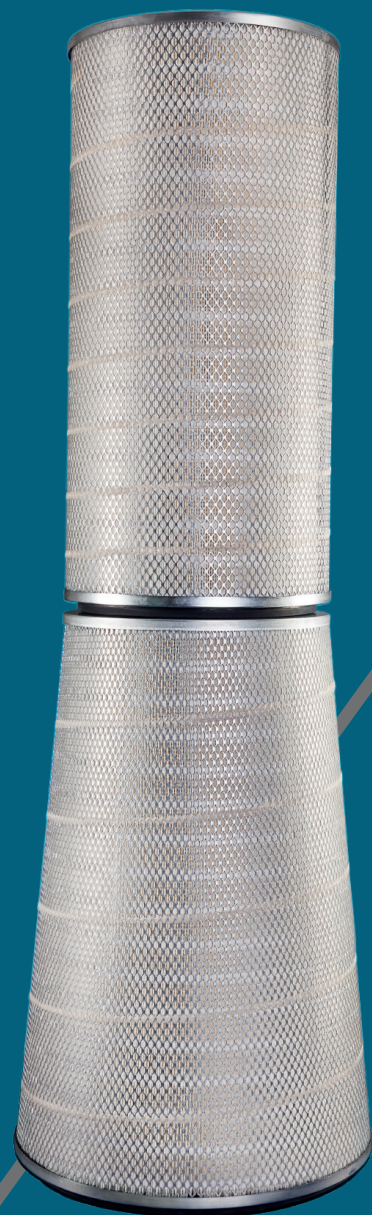
Better Durability - Perfect For Pulse Cleaning

Improved Dust Release - Longer Periods Between Maintenance

Higher Efficiency - Better Durability - Perfect For Pulse Cleaning

Lower Pressure Drop - Extended Filter Life

Excellent Uniformity - Maintaining Quality Performance

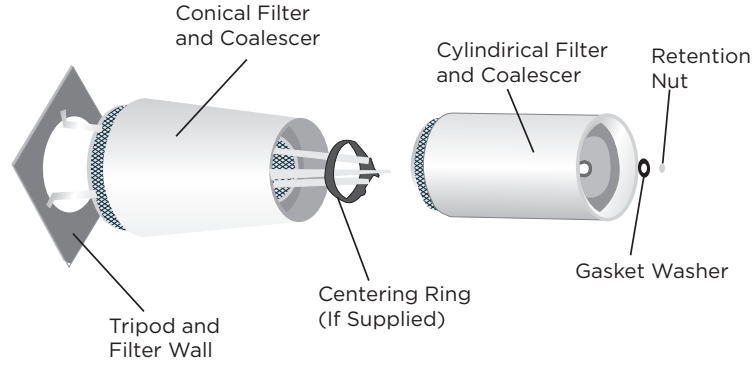
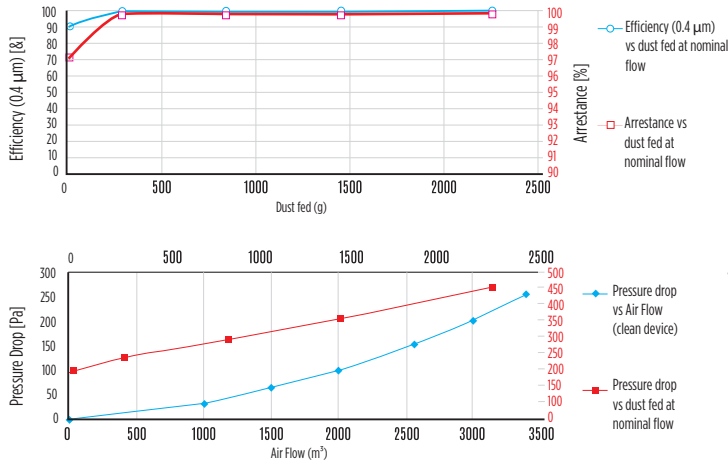


Forever
Quality...

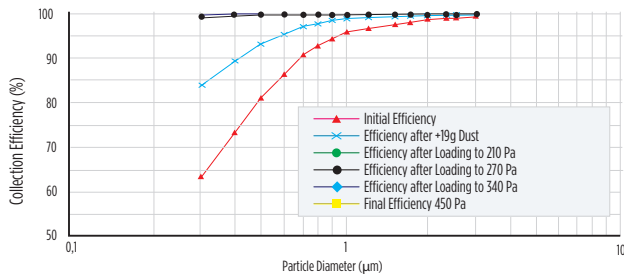
micronic
FILTER

CYLINDRICAL AND CONICAL CARTRIDGES

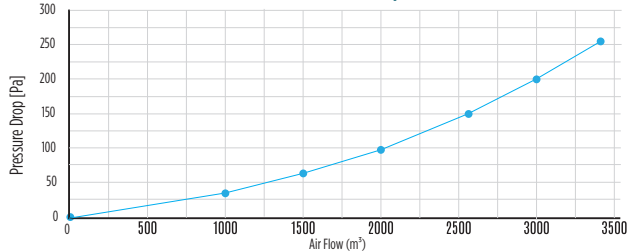
Efficiency and Pressure Drop Tests



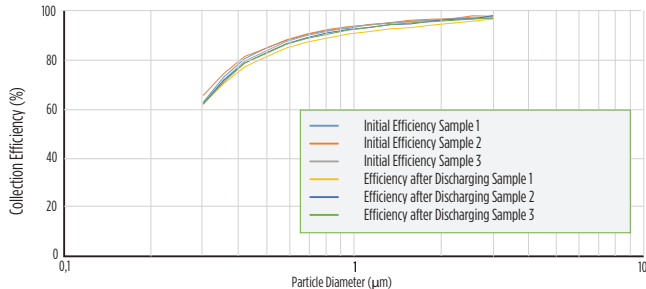
Fractional Collection Efficiencies at Various Loading Phases



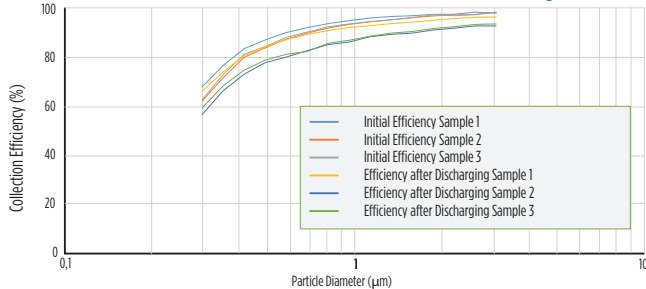
Pressure Drop



Fractional Collection Efficiencies Before and After Media Discharge



Fractional Collection Efficiencies Before and After Media Discharge



CONSTRUCTION MATERIALS

Filter Media	Blended-cellulose 80% polyester 20%
Structural Components	Covers Galvanized Sheet Metal DX54 and 1 mm electro galvanized sheet metal
Potting	Two Component Polyurethane
Gasket	EPDM rubber

APPLICATION PERFORMANCE

Efficiency	According to Grade F9 (0,711 m³/s EN 779:2012 Min: 99.5%)	
Wet Burst Pressure	>7500 Pa (30 in wg)	
	Initial Pressure Drop	Final Pressure Drop
1G 6000	10 Pa @ 2560 m³/h	450 @ 2560 m³/h
1G 6001	150 Pa @ 2560 m³/h	450 Pa @ 2560 m³/h
Recommended Maximum dP	1000 Pa (4 in wg)	
Temperature Range	-40 °C to +65°C (-40°F to +149°F)	

OPERATIONAL MODE

For arctic or desert environments

Dimensions	Inner Diameter	Out Diameter	Height
1G 6000 (Cylindrical)	215 mm	324 mm	660 mm
1G 6001 (Conical)	215 mm 330 mm	324 mm 445 mm	660 mm 660 mm



Micronic No	Donaldson No
1G 6000 1G 6001	P19 1280 P19 1281
1G 6010 1G 6011	P19 1037 P19 1039
1G 6020 1G 6021	P19 1236 P19 1038
1G 6030 1G 6031	P19 1033 P19 1107
1G 6040 1G 6041	P19 1713 P19 1463
1G 6050 1G 6051	P19 1177 P19 1178



1G 6000
1G 6001 Consist of Cellulose & Synthetic with Micro M-19 Nano Coated and Micro NanoFlat (Spiderweb)

Low Cost and Durable than its competitor not less than % 20

1G 6010
1G 6011 Consist of Cellulose & Synthetic without Nano Coating

Low Cost and Durable

1G 6020 % 100 Blended (Duratek) without Nano Coating

1G 6021 Natural Fibers Designed to Resist Moisture

1G 6030 %100 Synthetic without Nano Coating

1G 6031 Superior Dust-Holding Capacity, Sturdy, Durable And Moisture Resistant

1G 6040
1G 6041 % 100 Blended (Duratek) with Micro M-19 Nano Coated and Micro NanoFlat (Spiderweb)

High filtration performance can significantly increase turbine output! Micro M-19 and Micro NanoFlat (Spiderweb) consists of nanofibers bonded over a substrate of Blend (Duratek) filter media.

1G 6050
1G 6051 % 100 Synthetic with Micro M-19 Nano Coated and Micro NanoFlat (Spiderweb)

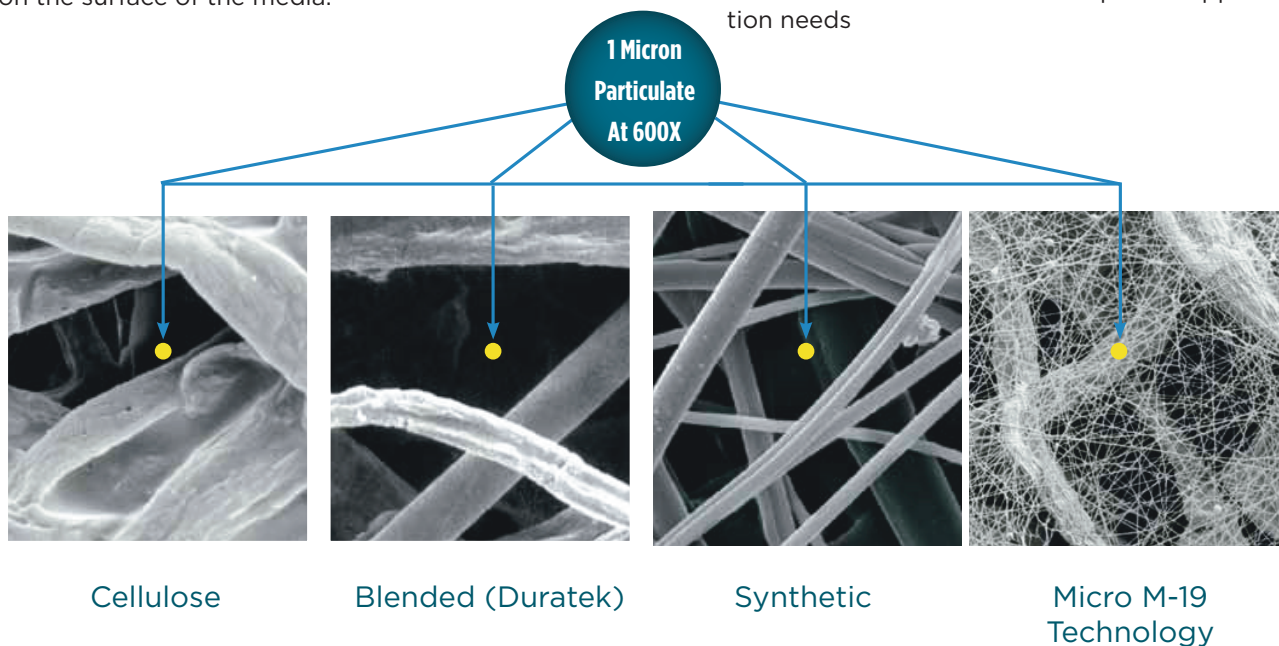
High filtration performance can significantly increase turbine output! Micro M-19 and Micro NanoFlat (Spiderweb) consists of nanofibers bonded over a substrate of Synthetic filter media.

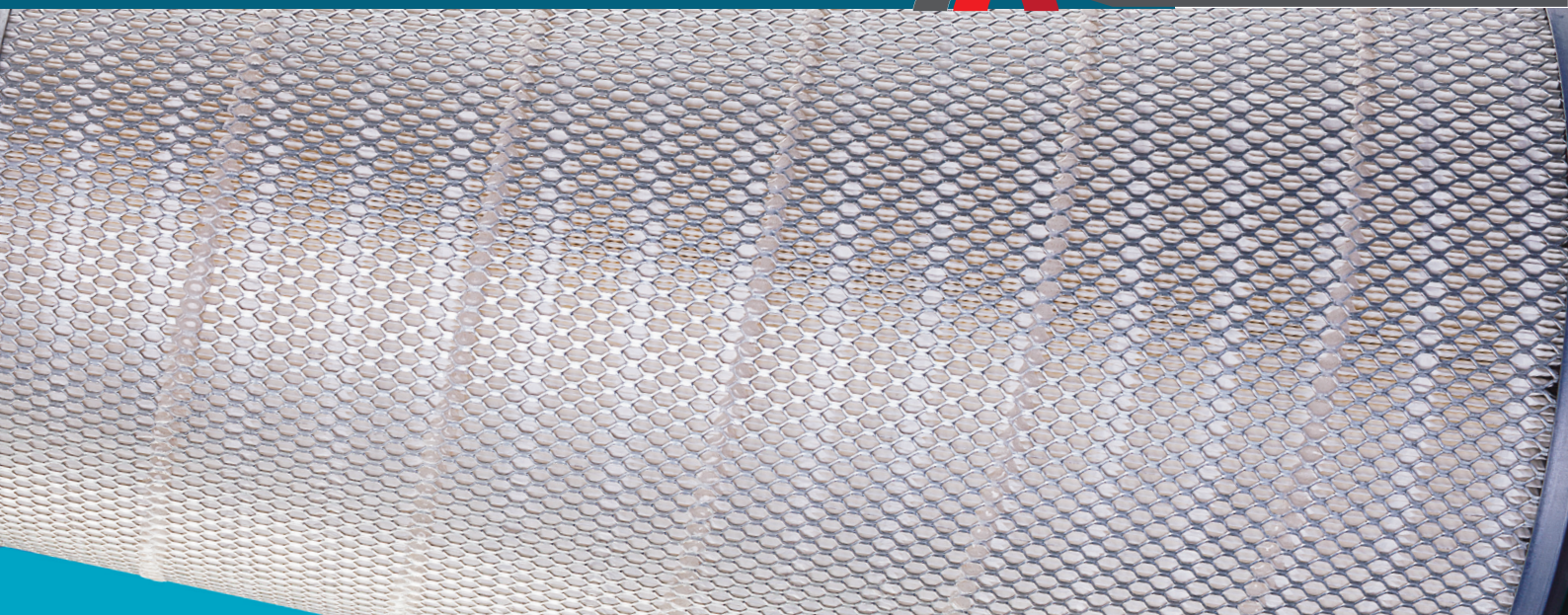
Donaldson	Micronic	Media	OD	ID	Length
P19-0949	1G 6062	Synthetic micro M 19 nano Coated and Micro NanoFlat	324 mm	213 mm	559 mm
P19-1031	1G 6063	Synthetic	324 mm	213 mm	559 mm
P19-1310	1G 6064	Duratek micro M 19 nano Coated and Micro NanoFlat	324 mm	213 mm	559 mm
P19-1234	1G 6065	Duratek	324 mm	213 mm	559 mm
P19-0848	1G 6066	Synthetic micro M 19 nano Coated and Micro NanoFlat	476/446 mm	356 mm	660 mm
P03-0067	1G 6110	Synthetic	476/446 mm	356 mm	660 mm
P19-5778	1G 6111	Cellulose + Synthetic	476/446 mm	356 mm	660 mm
P19-1617	1G 6067	Duratek	324 mm	213 mm	737 mm
P19-1713	1G 6060	Duratek micro M 19 nano Coated and Micro NanoFlat	324 mm	213 mm	762 mm
P19-1463	1G 6061	Duratek micro M 19 nano Coated and Micro NanoFlat	324 mm	213 mm	762 mm
P19-1790	1G 6070	Duratek	324 mm	213 mm	762 mm
P19-1492	1G 6071	Duratek	324 mm	213 mm	762 mm
P19-1726	1G 6080	Cellulose + Synthetic	324 mm	213 mm	762 mm
P19-1461	1G 6081	Cellulose + Synthetic	324 mm	213 mm	762 mm
P19-1767	1G 6068	Duratek micro M 19 nano Coated and Micro NanoFlat	324 mm	213 mm	914 mm
P19-1781	1G 6090	Synthetic micro M 19 nano Coated and Micro NanoFlat	406 mm	292 mm	876 mm
P19-1782	1G 6091	Synthetic micro M 19 nano Coated and Micro NanoFlat	406 mm	292 mm	559 mm
P03-0072	1G 6130	Synthetic	406 mm	292 mm	717 mm
P03-0071	1G 6131	Synthetic	406 mm	292 mm	717 mm
P03-0253	1G 6100	Synthetic micro M 19 nano Coated and Micro NanoFlat	406 mm	292 mm	717 mm
P03-0254	1G 6101	Synthetic micro M 19 nano Coated and Micro NanoFlat	406 mm	292 mm	717 mm
P03-0183	1G 6200	Duratek micro M 19 nano Coated and Micro NanoFlat (Spiderweb)	324 mm	213 mm	717 mm
P03-0184	1G 6201	Duratek micro M 19 nano Coated and Micro NanoFlat (Spiderweb)	324 mm	213 mm	717 mm

PROPRIETARY TECHNOLOGY THAT PERFORMS

Proven and proprietary Micro M-19 technology delivers longer filter life, cleaner air and greater cost savings than other types of filter media. Made with an electrospinning process that produces a very fine, continuous, resilient fiber od 0.2-0.3 micron in diameter, Micro M-19 forms a permanent nanofiber web with very fine interfiber spaces that trap dust on the surface of the media.

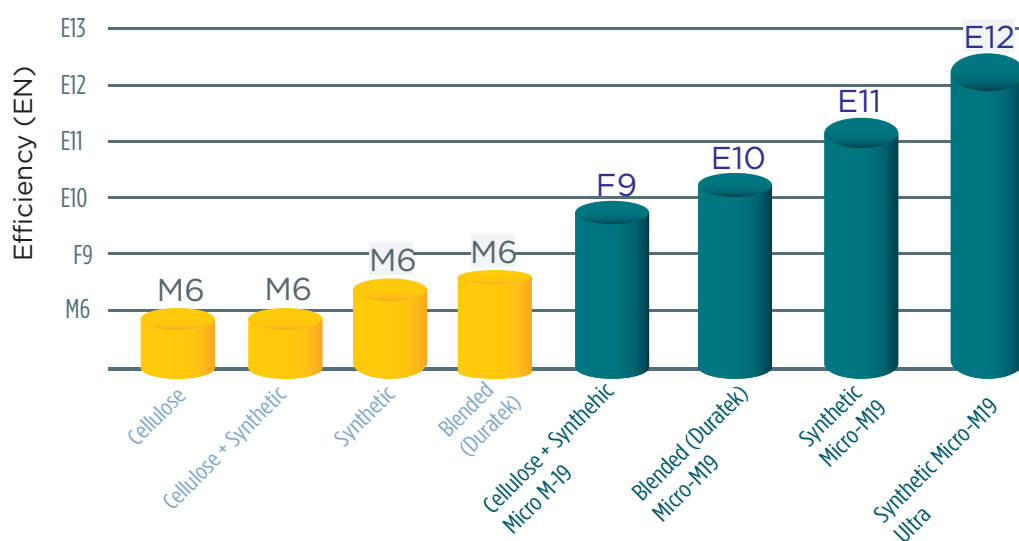
- Superior media, capturing submicron dust particles
- Longer filter life, better pulse cleaning, surface loading technology
- Lower pressure drop, optimal pulse cleaning, maximum turbine efficiency
- Filtration efficiencies to meet specific application needs





ENGINEERED FOR POWER

Higher Efficiency, Lower ΔP , More Power



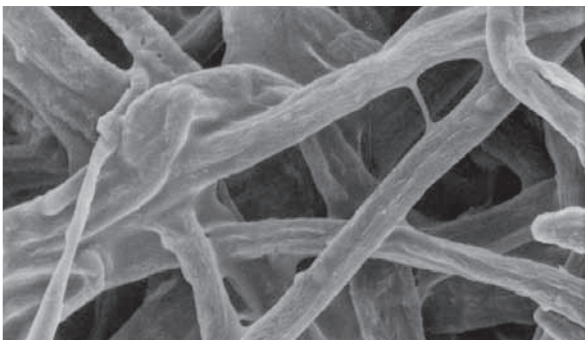
Cartridge Filter Media Type	EN	EN779:2012		
		Composite Average Particle Size Efficiency % in Size Range, μm		
		0.30 -1.0	1.0 - 3.0	3.0 -10.0
Synthetic Micro M-19 Ultra	E12	≥ 99.5	≥ 99.9	≥ 99.9
Synthetic Micro M-19	E11	≥ 97	≥ 97	≥ 97
Blended (Duratek) Micro M-19	E10	≥ 95	≥ 95	≥ 95
Cellulose + Synthetic Micro M-19	F9	≥ 85	≥ 95	≥ 95
Synthetic	M6	X	≥ 80	≥ 90
Blended (Duratek)	M6	X	≥ 80	≥ 90
Cellulose + Synthetic	M6	X	≥ 80	≥ 90
Cellulose	M6	X	≥ 65	≥ 90

Micro M-19 filters, optimizing filtration and turbine efficiency without sacrificing filter life or increasing pressure drop.

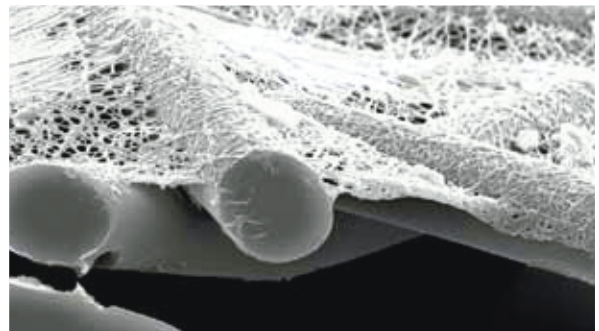
For applications that require even higher efficiency, there's a Micro-M19 filter to meet your needs.

SUPERIOR TURBINE PROTECTION

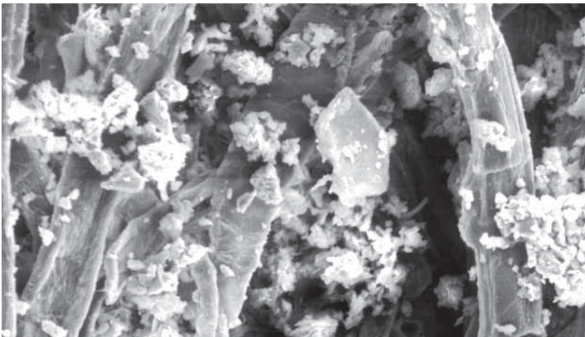
For more than three decades, Micronic has advanced our Micro M-19 technology to provide a complete line of filters that last up to twice as long as commodity filters. Pressure drop rises quickly with commodity filters, resulting in shorter filter life, reduced power output and increased maintenance cost. Micro M-19 high efficiency filters provide superior gas turbine protection, lower operating pressure drop and longer filter life.



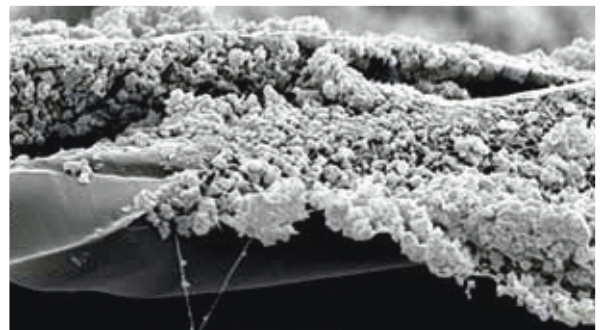
CLEAN COMMODITY FILTER



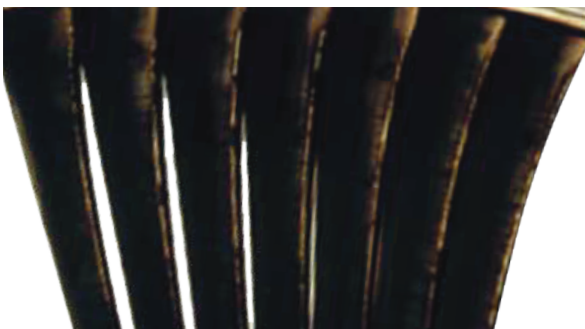
CLEAN MICRO M-19 FILTER



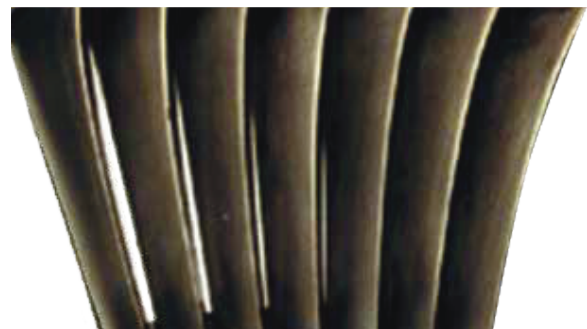
LOADED COMMODITY FILTER



LOADED MICRO M-19 FILTER



DIRTY TURBINE BLADE



CLEAN TURBINE BLADE