

















# UniTecl

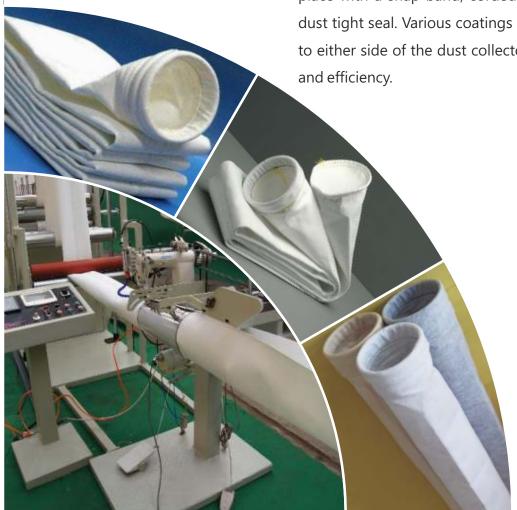
# COMPANY Introduction



We feel pleasure to introduce our selves as leading manufacturer, importers, Supplier and stockiest of Filter Bag's Cloth, Polyester Needle Felt, Anti Static Bags, Nomex, Fiberglass and other filtration related industrial products. We are in the field since 1998 supplying filtration and engineering items to many industries especially cement factories, chemical plants, gypsum plant & Other Industry. In the year of 2010 we established our Company in Kingdom of Saudi Arabia & Now we are in UAE.



We offer a complete line of replacement and custom designed Dust Collector Bags to fit all manufacture's Filter Bag Housings. Our Filter Bags are carefully fabricated and sized to ensure easy installation and change-out. These filter bags are designed to be mounted and gasket firmly into place with a snap band, corded cuff, or clamp to ensure a dust tight seal. Various coatings and finishes can be applied to either side of the dust collector bag to enhance cleaning and efficiency.



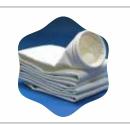
#### **OUR**

### **Products**





**Antistatic Polyester Needle Felt** 



**Polyester Membrane Needle Felt** 



**Acrylic Antihydrolysis Needle Felt** 



**Polyester Temperature Resisting Needle Felt** 



**Polyester Temp. Resisting** Membrane Needle Felt



**Compound Temperature Resisting Needle Felt** 



**Needle Felt** 



**Nomex** Needle Felt



**Dust Collector Filter Bags** 

We offer a complete line of replacement and custom designed Dust Collector Bags to fit all manufactures Filter Bag Housings. Our Filter Bags are carefully fabricated and sized to ensure easy installation and change-out. These filter bags are designed to be mounted and gasket firmly into place with a snap band, corded cuff, or clamp to ensure a dust tight seal. Various coatings and finishes can be applied to either side of the dust collector bag to enhance cleaning and efficiencies.









# Sewing thread

We supply kinds of sewing threads which suit for different material of the filter bag. They are Fiberglass sewing thread with PTFE coating, Basalt sewing thread with PTFE coating, PTFE sewing thread.



# **TEXTURE**

# Fiberglass Filter Cloth

It is a fabric made from textured glass yarn. Due to its bulky character, it has high covering capacity and good air permeability, thus providing higher filtration efficiency, lower filtration resistance and improved dustsepration, it's efficiency up to 99.5%. It is suitable for dust separator with high speed reverse air or pressure drop reverse air system. It is mainly used for cement and carbon black industries.



Technical Specification

| 770g/sqm                         |
|----------------------------------|
| 40 L/ d m2 /min@ 200Pa, 10+-2    |
| (warp 3200 N /5cm)               |
| (weft 2500 N /5cm)               |
| (N/5cm) MD(Warp) 2.0             |
| (N/5cm) CMD(Weft) 2.0            |
| 280c to 300c                     |
| Heat-Singed Cleanered            |
| Silicon and PTFE membrane coated |
|                                  |

| Item No. | Weight  |           | Weave        | Tread<br>count | Tensile strength<br>(N2.5cm) |       | Air Permeability |      | Finished | LOI |
|----------|---------|-----------|--------------|----------------|------------------------------|-------|------------------|------|----------|-----|
|          | (g/m²)  | (oz/yd²)  |              | (yarns/in)     | warp                         | weft  | cm3/cm2/s.       | CFM  |          | (%) |
| MA301    | 780-830 | 22-25     | Double twill | 48 x 40        | >2400                        | >2000 | 2-5              | 4-10 | PTFE     | >10 |
| MB302    | 450-500 | 13.3-14.7 | 1/3 twill    | 44 x 24        | >2000                        | >1200 | 3-6              | 6-12 | PGS      | >5  |
| MC302    | 450-500 | 13.3-14.7 | 1/3 twill    | 44 x 24        | >2000                        | >1200 | 3-6              | 6-12 | AR       | >7  |
| MA303    | 340-380 | 10-11.2   | 1/3 twill    | 54 x 30        | >1400                        | >800  | 4-8              | 8-16 | PTFE     | >10 |
| MC303    | 340-380 | 10-11.2   | 1/3 twill    | 54 x 30        | >1400                        | >800  | 4-8              | 8-16 | AR       | >7  |
| MA401    | 780-850 | 22-25.5   | Double twill | 48 x 40        | >2400                        | >2000 | 2-5              | 4-10 | PTFE     | >10 |
| MA404    | 920-970 | 27-28.5   | Double twill | 48 x 40        | >2600                        | >2600 | 2-5              | 4-10 | PTFE     | >10 |
| MA501    | 780-830 | 22-25     | Double twill | 48 x 40        | >2300                        | >2100 | 2-5              | 4-10 | PTFE     | >10 |
| MA503    | 780-830 | 22-25     | Double twill | 48 x 40        | >2400                        | >2100 | 2-5              | 4-10 | PTFE     | >10 |

### P84

# for Filter Bags











TABLE 1: Property of P84 Filter Cloth



# It has three remarkable features:

1.

Remarkable high temperature resistance

Working at temperature of 260° C. It has enough safe space to deal with The machine stop and accident etc.

2.

Favorable chemical resistance It is proved that P84 filter bag has the excellent filter resistance against the acid waste gas, alkali powder and dust in the past waste incineration more than 10 years. 3.

The efficiency of low back wash pressure and high elasticity mud cake release.

| Compositions                     | P84/P84 Scrim |      |      | P84/Glass Scrim |      |      |      |
|----------------------------------|---------------|------|------|-----------------|------|------|------|
| Weight (g / m2                   | 450           | 500  | 550  | 800             | 850  | 900  |      |
| Thickness (mm                    | 2.1           | 2.3  | 2.5  | 2.5             | 2.8  | 3.0  |      |
| Air Permeability (m2m2/min)      |               | 19   | 15   | 12              | 16   | 13   | 10   |
| Tensile strength<br>(N/5 x 20cm) | Warp          | 650  | 700  | 800             | 1800 | 1800 | 1800 |
|                                  | Weft          | 1150 | 1200 | 1300            | 1800 | 1800 | 1800 |



### **LEQUID**

#### **FILTER**



Unitech Filtration and Engineering FZ LLC is specialized in the reach and manufature of air inlet filter and environmental protection equipment. After intoducing the advanced technology and production equipment, with high-efficiency filter catridge productionline, integrated glue equipment, and advanced stamping, welding, metal processing equipments. Core material of filter is imported from United States, Japan, Koreaand Europe. Ensuring reliable and advanced quality.





### **HVAC**

# **FILTER**







- ► RM SYNTHETIC G2-M5
- RM GLASS G2-G4
- ► R-MATIC, ROLL FILTER
- ► METAL FILTER
- ► PANEL FILTER R-PANEL
- ► PANEL FILTER R-PLEAT
- ▶ PANEL FILTER R-PLEAT MP
- ▶ BAG FILTER COARSE AND MEDIUM FILTER RECO G4 & M5
- ► BAG FILTER MEDIUM FILTER RESAC M5 VZ
- ▶ BAG FILTER MICROGLASS RESAC M5-F9
- ► BAG FILTER SYNTHETIC RESAC M5-F8
- ▶ RESAC F7 ECO

- ▶ RESAC CARB / CITY FILTER GAS FILTER FOR COMFORT VENTILATION
- ▶ COMPACT FILTERS: RESEPAC ECO M6-F9
- ► COMPACT FILTERS: RESEPAC M6-F9
- ► HEPA FILTER: MICRO PAK SFV
- ► HEPA FILTER: MICRO SFV
- ▶ HEPA FILTER: MICRO S
- ► HEPA FILTER: MICRO SF
- ► HEPA/ULPA FILTER: MICRO SF-AL
- ► CHEMICAL AND CARBON FILTER PANEL
- ▶ REPLACEABLE CARBON CASSETTES
- ► CARBON FILTER A055
- ► COMPACT FILTER RESEPAC CARB
- ► COMPACT FILTERS: RESEPAC CARB F7

Air filters are imperative for removing dirt and other contaminants from breathing air in order to maintain indoor air quality while supplying clean air to heating and cooling coils for responsible for comfortable indoor air temperatures. These filters are generally constructed by the manufacturer for minimal material costs necessary to ensure an acceptable level of pressure drop across the filter bank. High pressure drops require increased energy usage by the end user in order to move the same volume of air through the heating, ventilation, and air conditioning (HVAC) system.

Single filters are available on an individual basis or can be combined in a multi-element structure array (MESA). The MESA is designed to improve air filtration efficiency by two orders of magnitude with minimal incremental capital cost, and individual filters can be easily inserted into fabricated grooves of the MESA unit. IntraMicron has a thorough understanding of MESA design and optimization allowing MESA structures to be customized for specific air filtration needs.



# CARTRIDGE FILTER



#### **Catridge Dust Collector**

MFS Self Clean Air Filter
Horizontal Catridge Dust Collector
Vertical Catridge Dust Collector
Portable Dust Collector
Pleated Bag Dust Collector

# Air Filter Catridge

Polyester Air Filter Catridge
Polyester+PTFE Air Filter Catridge
Polyester+Anti Static Air Filter Catridge
Oval Air Filter Catridge
Cellulose Air Filter Catridge
Gas Turbine Air Intake Filter Catridge

#### **Pleated Bag Filter**

Pleated Bag Filter
Polyurethane Top/Bottom Pleated Bags

#### Panel Air Filter

Primary Efficiency Plate Filter
Panel Filter with Clapboard
HEPA/ULPA Panel Air Filter
V Shape Panel Filter
Bag Panel Filter
Fiberglass Floor Filter
Spray Booth Ceiling Filter







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Polyurethane Top/Bottom Pleated Bags provide a unique design that can be easily retrofitted in existing dust collectors, it is Top Load Pleated Bag and Bottom Load Pleated Bag; Polyurethane Pleated Bags to cater demanding application of air pollution control segment. Moulded design of pleated bag is suitable for retrofit to various reputed name in similar segment. Spun bonded filter media offers surface filtration, due to which pleated bags offer very high throughput & lower pressure drop across the filter compared to any conventional tube type filter bags.

We are holding the faith "clean space, intention to create", to provide customers with high-quality products and after-sales service.

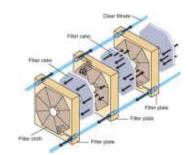


# **WOVEN FILTER CLOTH SERIALS**









- 1. Polyester woven filter cloth
- 2. Polypropylene woven filter cloth
- 3.Polyamide(Nylon) filter cloth
- 4. Cotton canvas/ cotton-polyester canvas

- 5. Fiber glass woven filter cloth
- 6. Polyester dewatering belt, net
- 7. Kavlar (aramid) fabrics
- 8. Scrim for needle felt supporting

The Unitech Filter Presses are ideal for batch filtration of liquids and slurries with high solids loading (3-30 wt%). If it can be pumped, it can be filtered in a filter press. Sometimes referred to as Plate and Frame Filters, filter presses generally work in a "batch" manner to filter or dewater slurries or sludges.



Individual, cloth-covered filter plates are pressed together with hydraulic rams forming a filter vessel with internal cavities. The feed pump sends the slurry into the filter press where the clean filtrate passes through the filter cloth leaving behind the solids in the form of a filter cake. The filter plates are separated at the end of the filtration cycle and the solid cake is discharged by gravity.

# Filter fabrics for filter press, filter press cloth

#### 1. what is filter press?

Filter press (sometimes called Plate-and-Frame Filter press) which describes the style of filters developed from the 19th century onwards originally for clay. The majority of today's filters are more correctly called "chamber filter press", "Membrane filter press", or "Membrane Plate Filter". Many processes in the food, chemical or pharmaceutical industries make products from liquid-solid suspensions or slurries. These mixtures are like a runny mud or milk shake. The solids in them do not dissolve in the liquid, but are carried along in it. Filter presses separate the solids from the liquids so that the useful part can be processed, packaged or delivered to the next step.

the components of filter pressFilter presses generally work in a "batch" manner. The plates are clamped together, then a pump starts feeding the slurry into the filter press to complete a filtering cycle and produce a batch of solid filtered material, called the filter cake. The stack of plates is opened, solid is removed, and the stack of plates is re-clamped and the filtering cycle is repeated.

A filter press uses increased pump pressure to maximize the rate of filtration and produce a final filter cake with a water content under 65%. This is more efficient than regular filtration because of the increased filtration pressure applied by the pump that can reach anywhere between 50-200 PSI. filtration process is often controlled by electronics to make it automatic or semi-automatic.



A filter press consists of a series of filter chambers formed between square, rectangular filter press workingor round filter plates supported on a metal frame. Once the filter chambers are clamped, the filter press is loaded with slurry. The plates on the filter press are clamped together with hydraulic rams that generate pressures typically in the region of 3000 pounds per square inch.

In addition to the filter plate filtration medium, the growing filter cake enhances removal of fine particles in the slurry. The solution coming through the filter press water bibs, called the filtrate, will be pure.

The filtrate can be drained away for safe disposal, or it can be kept in a water tank for recycled use. At the end of filtration, the solid filter cake can be removed. The whole

### 2. What We Provide? The Filter Fabric / Cloth For Filter Presses



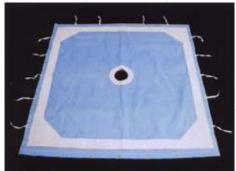
Ready Made Filter Fabrics



Filter Cloth For "quick-open" Chamber Filter Press



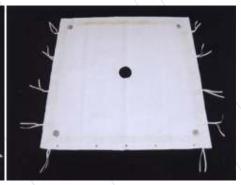
Ruber Barrel Filter Press Fabric



Welted Filter Press Cloth



Chamber Filter Press Fabric



Filter Press Cloth With Glued Edge



PP Mono-multi Filament Filter Cloth Monofilament Filter Press Cloth





Up Feed Filter Press Cloth

# AIR SLIDE

# **Fabric**



Air slide fabric is used in various industries for pneumatic conveying, discharge, homogenizing and fluidising of powdered or granular materials. It is used for pneumatic conveyor, hangers, silos of every type, vehicle trucks and ail-wagons and ships.

Thickness: 4mm, 6mm, 8mm

Standard Length: up to 500m (1,650')

Application: Industry, Agriculture, Fluidising and aeration of bulk powder material structure: high density polyester yarn, circular woven in plain weave, oneside polyurethance-coating, for maximum air permeability on the uncoated side, specially designed for good air transport.

Temperature range: 60 to 240°C.

The main industries served include the Cement Industry (raw cement powder and clinker dust.) Aluminum, chalk and gypsum industries, in powder plants (fly ash discharge), carbon dust, pharmaceutical, flour products, paper for carboard industries and chemical industries, etc.

#### TECHNICAL DATASTYLE: 5DM2

| Materia   | Warp: Polyester 100H (Multifilament) 11000 Deniers<br>Weft: Polyester 100H (Spun yam) Ne 9 W / 1 |
|---|--|
| Construction  | Two-ply woven Warp 208 yarn/cm Weft 115 yarn/cm  |
| Thickness   | 5.0±6.3 mm   |
| Width   | 100±1 mm(min.) / 1100±1 mm(max.)   |
| Weight  | 3600±300 g/m <sup>2</sup>  |
| Pressure loss at 400 m³/h/m²                          | 800±120 mm wc<br>(or at 2.5 m <sup>3</sup> /m <sup>2</sup> /min 300±50 mm wc)                    |
| Tensile strength                                      | Warp: 6200 N/cm (±10%)<br>Weft: 4200 N/cm (±10%)<br>SO 13935/1-99                                |
| Elongation at break                                   | Warp: 108% (±15%)<br>Weft: 27% (±15%)  |
| Continuous temperature rating                         | 150 °C   |
| Maximum temperature rating (peak)                     | 200 °C   |
| STYLE 50M4-***  | 350±60 mm we   |
| Pressure loss at 400 m <sup>3</sup> /h/m <sup>2</sup> | (or at 2.5 m <sup>3</sup> /m <sup>2</sup> /min 300±50 mm wc)                                     |

#### TECHNICAL DATASTYLE: 6DM2

| Materia   | Warp: Polyester 100% (Multifilament) 11000 Deniers<br>Weft: Polyester 100% (Spun yam) Ne 9 W / 1 |  |  |  |
|---|--|--|--|--|
| Construction  | Two-ply woven<br>Warp 208 yarn/om<br>Weft 115 yarn/om  |  |  |  |
| Thickness   | 6.0±0.3 mm   |  |  |  |
| Width   | 100±1 mm(min.) / 800±1 mm(max.)  |  |  |  |
| Weight  | 4900±300 g/m <sup>2</sup>  |  |  |  |
| Pressure loss at 400 m <sup>3</sup> /h/m <sup>2</sup> | 800±120 mm wc<br>(or at 2.5 m <sup>2</sup> /m <sup>2</sup> /min 300±50 mm wc)                    |  |  |  |
| Tensile strength                                      | Warp: 7400 N/cm (±10%)<br>Weft: 5000 N/cm (±10%)<br>ISO 13935/1-99                               |  |  |  |
| Elongation at break                                   | Warp: 115% (±15%)<br>Weft: 30% (±15%)  |  |  |  |
| Continuous temperature rating                         | 150 °C   |  |  |  |
| Maximum temperature rating (peak)                     | 200 °C   |  |  |  |
| STYLE 50M4-+++  | 350±60 mm we   |  |  |  |
| Pressure loss at 400 m <sup>3</sup> /h/m <sup>2</sup> | (or at 2.5 m <sup>3</sup> /m <sup>2</sup> /min 300±50 mm wc)                                     |  |  |  |









UniTech Engineering manufactures Filter Cage which is marked by the premium quality and excellent performance.

Filter Bag Cages are used for supporting a filter bag on a cell plate in bag house.

Our filter cages are carefully constructed to each individual's specific requirement.

We provide a wide range of configuration to fulfill your needs in the best way. Cage constructions consist of 8, 10, 12, or 20 vertical wires.

Customized ring spacing standard is 6" or 8" Cage diameters range from 4" to 8" (100mm to 200mm). Wire thickness ranges are 2.00mm to 5.00mm Dia.

We offer two-piece cage for application in low headroom situation, where access is a problem.

This style is made for easier installation. We have different type of cage top such as low groove, straight flange, flange top with build in venture.

Consequently, we stand among the famous Wire Filter Cage Manufactures based in UAE from past 5 Years. We are considered among the most reliable Filter Cage Suppliers in UAE.







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