D & K TEXTILES
FILTECH FABRICS PVT. LTD.

INTRODUCTION

We are leading manufacturer of technical textile filter products and accessories for industrial pollution control equipments and high-tech filter media for industrial applications like -

1. Dry Filtration (solid – Gas Separation) such as cylindrical, pocket envelope type bags, RABH type bags etc.
2. Wet Filtration (solid - Liquid Separation) such as butterfly filter cloth, centrifuge filter bags, Filter Paper, Filter press cloth etc.

We are glad to be first and only integrated manufacturer of all type filter media, having advance technology & state of the art fabric manufacturing, fabric processing and ePTFE membrane lamination facility & we produce international standard quality filter media.

Our process for choosing the right filter products for the particular application includes studying the filtration conditions such as filtering volume, particle size, temperature etc.

Our product quality, technical know-how and the express route to decision taking along with complete filter bag diagnostic solution and after sales maintenance service provided by us enhance overall filter bag house performance and efficiency, which guarantee our customers utmost satisfaction.

In order to achieve perfection we have always strived for technical advancement which drives us to move towards modernization by adopting innovative methods and makes us one of the very few filtration companies that is innovating filtration solutions for variety of industries.

Below is a list of FILTER MEDIA used to produce FILTER BAG for versatile possible APPLICATION as follows:

FILTER MEDIA

1. POLYPROPYLENE
2. POLYESTER NON WOVEN & WOVEN
3. HOMOPOLYMER ACRYLIC
4. MIXED FELT
5. PPS (POLYPHENYLENE SULPHIDE)
6. ARAMIDE
7. P-84 POLYIMIDE
8. 100% NON-WOVEN PTFE
9. WOVEN FIBER GLASS PTFE COATED (ALSO AVAILABLE WITH EPTFE MEMBRANE LAMINATION)
10. WOVEN FIBER GLASS SGT. (ALSO AVAILABLE WITH EPTFE MEMBRANE LAMINATION)
11. WOVEN FIBER GLASS ACID RESISTANCE (ALSO AVAILABLE WITH EPTFE MEMBRANE LAMINATION)
12. FMS NON-WOVEN FIBER GLASS

STITCHING THREAD

100% GLASS THREAD

Stitching of filter bag is of prime importance. A strong and appropriate thread will never cause the bag to break or tear during its operation. A broken bag will result in improper filtration and cause an unexpected shut down. A small factor could lead to huge problems for the plant manager. Filtech Fabrics (D & K Textiles) manufacturers the correct thread for fibre glass filter bags. Several strands of E-glass yarns are plied and twisted for extra strength and thereafter coated with PTFE under controlled conditions. The coating of PTFE will protect the thread from chemical damages when the bag is subjected to flue gases and also facilitate sewing operations.

100% PTFE THREAD

PTFE fibres are unique among all fibers, because of its exceptional properties. It is used where other threads give up in setback. PTFE thread is excellent in all type of conditions having some of the below key advantages

- ✓ Chemically Inert
- ✓ High temperature resistance up to 260 ^{0}C
- ✓ Low friction
- ✓ Minimize machine adjustment & reduce change out time

Our PTFE stitching threads are specially engineered for the various industrial & filtration stitching demands having superior strength, superior abrasion resistance.

We have a customized solution for critical applications where a lower emission is essential for which we have special welding facility for thermo-plastics qualities like polyester, PPS and Polypropylene.

FILTER MEDIA TREATMENT

TREATMENT	ADVANTAGE	APPLICABLE MEDIA
Signed	Enhanced Cake Release	All Except Nylon, PTFE, and Rayon
Heat Set Media	Stabilization of filter media	Stabilized the property of filter
Silicon	Enhances Cake Formation and Water Repellency	All
Flame Retardant	Retards Combustibility (Not Flame Proof)	All
Micro porous foam coating	Enhances Filtration Efficiency and Cake Release, help to capture very fine dust	Homopolymer Acrylic, Polyester, Polypropylene
PTFE Surface Coating	Enhances Filtration Efficiency oil & water repellency & easy dust released	Aramid, Acrylic, Homopolymer Acrylic, Polyester, and Polypropylene
Antistatic Property	Conducts Static Electricity	All

APPLICATION

- ASPHALT MIXING PLANTS
- CEMENT GYPSUM AND LIME INDUSTRY
- CHEMICAL & PHARMACEUTICAL INDUSTRY
- THERMAL/COAL FIRED POWER PLANTS
- SPENT WASH AND BIO-MASS
- METAL INDUSTRY, E.G. IRON, STEEL, COPPER, ALUMINIUM ZINK, FERRO ALLOYS
- TEXTILE & PAPER INDUSTRY
- CARBON BLACK
- HIGH TEMPERATURE DE DUSTING
- SOLID LIQUID SEPARATION

1 - ASPHALT MIXING PLANTS:

Filter media in asphalt mixing plants are exposed to extreme environmental conditions and aggressive corrosive gases. Temperature fluctuations and frequent start ups and shut down with different fuels as well as the resulting potential of sparks put additional strain on the filter media. Depend upon the operating conditions and dust composition. Filtech Fabrics offers technically optimal filter media solution for de dusting your asphalt mixing plant.

TYPICAL OPERATING CONDITIONS

Cont. Temp. (^{0}C)	100-200^{0}C
Peak Temp. (^{0}C)	Orientation to the maximum peak temperature of the fiber polymers used
Dust	Asphalt, Minerals
Dust Properties	Abrasive
Dust Source	Dryer, Mixer, Rotary Kiln
Harmful Gases	NOx & SOx
Cleaning Process	Pulse Jet
Fuels	Bio Gas, Fuel Oil, Heavy Oil, Liquid Gas, Natural Gas, Pulverized Lignite

SPECIFIC REQUIREMENTS FOR FILTER MEDIA IN ASPHALT MIXING PLANTS

- Robust Filter Media
- Continuous temperature resistance up to 200 ^{0}C
- Resistant to occasional high temperature upsurge

2. CEMENT, GYPSUM AND LIME INDUSTRY

Product quality and compliance with dust emission limits is a core requirement for de-dusting in cement, gypsum and lime industry. The choice of the filter media is paramount importance in cement kilns where there are high NOx level due to high combustion temperature. The filter media range offers for each process in the cement, gypsum and lime industry technically sophisticated solutions.

TYPICAL OPERATING CONDITIONS

Cont. Temperature (°C)	50-250 °C
Peak Temp. (°C)	Orientation to the maximum peak temperature of the fiber polymers used
Dust	Cement, Clinker, Coal, Gypsum, Lime, Raw Meal
Dust Properties	Agglomerating, Abrasive, Explosive
Dust Source	Chlorine Bypass, Clinker Cooler, Coal Grinding, Cement Mill, Rotary Kiln, Silo, Transfer Stations
Harmful Gases	H2O, NOx, SOx, HCl
Cleaning Process	Pulse Jet, Reverse Air
Fuels	Natural Gas, Coal, Oil, Secondary Fuels

SPECIFIC REQUIREMENTS FOR FILTER MEDIA IN THE CEMENT, GYPSUM AND LIME INDUSTRY

- High Abrasion Resistance
- Discharge of electrostatic charges
- High Chemical Resistance
- Filter Media with antistatic property for coal handling areas
- Suitable for moist heat conditions

3. CHEMICAL & PHARMACEUTICAL INDUSTRY

In the chemical and pharmaceutical industry, there are dusts which, due to their high value, are recycled into the production process. On recycling, it must be simultaneously ensured that the products are free of foreign substances and that the strict legal requirements in terms of product purity are maintained. All this demands filter media tailored perfectly to the individual requirements of the dust collector to meet the highest standards in filtration efficiency and product purity.

TYPICAL OPERATING CONDITIONS

Cont. Temperature (°C)	20-250°C
Peak Temp. (°C)	Orientation to maximum peak temperature of the fibre polymers used
Dust	Cosmetic, Fertilizers, Detergent, Pharmaceutical, Pigments
Dust Properties	Abrasive, Chemically Aggressive, Explosive, Fine, Coarse, Sticky
Dust Source	Dryers, Mills, Mixers
Harmful Gases	H2O, NOx, Volatile Chemical Substances
Cleaning Process	Pulse Jet
Fuels	Natural Gas, Coal, Oil, Secondary Fuels

SPECIFIC REQUIREMENTS FOR FILTER MEDIA IN THE CHEMICAL AND PHARMACEUTICAL INDUSTRY

- Discharge of Electrostatic Charges
- High Abrasion Resistance
- High Separation Efficiency
- Good Chemical Resistance (in hydrolysis and oxidation conditions)

4. THERMAL/COAL POWER PLANTS

Coal fired power stations generate a significant amount of fly ash, which must be safely removed from the flue gas by dust collectors. Therefore, the central task of filter media in coal fired power stations is an efficient dust removal and the neutralization of harmful gases. Filtech Fabrics offers you filter media solutions which are designed for these tasks and matched to the individual applications.

TYPICAL OPERATING CONDITIONS

Cont. Temperature (°C)	70-220 °C
Peak Temp. (°C)	Orientation to maximum peak temperature of the fiber polymers used
Dust	Fly Ash, Sorption Products
Dust Properties	Fine, Powdery, Sometimes Abrasive
Dust Source	Dry Sorption, Fluidized Bed Firing, Pulverized Coal Firing, Scrubber, Spray Reactor
Harmful Gases	H2O, NOx, SOX, HCl
Cleaning Process	Pulse Jet
Fuels	Coal, Lignite, Secondary Fuels

SPECIFIC REQUIREMENTS FOR FILTER MEDIA IN THE COAL-FIRED POWER PLANT

- High Abrasive Resistance
- High Separation Performance
- High Filtration Efficiency
- High Strength for Longer Durability
- Good Oxidation & Hydrolysis Resistance Property

5. SPENT WASH AND BIO MASS POWER STATION

Due to ever increasing shortage of fossil fuels, the production of energy from the combustion of bio mass is becoming more and more important, In addition to stalks and herbaceous bio mass (e.g. straw) wood is used as the main fuel in bio mass power station. Compared to fossil fuels such as coal, the composition of bio mass as a fuel may be to a great extent variable. Filtech Fabrics has specific high performance special design filter media for this application, which are precisely matched to the operating conditions of your dust collector system.

TYPICAL OPERATING CONDITIONS

Cont. Temperature (°C)	100-240°C
Peak Temp. (°C)	Orientation to maximum peak temperature of the fiber polymers used
Dust	Fly Ash, Sorption Product
Dust Properties	Fine, Agglomerating, Powdery
Dust Source	Cyclone, Different Sorption Processes, Grate and Fluidized Bed Firing
Harmful Gases	H2O, NOX, HF, SOX, HCl
Cleaning Process	Pulse Jet
Fuels	Bio Mass, Olive Stones, Rapessed, Rice Shells, Straw, Wood

SPECIFIC REQUIREMENTS FOR FILTER MEDIA IN SPENT WASH/BIO MASS POWER STATION

- High Separation Efficiency
- Good Chemical Resistance
- Resistance to High Process Humidity

6. METAL INDUSTRY

In the metal industry the reliable reduction of emission in a variety of manufacturing processes has become an indispensable process. High air to cloth ratio and different harmful gas composition (e.g. scrap recycling) can damage the filter media and affect the separation efficiency. Our filter media have excellent filteration properties and have been successfully used for dust removal in metallurgical production plants.

TYPICAL OPERATING CONDITIONS

Cont. Temperature (°C)	40-250°C
Peak Temp. (°C)	Orientation to the maximum peak temperature of the fiber polymers used
Dust	Coke and Coal Dust, Metal Oxides, Reaction Products, Sinter Dust
Dust Properties	Abrasive, Fine, Agglomerating, Electrostatically Charged, Pyrophoric
Dist Source	Converters, Cupolas, Cyclone, Drying, Dry Sorbent, Electric Arc Furnace, Foundry Mill, Silo, Sinter Strand, Transport Station, FES System, GCP Area
Harmful Gases	H2O, NOX, SOX, HCl
Cleaning Process	Pulse Jet, Reverse Air, Shaker Filter
Fuels	Coal, Coke, Pet Coke, Lignite, Natural Gas

SPECIFIC REQUIREMENTS FOR FILTER MEDIA IN NON FERROUS METAL AND STEEL PRODUCTION

- High abrasion resistance
- Resistance to occasional sparks and pyrophoric dusts
- Resistance to hydrolysis after quenching
- Separation of fine dust
- Suitable to handle very fine dust
- In the area of steel production, such as in the de-dusting of furnaces or the suctioning of arc furnaces, static charge can enter the dust collector. Depending on the dust collector design, filter media are treated with an additional antistatic property. Wherever there are abrasive dusts, such as steel dust or aluminum oxide, an additional Silicone-finish applied to the single fiber can protect fibers again moist heat condition & can reduce the mechanical stress on the filter media and thus significantly prolong the operational life.
- Filter media made of needle felt or fiberglass fabric are particularly suitable for fine dust filtration. Owing to a laminated ePTFE membrane, very fine dust particles are already separated on the surface. Filter media thereby allow compliance with minimal dust emission limit values.

7. TEXTILE & PAPER INDUSTRY

Textile and paper industry mainly having boiler, in which fuel is coal, wood- chips, briquettes & other secondary fuels etc. & boiler works on high temperature, hence produced fumes having dust with sox, nox & other content, which need to be filter prior to dilute in atmosphere, hence we offer filter media which is high temperature resistance & good for all type of gaseous conditions, also we can design filter media accordingly to the specific requirement.

TYPICAL OPERATING CONDITIONS

Cont. Temperature (°C)	50-260°C
Peak Temp. (°C)	Orientation to maximum peak temperature of the fiber polymers used
Dust	Coal-Fly Ash
Dust Properties	Abrasive, Fine, Chemically Aggressive, Explosive, Coarse, Sticky
Dust Source	Boiler
Harmful Gases	NOX, SOX, Volatile Chemical Substances
Cleaning Process	Pulse Jet
Fuels	**Coal and Secondary Fuels**

SPECIFIC REQUIREMENTS FOR FILTER MEDIA IN TEXTILE AND PAPER INDUSTRY

- High Abrasive Resistance
- High separation efficiency
- Good chemical resistance (in hydrolysis & oxidation conditions)

8. CARBON INDUSTRY

Carbon Industry, in which dust is very fine & also its a process of main product recovery and subject to strict emission standard, which need to be maintained to keep emission at very low level & efficient production output. Hence our ePTFE laminated filter media is perfect solution for the same and also we can design special filter media for any specific requirement of carbon and tyre industry.

TYPICAL OPERATING CONDITIONS

Cont. Temperature (°C)	50-260°C
Peak Temp. (°C)	Orientation to maximum peak temperature of the fiber polymers used
Dust	Carbon Black
Dust Properties	Fine, Free Flowing
Dust Source	Process, Tyre Manufacturing
Harmful Gases	NOX, SOX, Volatile Chemical Substances
Cleaning Process	Pulse Jet, RABH

SPECIFIC REQUIREMENTS FOR FILTER MEDIA IN CARBON BLACK INDUSTRY

- High separation efficiency
- High filtration efficiency
- Good chemical resistance (in acidic & oxidation conditions)

9. HIGH TEMPRATURE DE DUSTING

Textile filter media made of synthetic fibres and scrims reach their performance limits due to limited temperature resistance and therefore present a danger of flammability at temperatures above 280°C. Our filters guarantee the best filtration results even under demanding temperature conditions up to 650°C.

TYPICAL OPERATING CONDITIONS

Cont. Temperature (°C)	650°C
Peak Temp. (°C)	850-1000°C
Dust	Fly Ash, Pyrophoric Dusts, and Radioactive Polluted dust
Dust Properties	Fine, Flammable
Dust Source	Dryers, Blast Furnaces, Furnaces, Gas Firing Plants
Harmful Gases	NOx, Sox, CnHm, HCl, HF, H2O
Cleaning Process	Pulse Jet
Fuels	Bio Mass, Coal, Gas, Oil, Secondary Fuels, Waste

FILTERS ARE USED IN VARIOUS DEDUSTING PROCESSES:

- Incinerators, Coal or Waste
- Wood Gasification
- Glass Melting
- Separation of Pyrophoric Dusts
- Separation of Radio Active Material
- Separation of Calcium Carbide
- Applications in the Chemical Industry

10. SOLID LIQUID WET FILTRATION

In addition to its position in the dust control/pollution control industry Filtech Fabric also specialize in wet filtration in solid and liquid separation & we can provide following products

- Butterfly Filter Cloth
- Centrifuge Filter Bag
- Rotary Drum Filter
- Belt Filters
- Pressure Filters
- Filter press cloth
- Sparkler pad
- FBD Bag
- Polish Filter bag
- Hydraulic wax press bag

MEDIA SELECTION CHART

Media Selection Chart	Filter Media for Low Temperature				Filter Media for High Temperature				
Fibre's Generic	Polypropylene	Polyester	Acrylic Copolymer	Homopolymer Acrylic	Polyphenylene Sulfide	Aramid	P84	PTFE	Glass
Continuous operation temp. (dry heat) ^{0}C	90	140	110	125	180	200	200	250	260
Max. (short duration temp. (dry heat) ^{0}C	94	150	120	140	190	210	240	270	280
Supports combustion	Yes	Yes	No	Yes	No	No	No	No	No
Resistance to alkalis	Excellent	Fair	Fair	Fair	Excellent	Good	Excellent	Excellent	Fair
Resistance to mineral acids	Excellent	Fair	Good	V. Good	Excellent	Fair	V. Good	Excellent	V. Good
Resistance to organic acids	Excellent	Fair	Good	Excellent	Excellent	Good	V. Good	Excellent	V. Good
Resistance to oxidising agents	Good	Good	Good	Good	Good	Poor	V. Good	Excellent	Excellent
Resistance to organic solvents	Excellent	Good	V. Good	V. Good	Excellent	V. Good	Excellent	Excellent	V. Good

TYPICAL STYLES FIBER GLASS FABRICS FOR GASEOUS FILTRATION :

Style	Unit of Measure	STF Style GF 345	STF Style GF 450	STF Style GF 550	STF Style GF 750
Weave Pattern	.	1 x 3 Twill	1 x 3 Twill	Double Face Satin	Double Filling Face
Breaking Strength (Kg/50 mm)	Warp Weft	135 80	150 100	180 120	300 200
Mullen Burst	PSI	500	>500	>500	>700
Weight	g/m2	345	450	550	750
Operating Temperature	Deg. ^{0}C	260	260	260	260
Application	Reverse Air Cleaning			Pulse Jet Cleaning	

Finishes	Finish Purpose
SGT	This finish is mostly used in reverse air bag house. It is a light duty finish and helps to protect glass yarn from abrasion and also add lubricity.
PTFE	This is premium finish that provides outstanding lubrication for fiber movement. The PTFE finish provides a slick surface for dust release and protection against attack by water borne acids and chemicals.
Acid Resistant	This finish provides resistance to water borne acid and acid attack to extend life.
ePTFE Membrance	Laminating an expanded layer of polytetrafluoroethylene (PTFE) to woven fabrics, which makes it easier to clean fine dust from the fabric and reduce the required cleaning frequency, also helps to capture fine particulates.

BAG SUPPORTING CAGE

We manufacture and supply a wide range of bag supporting cage. Our cages are manufactured by high grade of raw material in order to increase the durability of the cage. We make cages in galvanized steel, mild steel and stainless steel.

We provide a wide range of cages as per customer design & requirements. Cage construction consists of 8-20 vertical wires or as per customer requirement. We can provide following type of cages

- Single Piece Type
- Split Type
- Round Type
- Flat Type
- Cage With Ventury
- Top Double Bend, Single Bend

We have strict in house quality checks before dispatched to our valuable clients. We have specialized team of experts who do quality checking under certain parameters that meets international standards. E.g. Welt strength, straightness & ovality, smooth finish all over cage.

We also provide other spares for Bag Filter Systems like

- Solenoid Valve
- Timer Card
- ID Fan & FD Fan
- Rotary Air Lock Valve

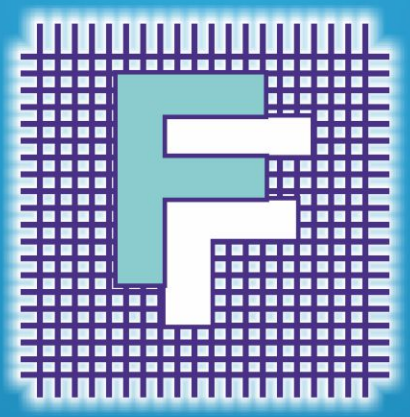
FILTER PAPER / PADS

We are specialized in manufacturing a wide range of filter paper and pads for coolant oil, transformer oil, edible oil, lubricant oil and fuel oil. Besides our specialization in filter pads and papers, we also offer an assortment of handmade papers, insulation papers and boards. Moreover, we also have the facilities for developing filter media as per our clients' requirement.

APPLICATION AREAS

Owing to the high quality standards of our range, we are catering to the requirements of numerous industries. Our high quality range of filter pads and papers finds extensive application in all those industries in which liquid filtration process is used. We cater to the following.

- Food and beverages industry
- Pharmaceutical industry
- Distilleries and beverages
- Hotel Industry for tea & coffee filter
- Air Freshener / fragrance industry
- Engineering industry for coolant oil filter
- Chemical industry for fine chemicals
- Laboratories
- Electroplating plants
- Paints, inks and coating manufacturing plants



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