

We take the dust out of industry®

midwesco
Filter Resources, Inc.



TDC Filter
a midwesco® company

Industrial Filtration Solutions

Filter Cartridges, Panel Filters
& Pleated Bags



SOLUTIONS FOR ALL INDUSTRIES



We take the dust out of industry®

Specializing in Air Filtration Solutions since 1968

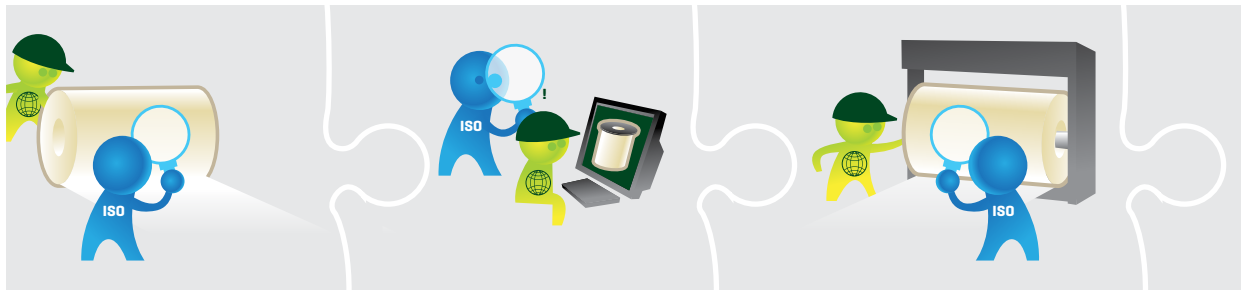


WE INVITE YOU TO VISIT THE NEW JOINT WEBSITE FOR MIDWESCO FILTER RESOURCES/TDC FILTER

You will find a vast amount of information about our extensive product range from air filtration solutions for baghouses and dust collectors, to accessories and service offerings.

Visit: www.midwesco-tdcfilter.com

A GLOBAL FILTER MANUFACTURER DELIVERING HIGH QUALITY ON TIME



Material sourcing

- > Global sourcing of raw material
- > Vendor and material quality approved before sourcing
- > Quality inspection upon arrival

R&D

- > High performing products
- > Filter life expectancy evaluation
- > Mobile Test Rig

Manufacturing

- > In-house air filter production
- > Lean manufacturing and continuous process improvement
- > Highly trained workers



= ISO9001 program guarantees optimized and standardized manufacturing processes.

Midwesco Filter Resources/TDC Filter is ISO compliant / Nordic Air Filtration is ISO9001 certified.



Midwesco Filter Resources, Nordic Air Filtration and TDC Filter's filtration solutions are installed worldwide

45 YEARS OF FILTRATION EXPERTISE

Midwesco Filter Resources, Nordic Air Filtration and TDC Filter are part of the MFRI Group. We manufacture filter cartridges, panel filters, filter bags and cages for new equipment installations and replacements. With more than 4000 types of filter design and a variety of 35+ media types, we supply air filter solutions for all types of dust collectors in most industries, including those that handle food, abrasives, toxic and explosive dust. Each one of our filters is manufactured in the US and Europe using only documented and certified materials and manufacturing methods.

Based on our wide range of high quality products and 45+ years of filtration expertise, we are able to find solutions to your most difficult challenges. Our experienced sales team will visit your facility, understand your needs and develop a customized solution to meet those needs.

In addition, we offer a wide range of value added services including turnkey installation and inspection services, emission monitoring equipment, Total Cost of Ownership Savings reports, filter service life testing and more.



Quality

- > Final inspection of the filters
- > Our products are tested according to EN779, EN1822, ARAMCO or ASHRAE 52.2

Quality on time

- > 95% on-time deliveries
- > Focused on continuous improvement

Satisfied customer

Wide Range of High Quality Filter Cartridges

Twist-Lock Cartridges

- > Lengths of 24", 29" and 34"



Rectangular/Square Flange Cartridges

- > Flanges up to 21"
- > Lengths up to 80"



Pleat Plus® Pleated Bags

- > Diameters from: 4.625" to 8.75"
- > Top & bottom load filters



Filter Bags

- > Pulse Jet bags
- > Reverse Air bags
- > Shaker bags
- > Filter support cages



NEW IntegraSeal™ Pleat Plus®

- > One piece molded gasket
- > Flexible fit: Fits tubesheet hole sizes from 5.0" to 8.75"
- > Can be retrofitted into existing bag collectors – no modifications needed
- > Patent Pending



Three & Four Hook Cartridges

- > Diameters from 5.38" to 12.75"
- > Can be made with plastic end caps



Cylindrical Cartridges

- > Lengths up to 80"
- > Diameters from 6.80" to 22.50"
- > Open/Open & Open/Closed options available
- > Expanded metal or bands available



One PowderMaxx™ Filter replaces two Cartridges

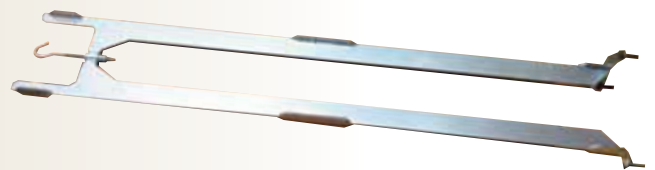
Features & Benefits

- > Diameter from 6.80" to 22.50"
- > Easier to install
- > Prevents misalignment
- > Larger filtration surface area
- > Better sealing
- > Lower pressure drop
- > Better pulse cleaning
- > Longer service life

We take the dust out of industry®

Wide Range of High Quality Filter Cartridges

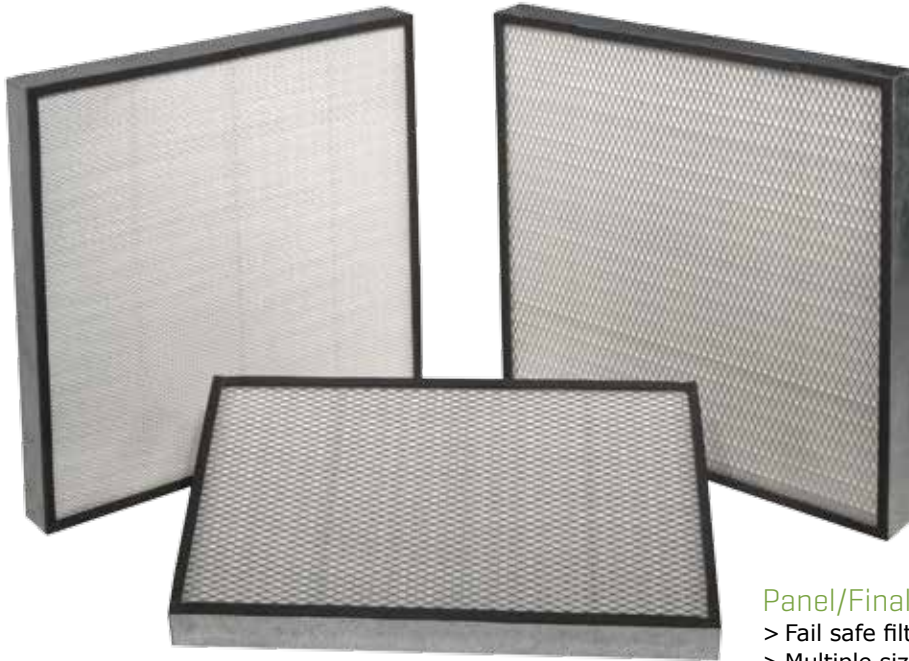
Thread Filter Cartridges
>Lengths up to 80"



O Kit™
Patented Oval Filter Conversion Kit

Use Standard Cylindrical Cartridges in Oval Collectors

- > Enables use of standard cylindrical replacement cartridges in your existing oval collector
- > Installation requires no special tools or equipment
- > Easy yoke adjustment from the front
- > Uniform pulsing of the filter
- > Technical support is available from Midwesco Filter Resources/TDC Filter



Panel/Final Filters

- > Fail safe filters prevent powder from recirculating
- > Multiple sizes and efficiencies available
- > High quality, long life & cost efficient



Flat Cell Panel Filters

- > Operating temperature up to 200° F
- > Integrated internal pleat retainers for optimal air flow
- > Non-woven spunbonded media for long filter life


We take the dust out of industry®



Filters for all Industries Filter Media Guide







Industry Dust / Fumes	QX	QX-FR	UX-Nano	BX	UX-FR	SX	PE	PE-TX	TurboWeb®	TurboWeb®-HO	BondMaxx®	SB	SB-HO	SB-ME	SB-TX	CB-TX	AR	AR-TX	PS	PS-TX
Chemicals																				
Carbon Black																				
Chemical																				
Pharmaceuticals																				
Food & Beverage *																				
Metals																				
Aluminum																				
Battery Manufacturing																				
Flame Spray (Off-line cleaning)																				
Foundry																				
Plasma/Laser Cutting (PreKote® needed)																				
Smelting (Copper, Lead, Zinc)																				
Steel																				
Welding fumes - dry																				
Welding fumes - oily (PreKote® needed)																				
Welding/grinding																				
OEM																				
Misc. Manufacturing																				
Abrasive Handling																				
Pneumatic Conveying																				
Powder & Bulk Processing																				


*FDA Compliant as needed

 = Available options

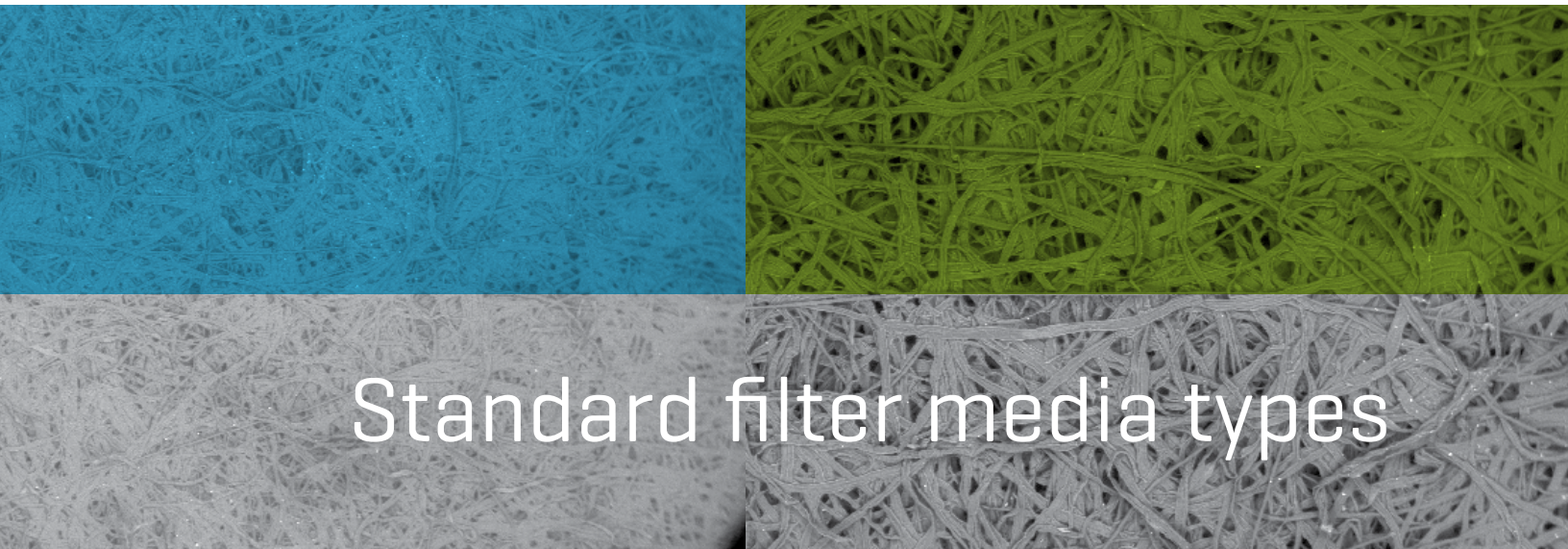
* Please note: These are preliminary suggestions for pleated filter media for each industry. However since site-specific issues might dictate a different media solution, we suggest that you draw upon the expertise of your Midwesco/TDC Filter sales representative to select the optimum media alternative.



Industry	Dust / Fumes	QX	QX-FR	UX-Nano	BX	UX-FR	SX	PE	PE-TX	TurboWeb®	TurboWeb®-HO	BondMaxx®	SB	SB-HO	SB-ME	SB-TX	CB-TX	AR	AR-TX	PS	PS-TX	
	Power																					
	Biomass																					
	Gas Turbine																					
	Industrial Boiler																					
	Utility Boiler																					
	Waste to Energy																					
	Powder Coating																					
	Powder Coating																					
	Rock Products																					
	Asphalt/Hot Mix																					
	Cement																					
	Gypsum																					
	Kaolin																					
	Lime																					
	Minerals																					
	Sand Blasting																					
	Grinding																					
	Sand blasting - sand																					
	Sand blasting - glass (moisture resistant)																					
	Sand blasting - enamel, steel & aluminium																					
	Textile																					
	Cotton																					
	Paper, Pulp, Woodworking																					
	Paper Plant																					
	Wood Dust																					

 = Available options

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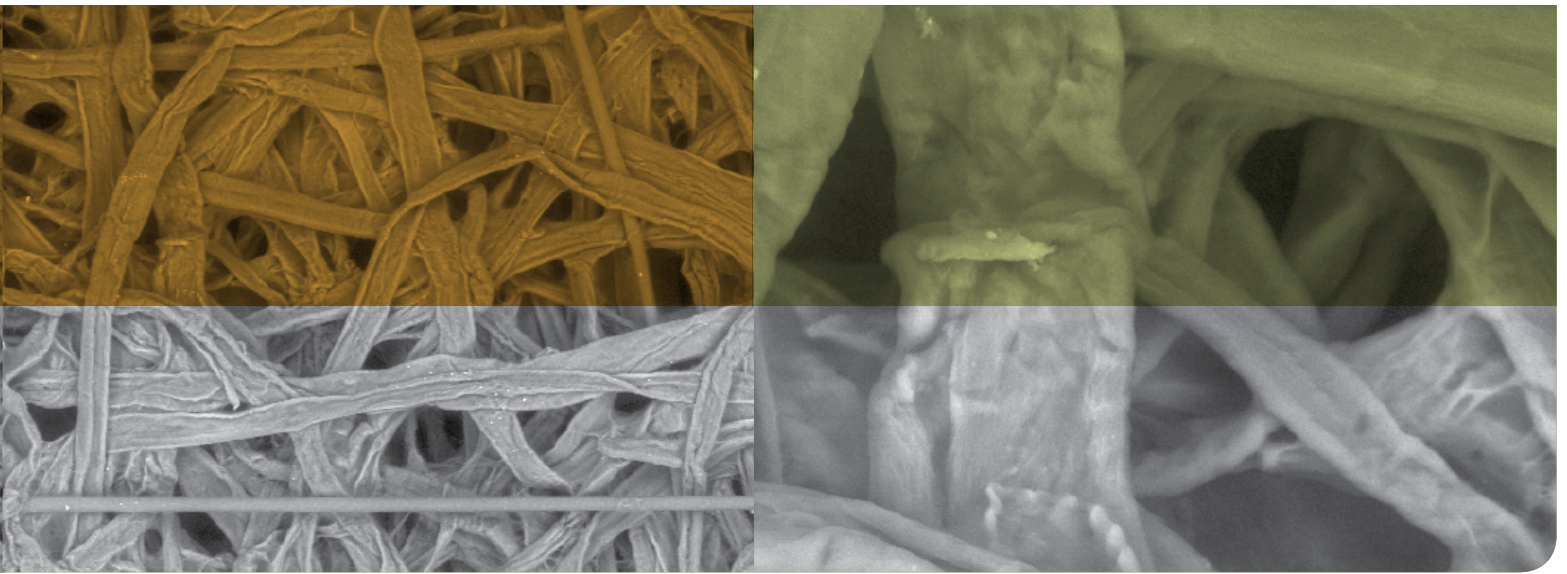


Standard filter media types

Description			Specification
Name	Material	Treatment	MERV Rating
QX	High strength cellulose based blended media	-	12
QX-FR	High strength cellulose based blended media	Flame Retardant	11
UX-Nano	Blended cellulose and polyester	Electrospun nano layer	14
BX	Cellulose with latex resin	-	15
UX-FR	Cellulose blend with flame retardant base layer	Electrospun nano + Flame Retardant	13
SX	100% synthetic blended media	-	12
PE	100% Polyester needlefelt	-	8
PE-TX	100% polyester needlefelt	ePTFE Membrane	16
TurboWeb®	100% synthetic spunbond	None	11
TurboWeb®-HO	100% synthetic spunbond	Hydrophobic & oleophobic	-
BondMaxx®	100% synthetic spunbond	-	10
SB	100% synthetic spunbond	-	12
SB-HO	100% synthetic spunbond	Hydrophobic & oleophobic	11
SB-ME	100% synthetic spunbond	Conductive / Anti-static	11
SB-TX	100% synthetic spunbond	ePTFE Membrane	16
CB-TX	100% synthetic carbon impregnated spunbond	Conductive / Anti-static + ePTFE Membrane	16
AR	100% Synthetic resin impregnated needlefelt	-	-
AR-TX	100% Synthetic resin impregnated needlefelt	ePTFE Membrane	16
PS	100% synthetic high temperature PPS needlefelt	-	10
PS-TX	100% synthetic high temperature PPS needlefelt	ePTFE Membrane	16

HO = hydrophobic and oleophobic treatment = water and oil repellant

TX = ePTFE membrane = media contains a membrane - the most dust resistant solution available



Chemical resistance

Max. cont. oper. temp. F	Oil/water	Hydrolysis	Acid	Alkali	Dust release
200°F	*	*	*	*	**
200°F	*	*	*	*	**
200°F	*	*	*	*	***
200°F	**	*	*	*	***
200°F	**	*	*	*	***
200°F	**	*	*	*	***
275°F	**	*	*	*	***
275°F	***	**	**	*	****
275°F	**	*	**	*	***
275°F	****	*	**	*	***
275°F	*	**	**	*	***
275°F	**	*	**	*	***
275°F	****	*	**	*	***
275°F	**	*	**	*	***
275°F	***	*	**	**	****
275°F	***	**	**	*	****
375°F	**	*	**	**	**
375°F	***	*	**	**	****
375°F	*	****	****	***	*
375°F	***	****	****	***	****

* Fair ** Good *** Very good **** Excellent

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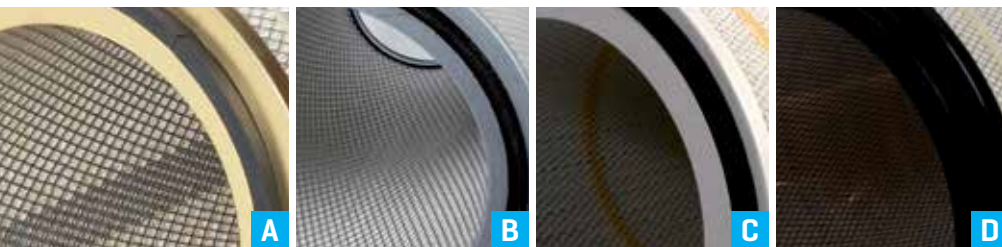
4000+ Filter Combinations

MESH/CORE



- A** Plastic inner core (non-corrosive)
- B** Expanded welded metal inner core/outer liner
 - > Galvanized
 - > Stainless steel
 - > Powder coated steel
- C** Expanded metal helical inner core
 - > Stronger design, no welding

END CAPS



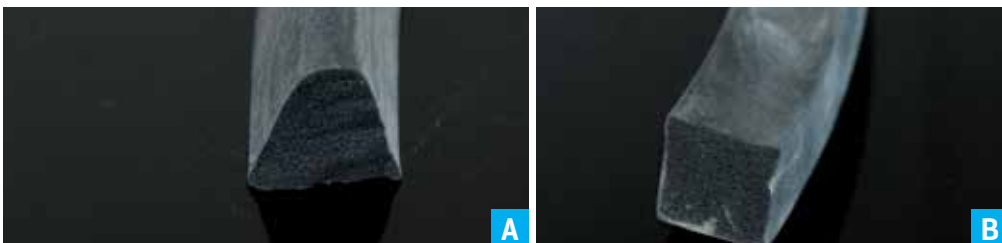
- A** Galvanized steel
- B** Stainless steel
- C** Powder coated
- D** Plastic ABS (non corrosive)

STRAPS



- A** Strap branded with your logo
 - > Glued strap
- B** WeldTech® strap - Ultrasonic welded
 - > No glue
 - > Secures consistent pleat spacing
 - > Minimizes trapping of dust behind strap

GASKET



- A** Seamless polyurethane gasket
- B** EPDM

Manufacturing Capabilities

PLEATER

A variety of pleating machines enabling

- > A wide range of filter options
- > High production capacity



HELICAL INNER CORE

- > No welding
- > Customized solutions
- > Greater crush resistance compared to expanded metal



WELDTECH®

Our Patent Pending WeldTech® Technology ensures

- > Lower pressure drop
- > Better pulsing
- > Longer life
- > Lower energy consumption
- > Consistent pleat spacing



MEDIA OPTIMIZATION

In-house production of anti-collapse PleatLock and PleatKeeper® guarantees

- > Optimum performance
- > Low pressure drop
- > Better air flow



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VALUE ADDED SERVICES

In addition to cartridge filters, panel filters and pleated bags we offer multiple value-added services including:

- > Dust Collector inspection
- > Laboratory testing services including Filter Analysis
- > Total Cost of Ownership Savings Report
- > Filter change-out services
- > Dust Collector renovation

Optimize Filter Performance by using our Proven Accessories



LEAK SEEKER®

Quick and easy test for leaks in your system

Utilizing Leak Seeker® as part of your regular baghouse maintenance program helps you avoid costly unscheduled shutdowns. Our Leak Seeker® is ideal for preventive maintenance use and offers a low cost, effective way of locating broken filter bags or pleated bags, cracked tube sheets or faulty seals.

The Leak Seeker® system contains an illuminating light and tracing powder used to reveal the exact location and severity of leakage.

- > Supplied in 5 lb., 25 lb., Case of 4 x 5 lb. and 300 lb. containers
- > Black lights available are Flash Light, Spot Light, Lantern and Wand

BROKEN BAG DETECTOR

PCME Electrodynamic™ technology allows for remote reporting of the condition of single and multi compartment filters. Emission warning alarms prevent dust emission levels to breach regulatory limits and thereby eliminates the lost production time normally associated with unscheduled plant shutdowns.



ACCESSORIES

- > Pulse Valves and Repair Kits
- > Air Headers
- > Pressure Gauges
- > Bulkhead Connectors
- > Door Gasket
- > Clamps
- > Sonic Horns
- > Timers
- > Tube Line Cleaner™ (TLC)
- > Go-Co Nozzles
- > Rotary Air Locks and Dump Valves
- > Bag Cups and Venturis
- > Other Dust Collection Accessories





Accessories

PREKOTE®

Increases initial efficiency and protects filter during start up

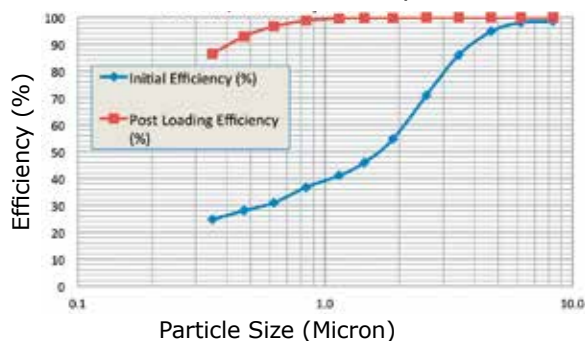
- > Creates a highly permeable, protective layer on the surface of the filter media and increases filter performance
- > Improves dust cake release
- > Ensures longer filter life
- > Ideal for applications where moisture and oil are present
- > Prekote® is chemically inert, non-toxic and pH neutral
- > Does not contain lime or diatomaceous earth
- > Supplied in 25 lb., 450 lb. super sacks or via bulk truck
- > Can be pre-applied to pleated bags and cartridges

Before PreKote®

After PreKote®

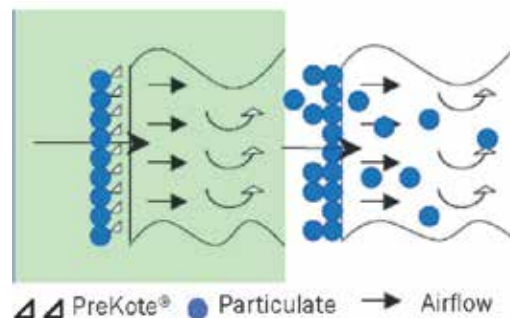


ASHRAE 52.2
Initial Efficiency Comparison
650 CFM, PreKote®: Expanded Perlite



With PreKote®

Without PreKote®



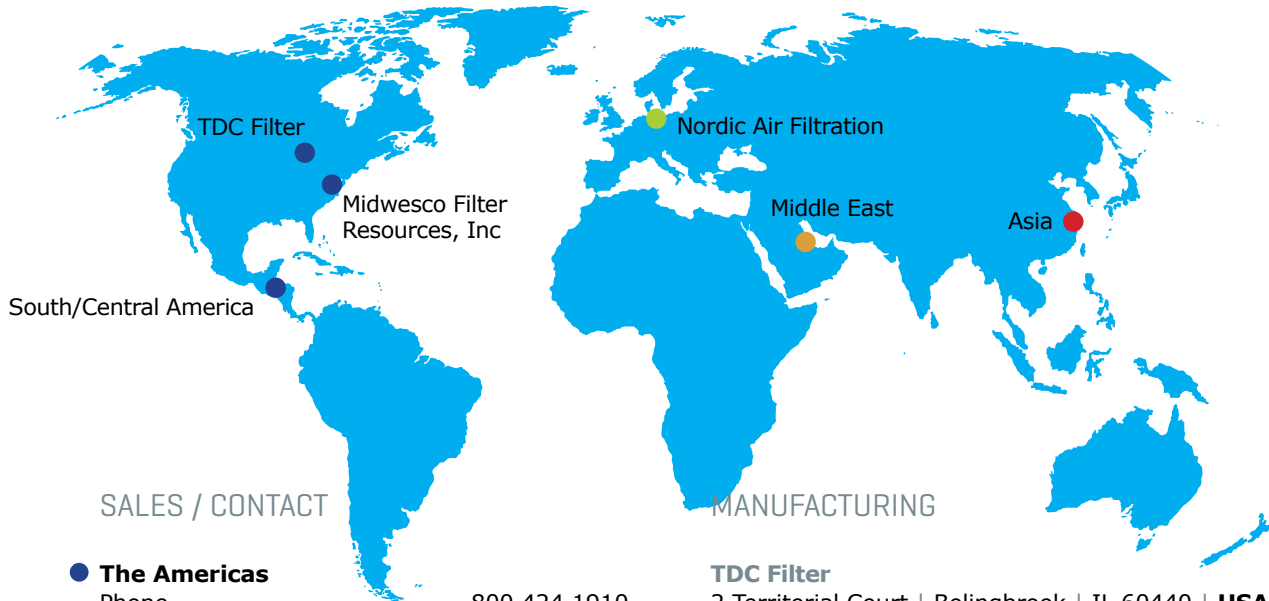
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