

Airtube/Aircone  
Pulse Power  
Pulse Jet Cartridges  
for Gas Turbine  
Filtration

# Airtube/Aircone Pulse Power

## Product Range



## Features



## Applications



## Filter Class

F

ePM1



## KEY FACTS

- Pulse-cleaning cartridges
- F8 or F9 efficiency according to EN 779:2012
- Built to withstand high levels of dust loading
- Available in cylindrical or conical formats
- Three media types designed for the needs of different operating environments
- Uniform pleat spacing for maximum life
- Corrosion-resistant end caps

## DESIGN

Pleated media formed into conical or cylindrical packs, supported by inner and outer expanded-steel sleeves. Epoxy-coated upper flanges and bottom end caps protect against corrosion. Liners are seamed to eliminate the risk of oxidation associated with welding dots.

## APPLICATIONS

For gas turbine intake filtration in areas with high levels of ambient dust.

# Airtube/Aircone Pulse Power

## AIRTUBE/AIRCONE PULSE POWER

Airtube and Aircone Pulse Power are built to withstand high levels of dust loading and provide protection to gas turbines in some of the harshest locations around the world.

The self-cleaning, pulse-jet capability delivers a long service life in environments where standard filters would become quickly overrun with dust – meaning constant performance and a low cost of ownership throughout its lifetime.

Available in cylindrical Airtube (660 or 900 mm) or conical Aircone (660 mm)

formats, these elements can be used individually, or combined for higher air flows and greater dust holding capacities.

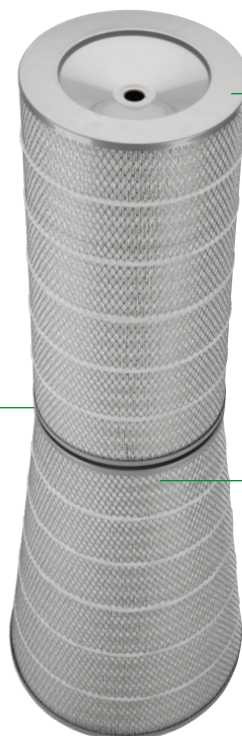
Airtube and Aircone Pulse Power are also available with three media options – an 80/20 blend, with a nanofiber covering layer, or a 100% synthetic version.

This means that Airtube and Aircone Pulse Power provide excellent flexibility to meet your requirements – no matter what your operating environment or existing systems.

## CONSTRUCTION

Airtube and Aircone Pulse Power are designed to cope with the worst that the world can throw at them. So each component has been crafted to perform under extreme levels of dust, intense humidity, high air flows – or all three simultaneously.

- Pleatlock uniform pleat spacing minimizes air flow restriction and maximizes service life
- Pleats secured to the outer sleeves by hotmelt beads maintain even pleat spacing and prevent movement during pulse cleaning



- Epoxy-coated upper flanges and bottom end caps provide a lifetime rust resistance
- Chemically-cured polyurethane pleat and end-cap bonding system eliminates air bypass and maximizes structural strength
- Galvanized expanded steel inner and outer sleeves support the media pack and protect against from damage
- Seamed liners eliminate all risks connected to welding dots oxidation

# Airtube/Aircone Pulse Power – Versions

## THREE VARIETIES

Airtube and Aircone Pulse Power come in three varieties to meet the needs of different operating environments.

Each variety – Select, N and Pro – has been designed to deliver the best performance depending on the level of dust and humidity that is present in the surrounding atmosphere.



Suitable for dusty, dry environments



Suitable for humid environments

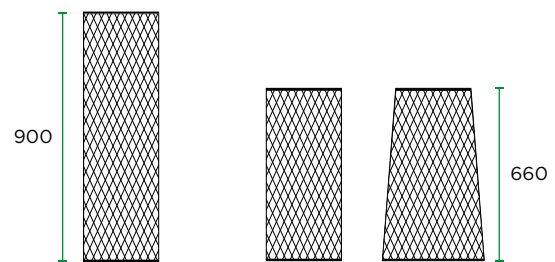


Suitable for dusty, humid environments

## TWO SIZES, TWO SHAPES

Airtube Pulse Power is available as two differently-sized cylinders (660 mm and 900 mm tall) and Aircone Pulse Power as one conical size (660 mm). Both sizes provide excellent active filtration areas for a long service life.

The two smaller elements can also be joined and used in combination for extremely high dust concentrations and air flows.



▲ Airtube and Aircone Pulse Power – two sizes and two shapes

Specification	Airtube and Aircone Pulse Power - All Models
<b>Gaskets</b>	Semi-expanded PUR seamless type.
<b>Upper flanges and bottom ends</b>	Grey epoxy-painted steel, thickness 0.8 mm. This special treatment protects the flanges from rust and ensures the perfect tightness of the PUR adhesive to the flanges.
<b>Sealant</b>	Hard neutral PUR, which is automatically dispensed through a dosing machine equipped with flow control to ensure a constant application of the adhesive.
<b>Outer and inner liners</b>	Expanded galvanised steel, rhomboidal mesh 20 x 10 mm, feed 1.5 mm, thickness 0.8 mm. Liners are not welded, but mechanically sealed.

# Airtube/Aircone Pulse Power Select



Suitable for dusty, dry environments



Cellulose and synthetic blend media



## AIRTUBE AND AIRCONE PULSE POWER SELECT - FILTER MEDIA

Airtube and Aircone Pulse Power Select utilize our pleated media composed of an 80/20 blend of cellulose and synthetic fibers. Designed specifically for use with gas turbines, this media offers medium resistance to humidity and is robust to the demands of the counter-flow pulse jets of compressed air.

This filter medium fulfils dust class M according to DIN EN 60335-2-69 annex AA and provides F8 efficiency according to EN 779:2012.



Fire resistant version also available

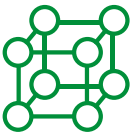
Filter Type	Aircone Pulse Power Select	Airtube Pulse Power Select 660	Airtube Pulse Power Select 900
<b>Article Number</b>	800486024422	800483024419	800483062853
<b>Height</b>	660 mm	660 mm	905 mm
<b>Outside Diameter</b>	445 mm* / 324 mm	324 mm	352 mm
<b>Filtration Area</b>	44 m <sup>2</sup> (cone and cylinder)		32 m <sup>2</sup>
<b>Filter Efficiency (ISO 16890)</b>	ePM1 70%		ePM1 70%
<b>Filter Efficiency (EN 779:2012)</b>	F8		F8
<b>Average Efficiency</b>	95.2%		90 ≤ Em < 95%
<b>Nominal Air Flow</b>	2500 m <sup>3</sup> /h		1728 m <sup>3</sup> /h
<b>Initial Pressure Drop</b>	150 Pa		187 Pa
<b>Final Pressure Drop</b>	450 Pa		450 Pa
<b>Max. Operating Temperature</b>	80 °C		80 °C
<b>Max. Relative Humidity</b>	100%		100%

\* Measurement refers to the widest part of the cone section

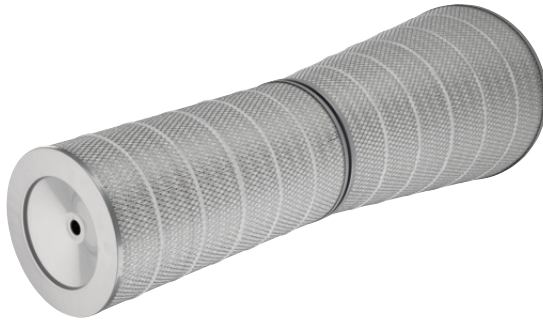
# Airtube/Aircone Pulse Power N



Suitable for humid environments



Cellulose & synthetic blend media with nanofibers



## AIRTUBE PULSE POWER N - FILTER MEDIA

Airtube Pulse Power N uses our own filter media - a pleated blend of cellulose and synthetic fibers (80/20) with a surface coating of nanofibers.

This media has been developed specifically for gas turbine applications, and is resistant to both humidity and the compressed air of the pulse-jet counter flows.

This filter medium fulfils dust class M according to DIN EN 60335-2-69 annex AA and class F9 efficiency according to EN 779:2012.

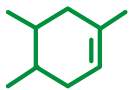
Filter Type	Aircone Pulse Power N	Airtube Pulse Power N
<b>Article Number</b>	800486062855	800483062854
<b>Height</b>	660 mm	660 mm
<b>Outside Diameter</b>	445 mm* / 324 mm	324 mm
<b>Filtration Area</b>	44 m <sup>2</sup> (cone and cylinder)	
<b>Filter Efficiency (ISO 16890)</b>	ePM1 80%	
<b>Filter Efficiency (EN 779:2012)</b>	F9	
<b>Average Efficiency</b>	99.7%	
<b>Nominal Air Flow</b>	2750 m <sup>3</sup> /h	
<b>Initial Pressure Drop</b>	194 Pa	
<b>Final Pressure Drop</b>	450 Pa	
<b>Max. Operating Temperature</b>	80 °C	
<b>Max. Relative Humidity</b>	100%	

\* Measurement refers to the widest part of the cone section

# Airtube/Aircone Pulse Power Pro



Suitable for dusty, humid environments



100% synthetic filter media



## AIRTUBE PULSE POWER PRO - FILTER MEDIA

Developed specifically for gas turbine applications, our 100% synthetic media has a surface treatment of nanofibers making it ideal for use in areas of high humidity. In fact, with this media, Airtube Pulse Power Pro is even suitable for locations with 100% relative humidity.

Strong to withstand the counter flow pulses of compressed air, the media undergoes a corrugation process that improves mechanical resistance and eases air flow without the need for additional separators.

Airtube Pulse Power Pro's media fulfils dust class M according to DIN EN 60335-2-69 annex AA and class F9 efficiency according to EN 779:2012.

Filter Type	Aircone Pulse Power Pro	Airtube Pulse Power Pro 660	Airtube Pulse Power Pro 900
<b>Article Number</b>	800488024424	800485024421	800485062856
<b>Height</b>	660 mm	660 mm	905 mm
<b>Outside Diameter</b>	445 mm* / 325 mm	324 mm	352 mm
<b>Filtration Area</b>	44 m <sup>2</sup> (cone and cylinder)		32 m <sup>2</sup>
<b>Filter Efficiency (ISO 16890)</b>	ePM1 80%		ePM1 80%
<b>Filter Efficiency (EN 779:2012)</b>	F9		F9
<b>Average Efficiency</b>	99.5%		99.9%
<b>Nominal Air Flow</b>	2500 m <sup>3</sup> /h		1728 m <sup>3</sup> /h
<b>Initial Pressure Drop</b>	136 Pa		182 Pa
<b>Final Pressure Drop</b>	450 Pa		450 Pa
<b>Max. Operating Temperature</b>	80 °C		80 °C
<b>Max. Relative Humidity</b>	100%		100%

\* Measurement refers to the widest part of the cone section



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