

# AIR FILTRATION

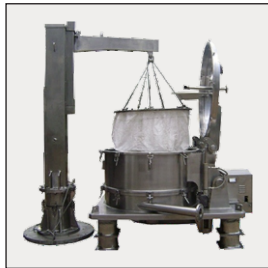


**RATTAN FILTERS & EXPORTERS PVT. LTD.**



**Resources unlimited renew  
create a cleaner world**

**PRODUCTS RANGE**



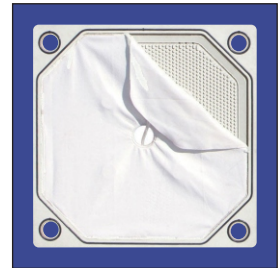
**CENTRIFUGE BAGS**



**FBD BAGS**



**HIGH TEMPERATURE  
DUST FILTER BAG**



**FILTER PRESS  
CLOTH PANNELS**



**LIQUID FILTER BAG**



**SPARKLER FILTER  
PADS AND PAPER**



**CARBON FILTER PAD**



**FILTER CLOTH**

# Needle Punched Air Media

## Polyester

With a strong, abrasion resistance, Polyester is the most versatile, cost effective, and widely used filter media for dust collection working up to 150° C, which is strong against acids, solvents and oxidizing agents, but it tends to hydrolyze which results in a loss of strength and toughness as the fiber breaks down and turns into powder. And according to the condition of collection fine or coarse fiber can be designed with a variety of the chemical and thermal treatments.

Generally applied for Wood, Lead, Nuisance dusts, Quarry, Fertilizers, Metal process, Grain handling, Cement, Tobacco, Ceramics, Vacuum cleaners, Flour, Plaster, Smelting, Polishing, etc.

## Polypropylene

In regard to temperature, polypropylene is the lowest rated filter media, but it shows one of the best chemical resistances and properties which match well with the various special industries. Continuous operating is 90° C under dry, non-aggressive condition. Due to the low density, it is 30% thicker than polyester, and with good chemical structure, it doesn't hydrolyze, but weak against any of oxidizing agents.

Generally applied for Food, Oil, Galvanizing, Chemicals, Liquids and Detergents.

## Aramid/Nomex

Suitable up to 200° C in dry condition, and be care when used in moisture condition at high temperature as it is prone to hydrolysis which chemically degrades the fibers by turning them into powder resulting in failure of the filter media.

Generally applied for Asphalt, Quarry, Lime, Foundry, Cement, Smelting, Gypsum, Chemicals.

## PPS

Normally operating up to 180° C with the excellent chemical resistance except for oxidizing agents such as NO<sub>2</sub> and Oxygen itself. This has very good acid resistance and wide application in Combustion process.

Generally applied for Power Generation, Cement, Combustion, Incineration, Dryer, Carbon black.

## Acrylic

Working up to 120° C, Acrylic fiber has a good chemical resistance as well as resistance to hydrolysis, and due to low strength, it sometimes mixed with polyester to make a compromised needle felts.

Generally applied for Power Generation, Cement, Lime-stone, Incineration, Smelting, Asphalt.

## P84

Known as P84, Polyamide can be operated up to 230° C, under dry condition with good chemical and thermal resistance although PTFE fiber exceeds these characteristics, and it is weak with NO<sub>2</sub> and hydrolysis in hot and wet conditions.

Generally applied for Power Generation, Cement, Straw burning, Medical Incineration, Lime, Gypsum, Waste incineration, Metallurgical.

## PTFE

PTFE is the one of the best fibers with outstanding chemical and thermal resistance, operating up to 250° C.

Generally applied for Power Generation, Chemical, Carbon black, Incineration, Combustion.



## Needle Punched Air Media

With the most advanced manufacturing technologies and equipment, RATTAN FILTERS® takes pride in manufacturing high quality needled and woven filter media, and filter bags to suit various operating conditions. Its manufacturing processes are totally vertically integrated to guarantee highest quality, from needling and heat setting, to finishes including singeing, calendering, special surface treatment, chemical treatment and bag fabrication.



FIBER	Temperature (Max.)	Against Hydrolysis	Against Acids	Against Alkalies	Against Oxidization
PTFE	250° (270° C)	Excellent	Excellent	Excellent	Excellent
Glass Fiber	260° (280° C)	Excellent	Good	Moderate	Excellent
Aramid/Nomex	200° (220° C)	Moderate	Moderate	Moderate	Moderate
PPS	160° (190° C)	Excellent	Excellent	Excellent	Moderate
Polyester	130° (150° C)	Fair	Moderate	Fair	Good
Polypropylene	90° (110° C)	Excellent	Excellent	Excellent	Fair
Acrylic	120° (135° C)	Good	Good	Moderate	Good
P84 / Polyimide	240° (260° C)	Good	Moderate	Moderate	Good

# Fiber Glass Air Media

## Main Features :

- 1 - Fiber glass filter cloth (filter bag) has good heat resistance, can be used under 260° C for long-term.
- 2 - Fiber glass filter cloth (filter bag) can easily peel dust off.
- 3 - Fiber glass filter cloth (filter bag) size stability is good, as long as within standard temperature it won't shrink.
- 4 - Fiber glass filter cloth (filter bag) does well in chemical etching, acid-proof and alkali resistance.
- 5 - Fiber glass filter cloth (filter bag) is high in efficiency, can achieve 99.5% or above.
- 6 - Fiber glass filter cloth (filter bag) texturized yarn filter cloth(bag), increase filtration velocity and the filtration efficiency, reduce dust removal equipment's volume.
- 7 - Fiber glass filter cloth (filter bag) is mainly used in cement industry: kiln end's exhaust, clinker and cooling device's exhaust, dust collection, raw material and drying kiln's exhaust, dust collection, raw mill, coal mill, dust collection, transport machine, bin, dust collection steel making industry, electric stove, open hearth furnace, blast furnace's exhaust dust collecting non-ferrous smelting, sintering furnace, baking furnace's exhaust dust collection, chemical industry, pesticide, fertilizer, thermal power generation.



## Main Specifications :

- 1 - Fiber glass filter cloth (filter bag)'s varieties: heat treatment (yellow), silicone oil (FQ yellow), graphite (PSI black), grey (white), PTFE dipping, PTFE membrane
- 2 - Fiber glass filter cloth (filter bag)'s thickness: 0.3 mm to 0.9 mm
- 3 - Fiber glass filter cloth (filter bag)'s width: 450 mm - 2500 mm
- 4 - Fiber glass filter cloth (filter bag)'s construction: twill, broken twill, plain weave, satin, 1/3 twill
- 5 - Fiber glass filter cloth (filter bag)'s material: high temperature, c glass, e glass, texturized

# Air Filter Bags

RATTAN FILTERS® provides air filter bags for many application. We guarantee complete traceability and high customization level. All products and production steps are checked according to quality test plan specifically defined with the customers.

## Top Head



Snap-ties with stainless spring steel



Steel, Cord or Rubber Ring



Sealing Felt of different thickness



Flange

## Bag Body

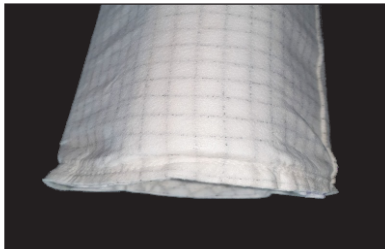


Longitudinal Thermo welded



Longitudinal triple seam

## Bottom



Single bottom



Bottom with reinforcement

## Product Application



## Application Areas

- ~ Asphalt Mixing Plant
- ~ Aluminium Production
- ~ Cement Production
- ~ Bio Mass Incineration
- ~ Food Industry
- ~ Chemicals & Pharmaceutical
- ~ Lime, Gypsum & Clay Industry
- ~ Metalworking
- ~ Non-Ferrous Metal Production
- ~ Power Plant
- ~ Steel Production
- ~ Wood-Processing
- ~ Waste Incineration
- ~ Mineral Products



## **RATTAN FILTERS & EXPORTERS PVT. LTD.**

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