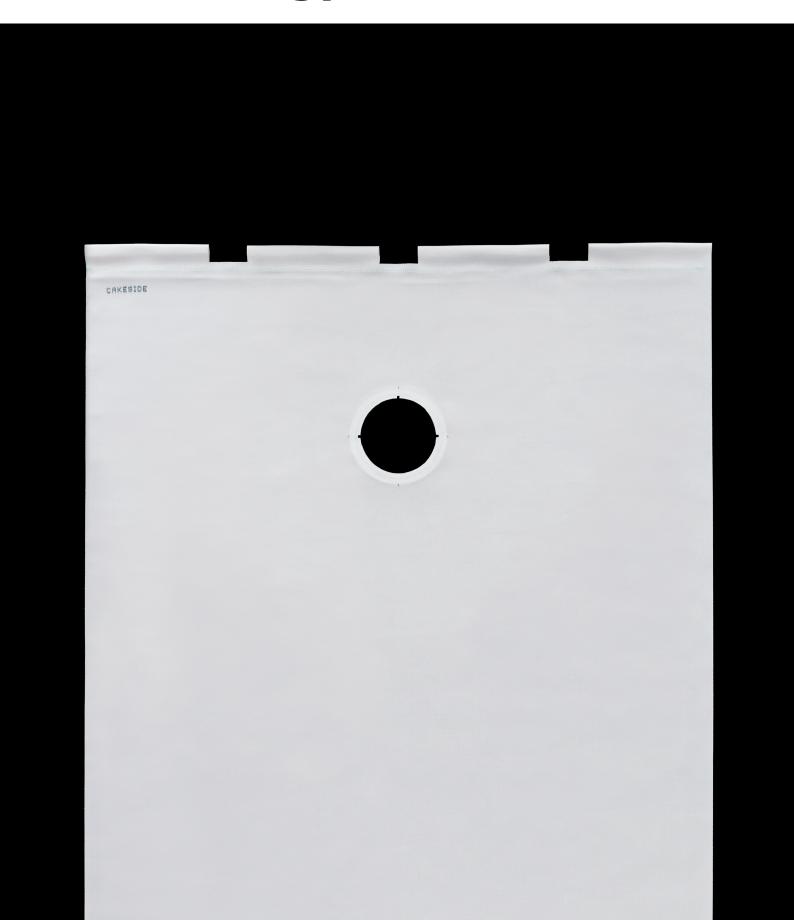


Textile Filter Technology



Welcome!

The Markert Group was established in 1929 and has been thriving over the years in the filtration industry specializing in manufacturing and selling filter cloths for industrial process filtration and hoses for industrial application.

Having a target of a vigorous mission: to make its customers' filtration process as efficient as possible, Markert successfully create a close network with leading OEMs and end customers.

Today, Markert is the market leader in Germany and Europe, having the most sophisticated filtration market in the world with two brands, marsyntex, known for top-notch textile filters and marsoflex, for the industrial hoses which are all specially made in Central Europe.

Markert's strong brand reputation are based on three leading principles:

- 1. Integrity
- 2. Optimization
- 3. Innovation

Both brands led Markert to giving the best applicationspecific advice, have an excellent quality in all the industrial areas, alongside maximum efficiency, and effectiveness.

Specially made in Germany, the production takes place in two ultra-modern plants that complies with the requirements of ISO 9001:2000/14001:2005. The production is led by the owners and a qualified team of engineers that guarantee the finest-quality products and customer-supplier relationship.

The marsyntex product ranges, which will be shown in the following pages, guaranteeing the optimum filtration at a low process cost.











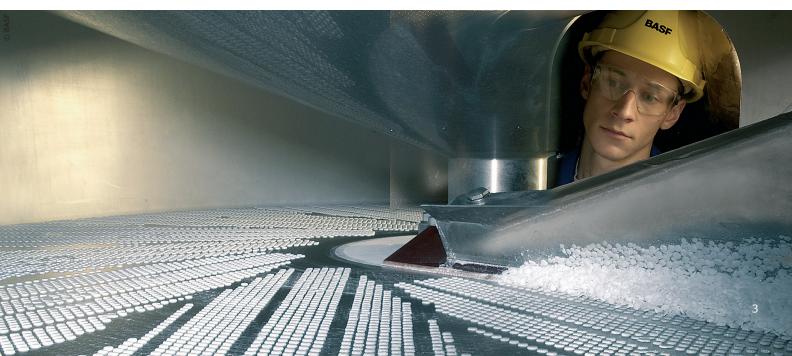
Chemicals & Pharmaceuticals

The chemical and pharmaceutical industry makes maximum demands on **@marsyntex*** filter media, whereby specific process and machine conditions determine the product design of the filters.

marsyntex filters meet the requirements for a best possible service life, selectivity, a precise fit and excellent cake-release performance.

Typical areas of application include the manufacture of silicates and pigments as well as the production of medicines and cosmetics. **@marsyntex**® filters are used here, among other things, as cloths for chamber and membrane filter presses, centrifuge inserts and belt or drum filters.

Whether on site or on the phone, Markert's sales engineers have the right, process-specific know-how for selecting the optimum filter. High fabrication quality combined with a wide range of fabric designs with different chemical, thermal and mechanical properties speak for themselves.



⊘marsyntex[®]

Mining

Here, too, basic process and machine-specific conditions determine the design of the textile filters.

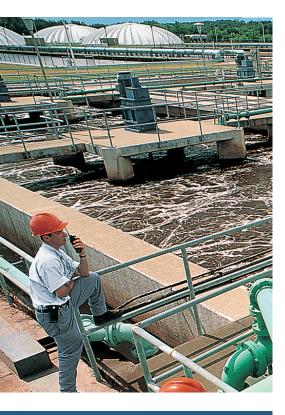
Whether they are filter press cloths, disc, belt, leaf or rotary filters: every filter is individual and, in particular, must withstand high mechanical loads for as long as possible. Our filter designs are ideal for bridging the gap between optimum dewatering and excellent cake-release performance.











Waste water

Markert's key focus in this area is on meeting the restrictive legal regulations for the protection of the environment and natural resources.

Our many years of experience, particularly in the development of filter cloths and belt filters, are decisive here.

Special advancements in raw materials and the weaving process also allow us to contribute actively towards improving efficiency.







Food

The food industry and its many applications provide a wide spectrum for **@marsyntex**° filter media.

Examples include sensitive campaign operation in the manufacture of sugar as well as beer and palm oil filtration. Our wide range of n marsyntex $^{\circ}$ products is used in practically all areas of food production.

Only materials which always meet the requirements of this sector for raw material composition and process control are used in all of these applications.













Fabrics

The process for manufacturing a **@marsyntex**[®] filter is a long one and requires a great deal of know-how.

Generally, synthetic materials form the basis. For example, these include polypropylene, polyamide, polyester, polyacrylonitrile, polyphenylene sulphide (PPS), polyvinylidene fluoride (PVDF) and polytetra-fluoroethylene (PTFE). Monofilament, multifilament and monomultifilament yarns as well as staple fibres are manufactured from these materials.

These yarns are then made into fabrics using stateof-the-art weaving processes to achieve the required filtration properties. In the next step, the fabrics are finished to meet the many sensitive requirements for separating solids from liquids.

Our customers' high expectations and our own endeavours to produce optimum filters form the basis for the continuous development of our products.

In this way, we can guarantee that o marsyntex $^{\circ}$ filter media are always state-of-the-art.



Fabrication

marsyntex[®] filters always provide a customized solution, whether as a filter press cloth, rotary filter or disc filter clothing, filter belt, centrifuge insert or any other kind of filter.

marsyntex[®] products are always custommade to meet the different processing conditions and account for the variety of filter equipment for separating liquids from solids.

Our filter factory is state-of-the-art; it is one of the most modern plants in this field. Production processes are highly automated (laser techno-logy). Manual production processes are performed by qualified and motivated employees.

Irrespective of their size and design, **marsyntex** filters are always made precisely, giving an impressive result. A perfect fit and long service life guarantee our customers low process costs.

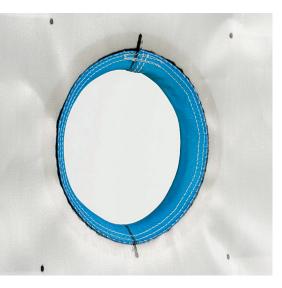
Maximum productivity enables us to react quickly and deliver all the versions of our products in the shortest time.

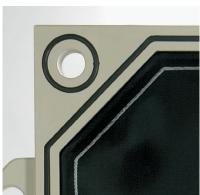




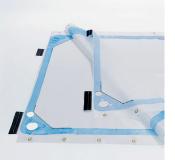












Filter Presses Filter presses play an important part in almost

Filter presses play an important part in almost all areas in which liquids are separated from solids. All marsyntex filter cloths are fabricated so as to make them suitable for the specific features of the filter press and the technical conditions of the filtration process.

⊘ marsyntex® filter cloths are manufactured as:

- single filter cloths
- double cloths barrel neck design
- overhang filter cloths

for chamber, frame, membrane filter presses and leakproof filter presses.

marsyntex® filters ensure:

- optimum separation of solids
- easy cake release and cleaning
- excellent chemical, thermal and mechanical resistance
- easy installation due to customized design
- high dimensional stability and no wrinkling

Against the background of specific features for the design of the machine, the following characteristics distinguish the **@marsyntex**® cloth design:

- fabric type, i.e. material and weave
- hose connections made of EPDM or special fabric
- double or single layer of material
- sealing on edges
- reinforcement on edges and stay bosses
- hook and loop fasteners
- eyelets or heat cut holes

If required, the filter cloths are combined with a backing cloth to improve drainage and protect them from damage.

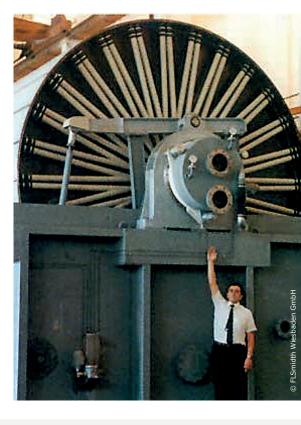


Vacuum Drum Filters

Drum filters are used for continuous, mechanical separation of large quantities of solid and liquid mixtures by filtering them in a vacuum. Typical areas of application include mining, chemicals and food production.

Here, too, precise fabrication, a long service life, easy installation as well as optimum separation are required to ensure efficient filtration. **@marsyntex*** filter media are manufactured to order as rotary filter cloths or segments:

- in stitched or welded form, specially cut to the length and width of the drum
- fitted, for example, with rubber profiles or specially sealed or coated for lateral guidance
- provided with fasteners made of stainless steel or other materials











Belt Filters

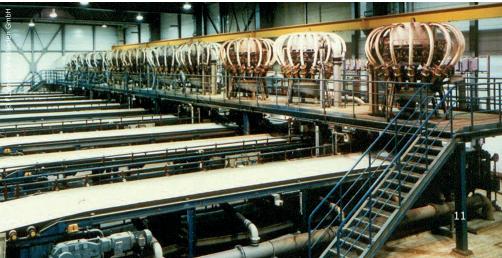
The marsyntex product range includes textile filters for vacuum filter, tower presses and belt filter presses. As a manufacturer of textile machine parts, marsyntex also provides solutions in maximum lengths and widths for these areas of use. The range includes double layer weaves with different filtration efficiencies.

marsyntex* filter belts ensure that the machines operate smoothly. The following features are important:

- optimum filtration
- uniform fabric structure across the entire length and width of the belt
- good abrasion resistance
- perfect alignment
- good transversal stability
- plain and stable edges for perfect tracking behaviour
- easy installation

In addition, \bigcirc marsyntex $^{\circ}$ filter belts for belt presses must:

- transmit high tension forces
- have high bending strength
- be resistant against high surface and linear pressure



Other Filters

marsyntex filters are also available for a wide range of other important filter equipment. Our sales specialists process know-how enables us to create the specifically required filter at any time for the machines listed below:

- nutsche filters
- centrifuges
- filter bags
- moore filters
- disc filters
- table filters
- pressure cylinder filters
- anode filters
- micro-screen/drum-screen

Irrespective of the filter apparatus, **@marsyntex**° filters also guarantee:

- convincing filtration performance and excellent cake-release properties
- perfect fabrication and, therefore, easy installation and a precise fit
- a large selection of fabric qualities with optimum chemical, thermal and mechanical properties, and
- a long service life

in these fields.

















Filters for Dust Filtration

marsyntex filters for gas filtration provide sophisticated solutions in the chemical, metal and mineral industries, as well as for power stations and waste incineration plants.

They enable low pressure loss, almost zero emissions and a constant flow rate. They also contribute towards reducing maintenance and operating costs of filter systems. Furthermore, productivity and reliability are increased in many industrial processes.

The choice of optimum raw materials and the use of additional equipment are important for filter performance.

On site or on the phone, our sales specialists select the specific product design for the application in question. In this way, we contribute daily towards improving the individual performance of filter systems.

Apart from optimum filter performance and efficiency,
marsyntex* dust filters provide:

- the right fabrication quality for a long service life
- easy installation and a precise fit
- resistance to high temperatures and mechanical loads
- a wide selection of felts in different versions for specific applications
- easy cake discharge and fast cleaning
- availability of filter inserts made from precision weaves

marsyntex* filters are available for dust filtration as filter hoses, filter pockets, filter bags, filter covers, inserts for fluid bed driers and as ring filters.





Hose and Coupling Technology

The marsoflex product group includes hose and coupling technology products. Here, the Markert Group provides maximum reliability and efficiency for the transport of liquid, gaseous and solid substances.

The brand name **@marsoflex**[®] stands for a universal range of proven industrial hoses which has enjoyed the greatest confidence for decades.

Our customers in this segment include wellknown companies from plant construction, the chemical and oil industries, tank storage, tank transporters and other industrial sectors.

Ask for our **@marsoflex**[®] catalogue.











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Textile Filter Technology

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