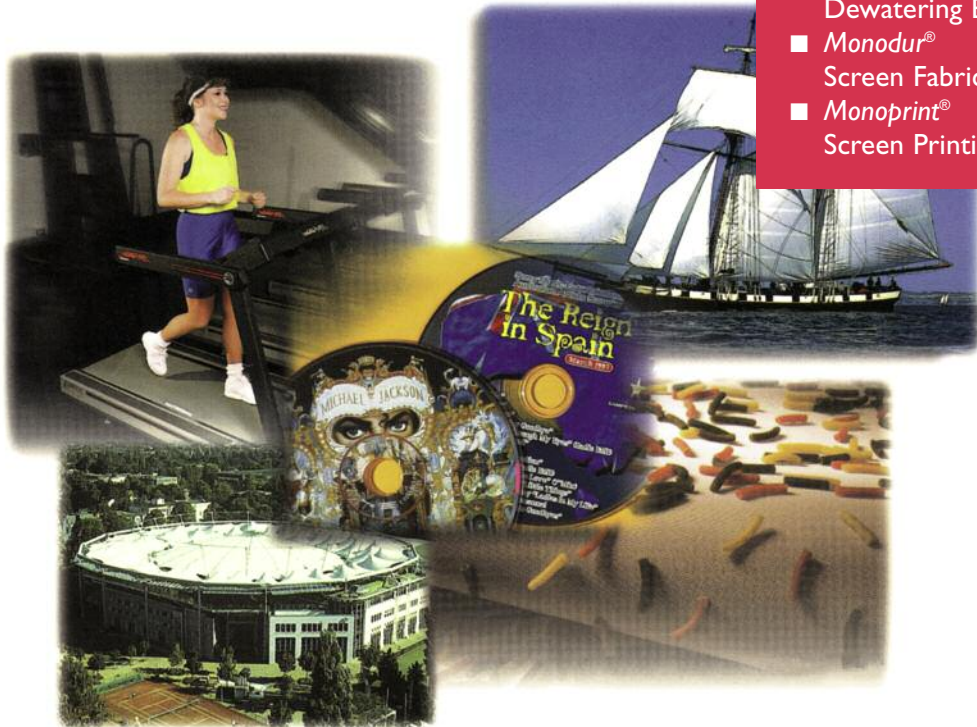


Weaving excellence into a world of products

IFC – specialists in industrial textiles for more than 40 years.

With research and production facilities on two continents, we literally span the globe to provide fabrics that meet your needs—from optimum production conditions to assuring the highest standard of manufacturing excellence.

“Weaving excellence into a world of products” is more than our slogan, it’s our commitment.



Ammeraal Beltech

Process and Conveyor Belts/ Power Transmission Belts
www.ammeraal.com

Verseidag Indutex

Coated Fabrics/Composite Materials
www.vsindutex.de

Dimension Polyant

Sailcloth
www.dimension-polyant.com

Verseidag Techfab

Screen and Filter Technology
www.techfab.de

Product Lines:

- **Filtratex™**
Filtration Fabrics
- **Durotex™**
Dewatering Belts
- **Monodur®**
Screen Fabrics
- **Monoprint®**
Screen Printing Fabrics



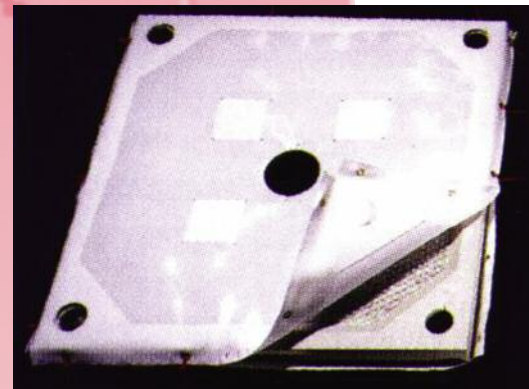
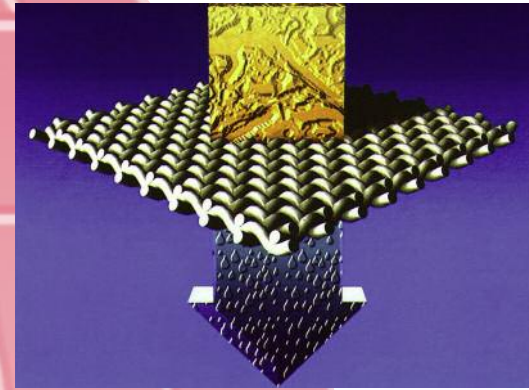
INDUSTRIAL FABRICS CORPORATION

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763-535-3220 • 800-328-3036 • Fax: 763-535-6040
www.ifcfabrics.com • sales@ifcfabrics.com

ver 1.1

Filtratex™

Filtration Fabrics



Delivering

- **Value**
- **Precision**
- **Expertise**



INDUSTRIAL FABRICS CORPORATION
Weaving Excellence Into A World Of Products



Weaving Excellence Into a World of Products

For more than four decades Industrial Fabrics Corporation (IFC) has been a leader in manufacturing precision woven screen and filter fabrics.

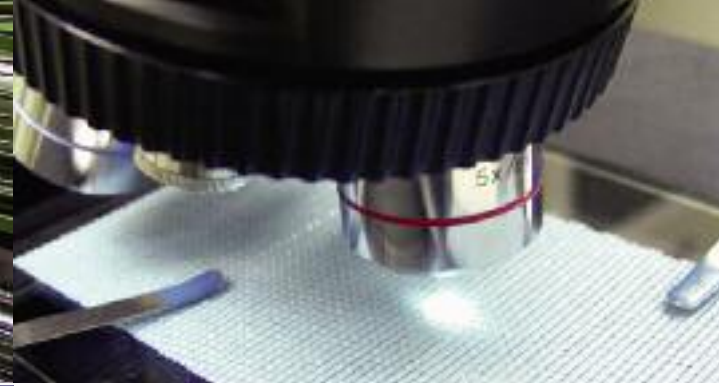
With research and production facilities on two continents, we literally span the globe to provide fabrics that meet your needs. We offer many advantages to ensure your satisfaction from optimum production conditions to assuring the highest standard of manufacturing excellence.

Whether you are a supplier or a customer, IFC believes in partnering with you to produce innovative solutions and products for today and tomorrow.

"Weaving excellence into a world of products" is more than our slogan, it's our commitment.

IFC Advantage

- Proven Partner to Industry
- Fast and flexible production sizes
- Modern Technologies with domestic production
- Onsite Lab for Quality Assurance and Research and Development
- Application Samples for testing
- Technical Staff Providing Product Recommendations
- ISO 9001:2000 registered



IFC's Filter Fabrics A step above the rest

IFC Filtratex™ filtration fabrics meet the great variety of requirements in wet filtration and dust collection. IFC offers a standard line of fabrics, but also is involved in the designing and subsequent manufacturing of fabrics for specialized applications.

Each filtration process is different and IFC fabrics are designed to meet customer requirements relative to flow rate, clarity of filtrate, moisture of filter cake, cake release, non-blinding characteristics and other important criteria. The ability of a filter fabric to help meet these needs, and to resist chemical and physical attack, depends on the fabric's fiber content, yarn construction, thread count, type of weave and finish.

Fiber Content

A synthetic fiber is manufactured by forcing a viscous fluid of definite chemical composition through a spinneret, a process called extrusion. It is necessary to select the fiber that will offer the most resistance to breakdown normally caused by chemical, temperature, and mechanical conditions of the filter process.

To meet your filtering requirements we offer woven filter fabrics with a variety of synthetic fibers.

Delivering what you need, when you need it

Our mission is to be the "first choice" supplier. Why? We've specialized in woven filter media for more than 40 years and have developed dry and liquid/solid separation solutions for many industries. Plus, IFC produces a wide range of filtration fabrics, from 3 oz/yd² to 40 oz/yd² in a variety of fiber types, widths and constructions. Our professionals will ensure you have the right filtration fabric for your equipment.

Vacuum Systems

- Candle Filters
- Centrifuges
- Disc Filters
- Pan Filters
- Rotary Drum Filters
- Vacuum Belt Filters

Pressure Systems

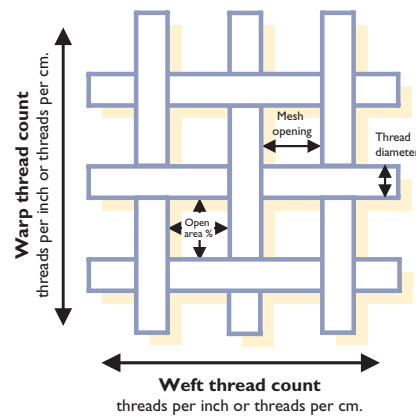
- Cartridge Filters
- Dust Collection
- Filter Belt Presses
- Filter Presses
- Gravity Dewatering
- Leaf Filters
- Nutsche Filter
- Strainers
- Tilting Pan Filter

All of our industrial-grade Filtratex™ filtration fabrics are manufactured in the United States and Europe using advanced loom and finishing equipment to guarantee consistent and superior quality. This also ensures that fabrics are woven to your exact precision standards every time.

Whether you choose from one of our many proven filtration fabrics or have us custom design a fabric to meet your specific filtration requirements, IFC experienced fabric experts will deliver what you need, when you need it.

Fiber Type	Chemical Resistance of Technical Fibers at 20° C														Chemical Resistance of Technical Fibers at 50° C															
	Acids	Acetic acid conc.	Sulfuric acid 20%	Nitric acid 10%	Hydrochloric 25%	Alkalis	Sat. Sodium carbonate	Chlorine conc.	Causic soda 25%	Ammonia conc.	Potassium permang. 50%	Formaldehyde conc.	Chlorinated hydrocarbons	Phenol	Ketones, Acetone	Acids	Acetic acid conc.	Sulfuric acid 20%	Nitric acid 10%	Hydrochloric 25%	Alkalis	Sat. Sodium carbonate	Chlorine conc.	Causic soda 25%	Ammonia conc.	Potassium permang. 50%	Formaldehyde conc.	Chlorinated hydrocarbons	Phenol	Ketones, Acetone
Cotton	-	O	-	-	-	+	+	O	+	+	+	+	+	+	+	-	O	-	-	-	+	+	O	+	+	+	+	+	+	+
Wool	O	+	O	-	O	-	-	-	-	-	O	+	+	+	+	+	O	+	O	-	-	-	-	O	+	+	+	+	+	+
Glass	-	+	-	-	-	-	-	-	O	+	+	+	+	+	+	+	O	O	+	+	+	+	O	O	+	+	+	+	+	+
Polyamide 6, 6.6	-	-	-	-	-	O	+	-	O	+	-	+	+	+	+	+	-	+	+	+	+	+	+	-	+	+	+	+	+	+
Polyamide 6.10	-	-	-	-	-	O	+	-	O	+	-	+	+	+	+	+	-	+	+	+	+	+	+	-	+	+	+	+	+	+
Polyamide 11	O	+	O	-	-	+	+	O	+	+	O	+	+	+	+	-	+	+	+	+	+	+	O	+	+	+	+	+	+	+
Nomex*	-	-	-	-	-	O	O	-	O	+	-	O	+	+	+	+	O	+	+	+	+	+	-	+	+	+	+	+	+	+
Kevlar*	-	-	-	-	-	O	+	-	O	-	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+
Polyester (PET)	O	+	+	+	+	O	+	+	-	-	+	+	+	+	+	+	O	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyester PBT	O	+	+	+	+	O	+	+	O	O	+	+	+	+	+	+	O	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyethylene	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Polypropylene	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyvinylidene fluoride (PVDF)	+	+	+	O	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyacrylonitrile	O	O	O	O	+	O	O	-	+	-	+	+	+	+	+	+	O	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyvinylchloride (PVC)	+	+	O	+	O	O	+	O	O	O	O	O	-	-	O	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyvinylidenechloride (PVDC)	+	+	+	+	+	O	+	+	O	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Polytetrafluorethylene	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyether-ether-ketone (PEEK)	O	+	O	O	O	+	+	O	+	+	+	+	+	+	+	+	O	+	+	+	+	+	+	+	+	+	+	+	+	+
Ethylene-Tetrafluorethylene (ETFE)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

+ = Resistant O = Relatively Resistant - = Unresistant



Thread Count:

Thread Count of a fabric is the number of threads per inch or centimeter. Thread count is represented by indicating the number of threads in the warp and weft direction. Warp threads run lengthwise in a fabric and are parallel to the selvage edge. Weft or filling threads run across the width of a fabric at right angles to the warp.

Fabric Finishes:

A finish is a process that follows the construction of a fabric. Depending on the application of the filter fabric, a separate finish may or may not be needed. A fabric unfinished is classified as being greige. Some of the various finishing processes that may be used are:

Scouring: The process of removing foreign matter such as lubricants or oil accumulated on the yarn prior to or during the weaving process.

Heat Setting: A process to stabilize the yarns within the fabric to assure the uniformity of the fabric and to eliminate shrinkage when subjected to elevated temperatures in a process application.

Calendering: The process of pressing the fabric between rollers to increase its smoothness and to reduce air permeability.

Slitting: A precision process of converting wide rolls of fabric to smaller widths within a very tight tolerance.

Special Finishes: Other finishes are available upon request.

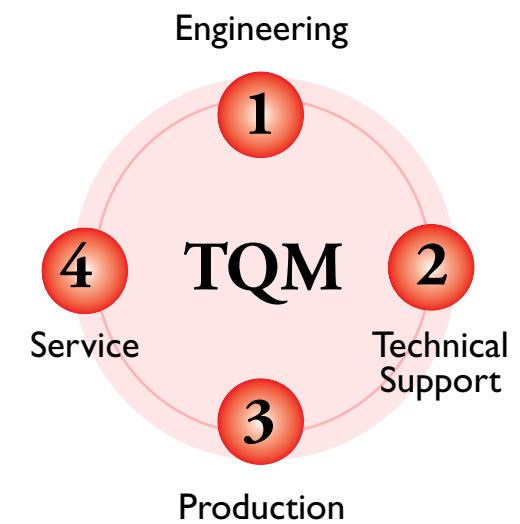


Meeting the most stringent precision standards

The filtration industry is ever changing. To respond to industry needs driven by technology advancements, increasingly stringent government regulations, and the relentless search for improvements in the filtration process, IFC is committed to Total Quality Management (TQM). Our success is built on a 4-part approach.

- 1. Engineering**
Design, production, and application engineers create products in cooperation with yarn suppliers and fabric designers to continually seek improved filtration characteristics to provide greater durability and performance.
- 2. Technical Support**
Only experienced staff help select or develop the best solution for your filtration requirements.
- 3. Production**
IFC is ISO 9001:2000 certified. Strict quality control measures are in place throughout our manufacturing process to ensure fabrics consistently meet required specifications. Each roll of fabric is carefully inspected prior to shipping.
- 4. Service**
Our extensive material inventory ensures the shortest delivery time possible. A Technical Service hotline provides immediate customer support.

Customer satisfaction through:



Consistent maximum filtration performance through TQM control

Fiber Type	Codes	Density	Moisture absorption		Tensile strength			Elongation at break		Temperature resist (dry heat)	
	DIN 60 001	g/cm ³	65% R.H. 20°C %	Water retention capacity %	cN/dtex	N/mm ²	wet in % of dry	%	wet in % of dry	Max. temp. in C°	Short time exposure in C°
Cotton	CO	1.5	7 – 11	45 – 50	2.5 – 5	35 – 70	100 – 110	6 – 10	100 – 110	100	200
Wool	WO	1.3	15 – 17	40 – 45	1 – 2	15 – 25	70 – 90	25 – 60	110 – 130	80	110
Glass	GF	2.4 – 2.6	0	0 – 0.5	7 – 12	175 – 300	100	2 – 5	100	220	400
Polyamide 6, 6.6	PA	1.14	3.5 – 4.5	10 – 15	4 – 9	70 – 100	80 – 90	15 – 25	105 – 125	100	170/180
Polyamide 6.10	PA	1.07	2	3 – 4	4	45	100	20 – 30	100 – 110	100	170
Polyamide 11	PA	1.04	1.2	3	4	40	95	25	100 – 105	90	140
Nomex*	–	1.38	5	12 – 17	5.3	75	60 – 80	20 – 25	60 – 80	180	250
Kevlar*	–	1.44	7	15 – 20	18 – 25	250 – 350	100	2 – 4	100	180	250
Polyester (PET)	PES	1.38	0.4	3 – 5	7 – 9.5	95 – 130	95 – 100	10 – 20	100 – 105	150	180
Polyester PBT	PES	1.28	0.2	1.1	4	50 – 60	95 – 100	24	100 – 105	140	180
Polyethylene	PE	0.95	0	0	3.5 – 7	32 – 65	100	15 – 30	100	60	90
Polypropylene	PP	0.92	0	0 – 0.5	2.5 – 6	22 – 55	100	15 – 30	100	80	100
Polyvinylidene fluoride (PVDF)	–	1.78	0	0	2 – 5	35 – 80	100	30	100	110	150
Polyacrylonitrile	PAN	1.15	1 – 1.5	5 – 12	3.5 – 4.5	40 – 50	80 – 95	25 – 40	100 – 120	80	100
Polyvinylchloride (PVC)	CLF	1.38	0 – 0.2	4 – 6	1.5 – 3	20 – 40	100	14 – 60	100	60	70
Polyvinylidenechloride (PVDC)	CLF	1.72	0	4 – 6	1.6 – 2.1	25 – 35	100	16 – 21	100	70	80
Polytetrafluorethylene	PTFE	2.3	0	0	1.4	20 – 30	100	15 – 32	100	220	280
Polyether-ether-ketone (PEEK)	–	1.3	0 – 1	0	4	80 – 100	100	30 – 40	100	200	240
Ethylene-Tetrafluorethylene (ETFE)	–	1.76	0	0	2.0 – 2.5	30 – 50	100	30 – 40	100	155	180

*Trademark

The information is given according to our current level of knowledge and is without liability.

Key Industries served

- | | | |
|------------|--------------------------|-------------------|
| Automotive | Environmental Protection | Metallurgy/Mining |
| Chemical | Food Processing | Pharmaceutical |
| Energy | Medical Engineering | Pulp and Paper |

IFC produces filter fabrics for mining applications on tilting pan filters. One example of the many applications is the production of phosphoric acid. IFC fabrics are used on pan filters that provide optimal performance and superior filtration efficiency.



Pan Filter



Filter fabrics have been developed over time in close cooperation with equipment manufacturers and end users for a variety of applications on filter presses. Some of these applications include dystuffs, titanium dioxide, galvanic products, fruit juice, beer, wine, palmoil, municipal and industrial waste water treatment. IFC fabrics offer superior cake release through special surface treatments.

Filter Press

A main application of Filtratex™ fabrics is the product extractions in the chemical, metallurgy and coal mining industries. Filter fabrics (belts) are used for extraction of phosphoric acid and fertilizers, for filtration of aluminum hydroxide, for coal washing, as well as for specific filtration in flue gas desulphurization.



Belt Filter



IFC fabrics are known for superior tracking properties, i.e. perfect straight running through special weaving technology.

Drum Filter

Filtratex™ filter fabrics for disc and drum filters are made in different weave constructions and permeabilities. This selection enables the adjustment to any specific application providing the results customers need in today's competitive environment. IFC fabrics offer excellent mechanical stability and service life.



Disc Filter

Matching performance with customer expectation

Media performance is a function of yarn properties, fabric construction, and fabric finishes. IFC's extensive knowledge and experience of how these variables interact allows us to determine the most effective filter media solution to meet your requirements related to flow rate, filtrate clarity, product dryness, cake release, and resistance to media blinding.

Fabric Construction: The construction of a filter fabric is determined by the yarn type, yarn size, thread count and weave pattern.

Yarn Type: IFC's yarns are constructed by one of several methods.



Monofilament Yarns are a single continuous filament with relatively smooth surface, and may be varying in size depending upon the size of the spinneret hole. The different sizes are specified as a measurement of the diameter in mils or microns. We use monofilament yarns which range in size from 2 mil to 20 mil.



Multifilament Yarns are those made from more than one filament, by extruding many filaments simultaneously. The different sizes are specified by a measurement of the weight known as denier. These yarns are generally used for filter fabrics which require a smooth surface and relatively tight weave. We utilize yarns from 40 denier to 10,000 denier.



Spun Yarns are made from filaments that have been cut into short lengths, then twisted together to form the yarn. Filter Fabrics made of spun yarns have a hairy, dense surface suitable for dust filtration or wet filtration of very fine particles. We can weave plied spun yarns from 40 denier to 10,000 denier.



Specialty Yarns include textured, slit film and cable yarns.

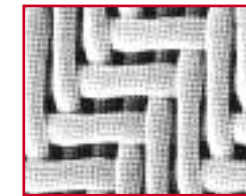
Weave Pattern:



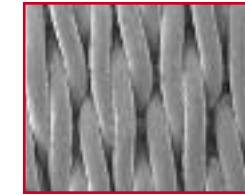
Plain Weave is the most basic weave, with a weft thread alternately going over one warp thread and then under one warp thread.

Basket Weave is a modified plain weave with two or more yarns acting as one in both the warp and weft direction.

Oxford Weave is also a modified plain weave, where two warp yarns weave identically in a plain weave pattern.



Twill Weave produces a diagonal or "twill" line across the fabric face. These diagonals are caused by moving the yarn intersection one weft thread higher on successive warp yarns. A twill weave is designated as 2/1, 2/2, 3/1 depending upon how many weft threads the warp threads go over and under.



Satin Weave has a smooth surface caused by carrying the warp yarn on the fabric surface over many weft yarns. Intersections between warp and weft are kept to a minimum, just sufficient enough to produce a stable fabric and still give a smooth fabric surface.



Specialty Weaves include many possibilities, an example is the double layer fabric integrating a support layer with filter layer.

Fiber Types:

- Cotton
- Polyamide 6, 6.6
- Polyamide 6.10
- Polyamide 11
- Polyamide 12
- Nomex*
- Kevlar*
- Polyester (PET)
- Polyester PBT
- Polyethylene
- Polypropylene
- Polyvinylidene fluoride (PVDF)
- Polyacrylonitrile
- Polyvinylchloride (PVC)
- Polyvinylidenechloride (PVDC)
- Polytetrafluorethylene
- Polyether-ether-ketone (PEEK)
- Ethylene-Tetrafluorethylene (ETFE)