



Gas Turbine Air Inlet Filtration

We take the dust out of industry™

NORDIC AIR FILTRATION

Member of the Hengst Group





We take the dust out of industry™

Nordic Air Filtration is specialized in Gas Turbine Air Inlet Filtration

Nordic Air Filtration – member of the Hengst Group, provides high technology air filtration solutions for all operating environments in all parts of the world.

Our cartridges are installed in air inlet housings for General Electric, Siemens, Alstom, Turbomach, Solar and many other gas turbines around the world. Each one of our filters is manufactured in Europe, Middle East, Asia and USA using only documented and certified materials and manufacturing methods.

Nordic Air Filtration is a member of the Hengst Group. Hengst - www.hengst.com - is an international recognized manufacturer and supplier for the automotive and engines industry as well as a producer of a wide variety of filtration applications in the industrial- and consumer goods sectors.

Our highly skilled R&D departments in Münster, Germany, and Nakskov, Denmark work closely together to ensure our global customers receive certified high quality products.

In everything we do, we strive to exceed customer expectations by continuously developing innovative filtration solutions that increase performance and reduce cost for our customers.

With our vast gas turbine filtration experience and our wide range of high quality filter media and material, we offer custom solutions for your specific air inlet filtration needs, replacement filter elements as well as on-site technical field support. We have solutions for all environments.



Desert

Hot and dry with heavy concentration of blowing sand



Coastal

Corrosive moisture and high humidity



Tropical

High temperature and humidity



Offshore

Salty corrosive moisture, high humidity and occasional heavy fog



Arctic

Dry air, snow and frost can block filters



Urban

Polluted air and high levels of hydrocarbons and particles



Your reliable business partner

We focus on implementing initiatives that benefit our employees, business partners, customers and the environment.

When developing new products, manufacturing our filters or troubleshooting for customers, we always find the most productive solution benefitting the parties involved.

High quality filters

Manufactured with Danish knowhow always following the ISO 9001 standards

Nordic Air Filtration was founded in 1991 in Nakskov, Denmark, the factory here has developed over time. It is our primary task to produce high technology filters with high quality standards.

The factory is certified under the ISO 9001 program that guarantees optimized and standardized manufacturing processes. This goes for all steps in the process, from the material sourcing, research & development, manufacturing, quality and shipping. Our products are tested according to EN 779, EN 1822, ARAMCO or ASHRAE.

In house we are producing complete cartridges, but also many of the filter elements, including plastic and metal spiro and gaskets.

The pleating of filters is a special science in which we take great pride. The pleating can come with many different enhancements ensuring optimal performance for various operational settings, you can choose between dimpling, pleat lock, embossed or minipleat.

Besides Denmark we are manufacturing in Germany, United Arab Emirates, China and USA.

ISO 9001 steps for optimized manufacturing process



01 | Material sourcing



02 | Research & Development



03 | Manufacturing



04 | Quality control



05 | Quality on time



Choosing the right filter

You can save time and money by protecting your intake housing with premium filters. If not, you risk cooling passage fouling, erosion on vital parts, reduction in the air flow capacity and efficiency and in worst cases hot end corrosion of the gas turbine. We can help you choose the optimal filter solution to protect your turbine.

Nordic wide range of quality filters

We supply Gas Turbine Air Inlet filters for all types of environments and intake housings. Our products are tested according to EN779, EN1822 or ASHRAE 52.2. The Nordic Air Filtration's product portfolio covers all shapes and sizes of cartridges and our media selection covers from G4 to E12 in pulse and static applications. Below you can see our most common styles.



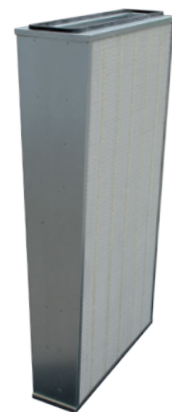
Cylindrical Cylindrical



Cylindrical Conical



Conical Conical



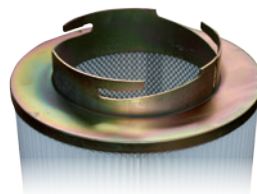
Panel filter



Square End Cap



Cylindrical



Twist lock



Panel V Bank

Please notice: You can also find the Pre-filter and the Turbowrap within the Nordic range.

<< Stop Ring a unique Nordic Air Filtration solution, to align the filter and to avoid complete compression of gasket.



Research & Development

Nordic Air Filtration's R&D departments work closely together to ensure our global customers new unique products that provide added value. We strive to continuously develop innovative filtration solutions that increase performance and reduce operating cost for our customers.

Guide: customize your filter

at Nordic Air Filtration it is possible to customize your filter so it fits your needs. You have many possibilities and we are very flexible and eager to help you find the right solution to your specific requirements.

01

End caps

- › Stainless steel
- › Galvanized, Powder coated or incinerable /recyclable plastic ABS

02

Mesh

- › Metal inner spiro
- › Expanded welded metal inner/outer mesh (Galvanized,Stainless or Powder coated steel)
- › Expanded Helix metal inner/outer mesh
- › K-profile for corrosion free quality

03

Separators

- › Minipleat: Pleat separation with hot melt
- › Glued strap branded with your logo
- › Hotmelt spiral

04

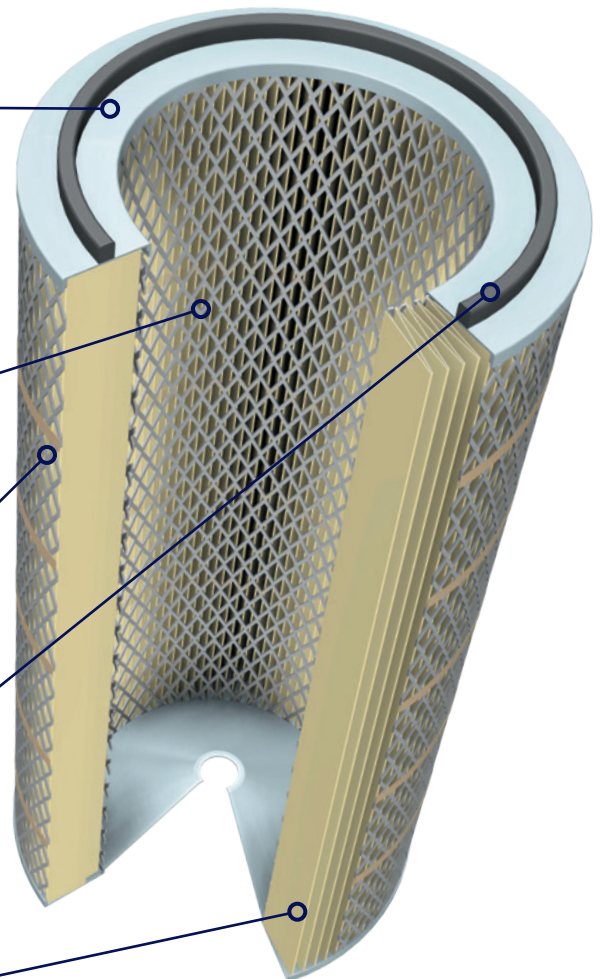
Gasket

- › Unique Nordic Seamless Foam Gasket
- › EPDM
- › Silicone

05

Media

- › Can be equipped with
- › Nordic Air Filtration's media selection.
- › See our standard filter media types on page 10



<< K-Profile for corrosion free quality.

Standard filter media types

Benefits of using TW High Efficient Media

Upgrading your media solution can be very beneficial for you and in the long run reduce your Total Cost of Ownership. It can solve problems you might face, e.g. with harsh environments with salt/water or frost. Or if you experience frequent water wash or many unplanned shutdowns or reduced power output.

If you decide to upgrade the initial costs will be higher, but you will receive an instant ROI with lower operating costs, increased power output and reduced downtime and compressor fouling.

In our media selection we have a wide selection fitting your every need, please see the table below.

TW EPA media benefits



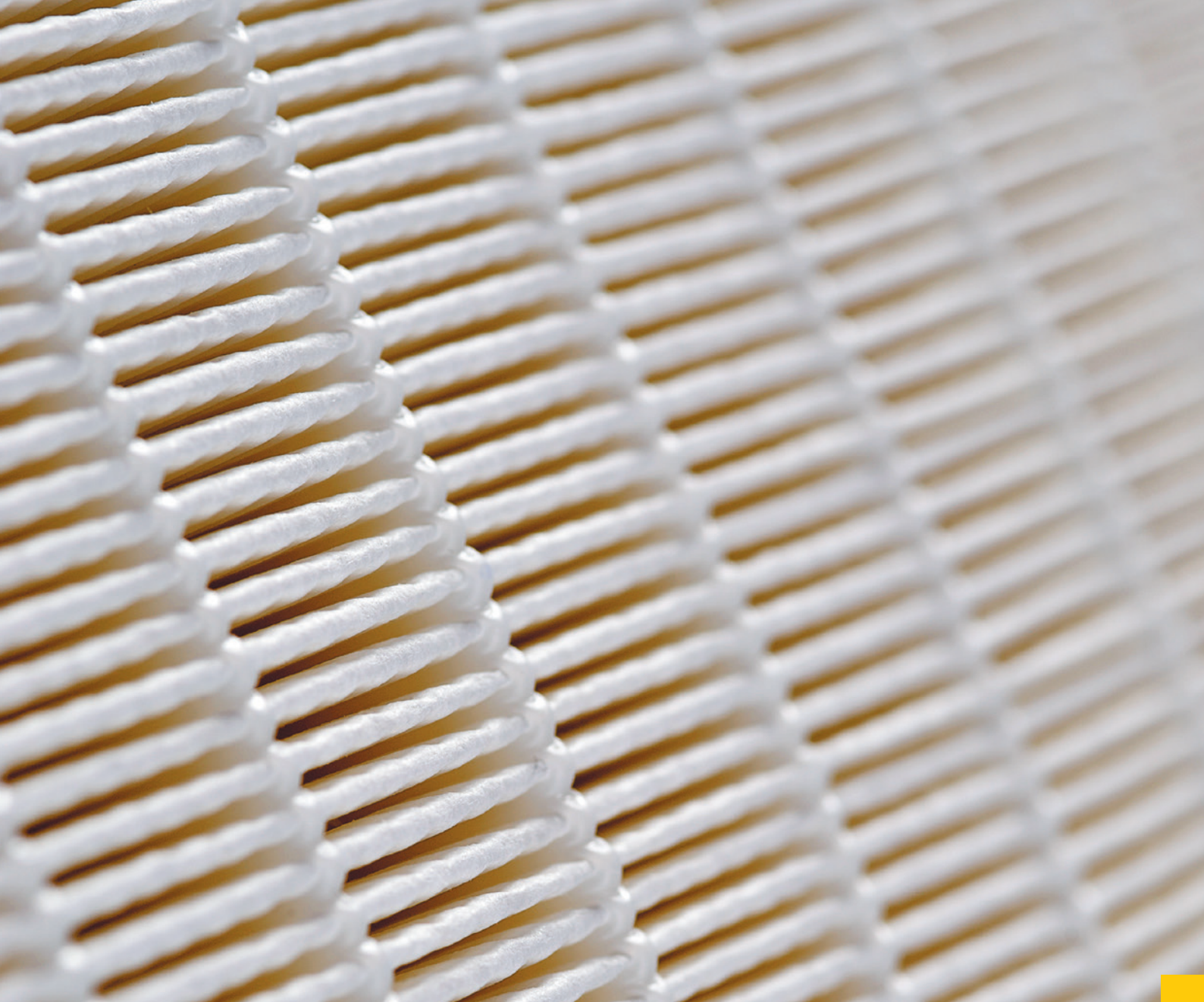
Water and salt repellent



Better airflow

Description				
Name	Material	Treatment	Filter Class	Application*
140GT	Blend media	-	F9:2002	
171GT	100% synthetic	-	F9:2002	
TW HE**	Synthetic mix	Water repellent	F9:2012	
UX Nano	Cellulose / synthetic	Electrospun Nanofiber surface	F9:2012	
UX Nano FH	Cellulose / synthetic	Nanofiber + Flame retardant	F9:2012	
TW EPA***	Synthetic glass mix	Water repellent	E11:1822	

* See Application/industries on page 3. ** Previously named TW Nano. *** Only for static applications.



Water repellent treatment for optimal filter protection

The water repellent treatment increases the hydrophobic properties of the media by creating a surface friction that improves the filter operation in humid conditions. This results in more stable differential pressure behavior.



















References: global Nordic installations

Nordic Air Filtration have sold numerous projects and our know-how and expertise derives from 25+ years in the business, and from developing new products in close collaboration with large original manufacturers of gas turbine air inlet houses. Our collaboration with OEMs guarantees that our filtration solutions are in line with the latest technologies and optimized for the actual operating environments.

Examples of global installations



Turbine	Filter Configuration	Region	Environment	Dust	Installation Date
GT26	ASC II Panel	Africa		Chlorides, Sand, Hydrocarbons	2016
SGT6-4000F	Cylindrical Cylindrical	Asia		Chlorides, Hydrocarbons	2017
Solar, Mars100	Cylindrical	Europe		Hydrocarbons	2015
F9E	Cylindrical Cylindrical	Middle East		Sand	2016
SGT5-4000F	Cylindrical	Middle East		Sand	2014
SGT5-4000F	Cylindrical	South America		Hydrocarbons	2014
GT13E2	Conical Cylindrical	Middle East		Sand	2015
F6B	Cylindrical	Middle East		Chlorides, Sand, Hydrocarbons	2017
SGT6-4000F	Cylindrical	Middle East		Sand	2014
SGT-100	Cylindrical + Pre-filter	Europe		Chlorides, Hydrocarbons	2014
SGT6-4000F	Cylindrical	Africa		Sand	2013
GT13E2	Conical Cylindrical	Middle East		Sand	2015
SGT6-4000F	Cylindrical	Middle East		Chlorides, Sand, Hydrocarbons	2016
F9E	Conical Cylindrical	Middle East		Sand	2016
SGT6-4000F	Cylindrical	Middle East		Sand, Hydrocarbons	2016
SGT6-4000F	Cylindrical	Africa		Sand	2013



Laboratory Testing

With our strong technical team we examine customers' current filters at our laboratory facilities and establish:

- › Residual filter life
- › Filter suitability for specific operational environment
- › Suggest alternative media + design to improve filter performance

Field Support and Field Test

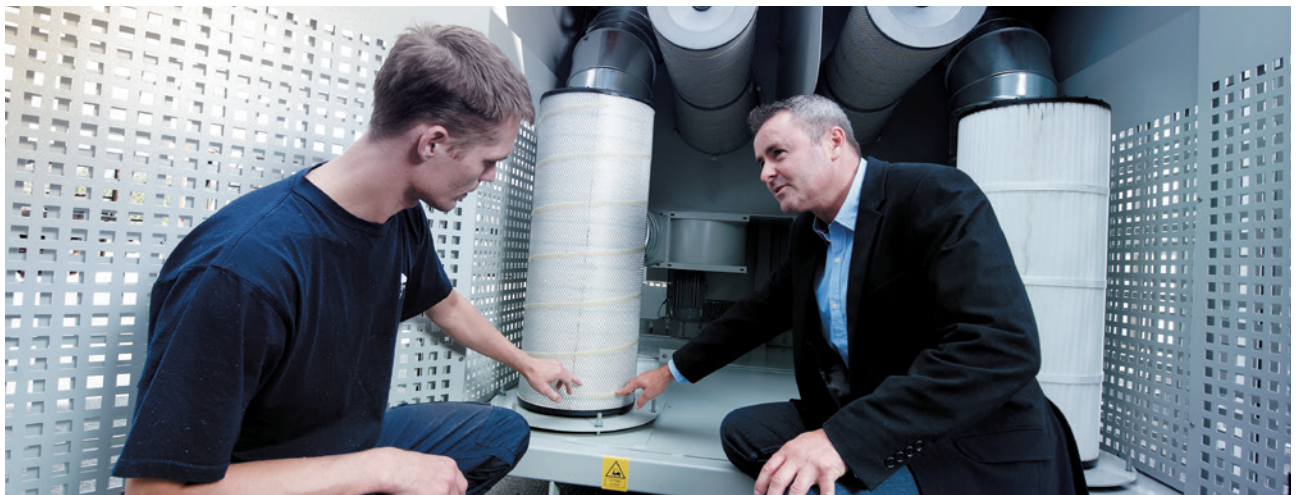
We provide field support and guidance

Our specialist can always be present during installation of new filters to ensure correct installation, and we can provide counseling about the most efficient use and cleaning of filters over their operating life.

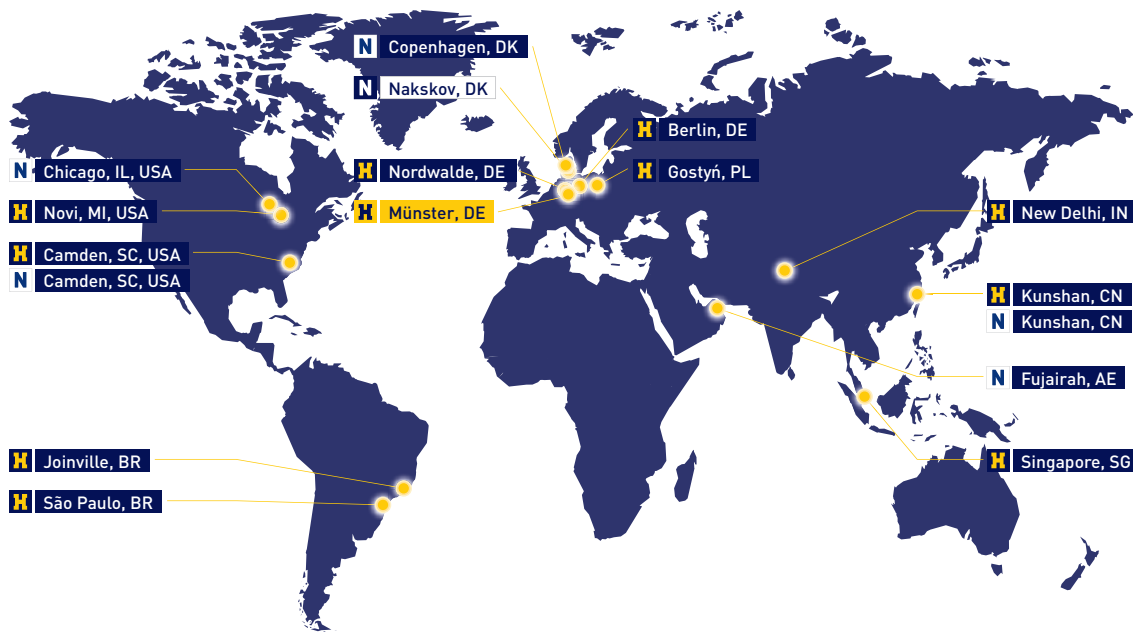
In Europe and Middle East we offer on-site testing of filter cartridges using our Mobile Test Rig. Our Mobile Test Rig enables test of 2 different filter cartridges

simultaneously in the actual operating environment of our customers.

By simulating a complete operating Gas Turbine Air Inlet Housing with pulse cleaning, the Mobile Test Rig offers a unique opportunity to compare the efficiency of existing filter cartridges with new types of cartridges and filter media on-site.



Your global provider of air filtration solutions



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