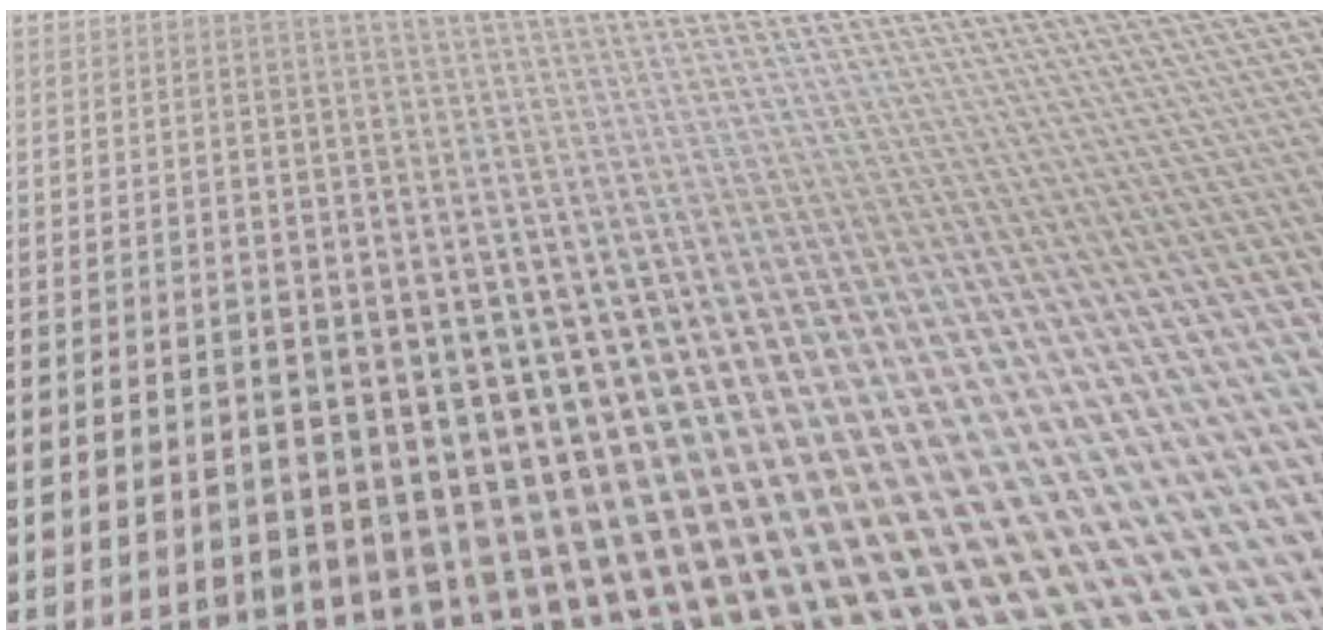
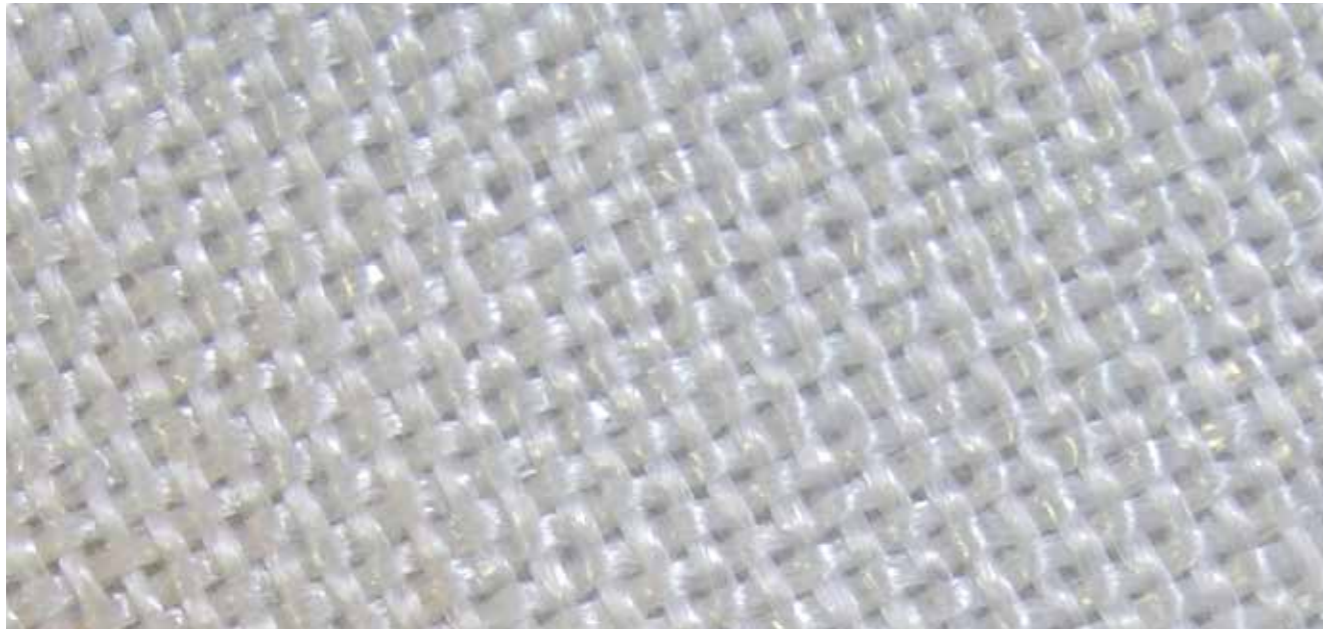

BOOST YOUR FILTRATION PROCESS

FOR EVERY APPLICATION THE RIGHT FILTER CLOTH



**BOOST YOUR FILTRATION PROCESS
FOR EVERY APPLICATION THE RIGHT FILTER CLOTH**

THE IDEAL FILTER CLOTH FOR YOUR FILTRATION PROCESS	3
THE PERFECT MATCH OF FILTER CLOTH AND FILTER ELEMENT	4
THE WIDE RANGE OF FILTER MEDIA	6
LENSER PRESS TEX	9
OUR POSSIBILITIES OF CLOTH FASTENING	10
FULL SERVICE OPERATION BY CHOOSING LENSER 3-IN-1	11
LENSER EASY-FIT: LATEST TECHNOLOGY FOR LEAK-PROOF DESIGN	12
LENSER LFC AND LFC-HYBRID: INNOVATIVE CONNECTOR	13
LENSER PRESS TEX: TECHNICAL DATA AT A GLANCE	14



THE IDEAL FILTER CLOTH FOR YOUR FILTRATION PROCESS

An important factor in increasing performance is the use of high-quality filter cloths that are precisely tailored to your machine and your production requirements.

We at LENSER know that even the smallest improvement in your filtration process can have a noticeable impact on your bottom line.

Filter cloths also contribute significantly to the success of critical and sustainable filtration. With the right filter cloth for your application, you can achieve a longer service life by up to 20% as well as a higher dry content in the press cake.

For several years, LENSER has been obtaining filter cloths from its own in-house production within the consortium or has made use of the wide range of well-known filter cloth manufacturers.

With LENSER, you get the access to a high-quality inventory of filter media in various materials, finishes and sizes (ranging from 250 mm x 250 mm up to 3000 mm x 3000 mm).

The combination of highest-quality fabrics, the latest manufacturing technology and field/laboratory-testings guarantees you the right filter cloths for best performance.

LENSER Filtration offers you the ideal filter cloth to

- fit your filter element
- boost your performance, and
- provide the most efficient filtration results.

Choose LENSER PRESS ELEMENTS in combination with LENSER PRESS TEX and unlock the full potential of your filtration process.



„There is no universal or perfect filter cloth. You have to find the right filter medium for every single process.“

Dr. Harald Aust
Global Product Manager Filter Media
LENSER Filtration GmbH

THE PERFECT MATCH OF FILTER CLOTH AND FILTER ELEMENT

At LENSER, we think outside the box. That is why we have been offering filter cloth analysis, procurement and installation for many years – with considerable success.



A

5-YEAR FORECAST ON THE RISE

Our success proves that we were right, because demand is now increasing. The number of our filter cloth orders has increased continuously over the past five years and we expect this trend to continue for some years to come.

TAKE ADVANTAGE OF OUR ALL-ROUND SERVICE

Rely completely on our #FiltrationExperts and use our high expertise for your application. We do not only create the filter element to meet all the requirements of your filtration process, but would also be pleased to supply you with the appropriate filter cloths.

Let us do what we do best: Ensure a completely homogeneous filtration process – starting with the analysis of your application and requirements and then moving on to procurement of all the spare parts needed, when using filter elements and filter cloths.

YOUR BENEFITS

- Sustainable use of resources by relocating to an external partner
- Comprehensive expertise gained from years of experience
- Fast procurement channels through optimized logistics
- Time and cost savings thanks to customer-specific filter cloth solutions with extended service life
- All from a single source



B



C

- A LENSER PRESS TEX filter cloth mounted in a sidebar filter press
- B LENSER PRESS TEX Multi filter cloth with edge sealing
- C LENSER PRESS TEX in different fabrics and making-up styles

On request, we can deliver your filter elements pre-assembled with the appropriated filter cloths. This allows you to concentrate fully on your own business.

Save time and costs by using our comprehensive service. Your #FiltrationExperts take care of the entire process – from preparation of the offer to delivery of the goods.

ALL FROM A SINGLE SOURCE

We are constantly optimizing the manufacturing processes, and this enables us to offer you an attractive price-performance ratio. Even special designs and materials are no problem for us.

At LENSER, you can find everything relating to your filtration process from a single source. At all times, your contact person is there for you, keeps your needs in mind and is also available to advise you in the event of an exchange.

RELY ON YOUR #FILTRATIONEXPERTS

Whether you need a filter element or a filter cloth: Meeting your individual product requirements is one of our core competences. With LENSER you will obtain the best filtration results and therefore achieve optimum production efficiency. Give it a try!

THE WIDE RANGE OF FILTER MEDIA

Efficient and effective filtration processes run with filter media that are precisely tailored to the application and the filtration process. LENSER takes over the research for your ideal filter cloth.



Finding the right filter cloth for your filtration process often feels like looking for a needle in a haystack. Filter media have a number of different characteristics and these have different effects – positive or negative – on the filtration result.

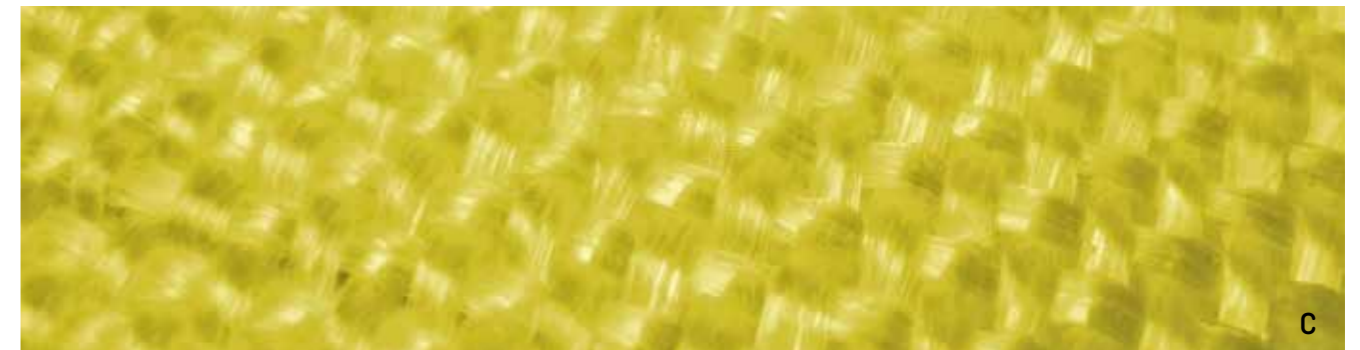
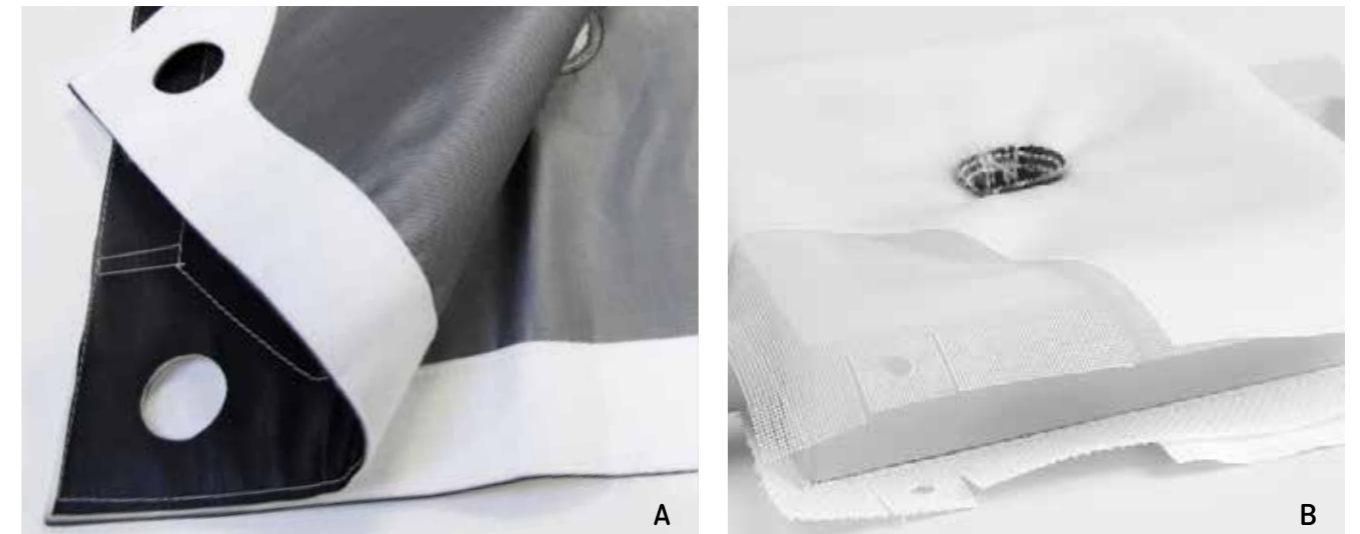
FEATURES OF THE FILTER CLOTHS

These features include the design or type of fabric, the number of pores, the pore shape and the pore size and permeability. All of these factors influence cake formation and thus also particle retention and filtrate flow as well as the life of the filter media, both individually and in combinations. All in all, they are of crucial importance to efficiency and overall process costs.

SELECTING THE RIGHT FILTER MEDIA

A comprehensive and qualified analysis is always the first step in selecting the filter media. By taking account of your filter press type and the respective application, we can already reduce the number of possible filter media to be considered. In addition, we consider the requirements of your filtration process and the properties of your suspension. These give our #FiltrationExperts essential information on the required pore size, allowing us to determine the air permeability and the appropriate fabric type.

The fabric type is a central parameter that influences the overall economy of the filtration process. It defines the filter media resistance: the lower the resistance, the shorter the filter cycles. At this point, the cost-effectiveness of the right filter cloth becomes clear – a shorter filtration time means a higher product output.



A LENSER PRESS TEX Mono-Multi barrel-neck filter cloth
 B LENSER PRESS TEX MONO filter cloth with backing cloth
 C Macro view of a LENSER PRESS TEX Multi filament

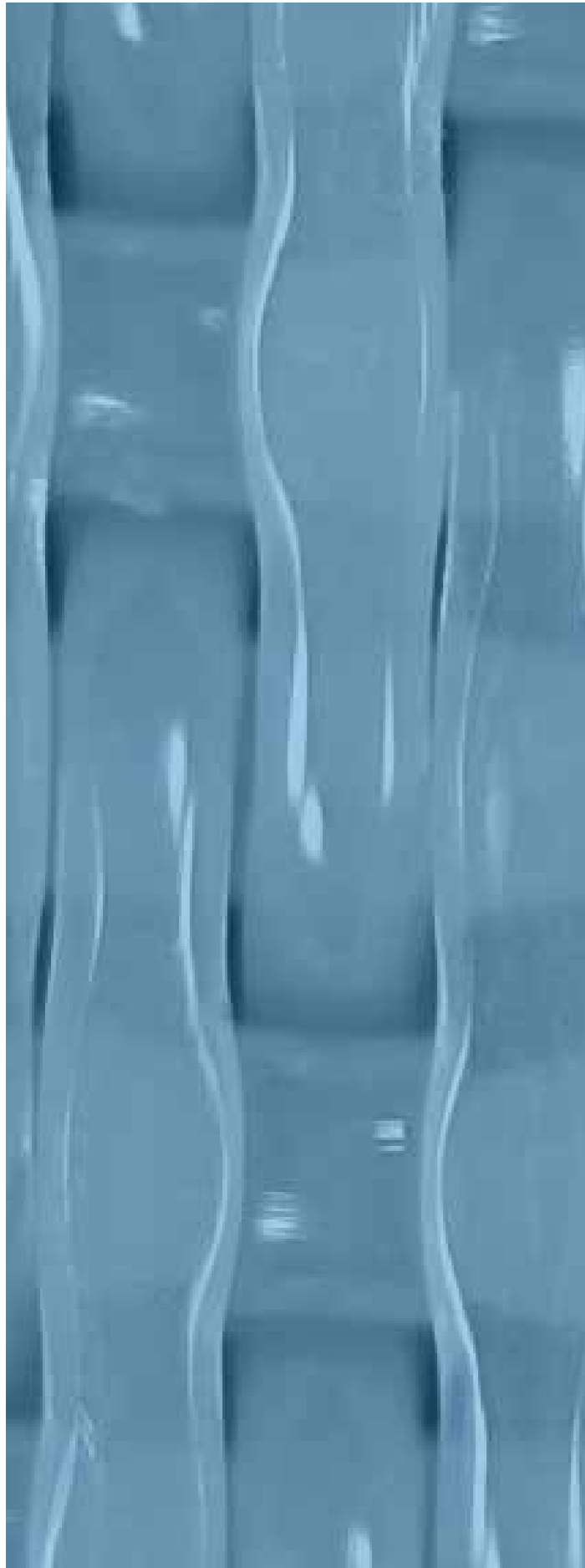
Another key parameter in optimizing process economy is particle retention by the filter medium. The overall goal is to obtain a clear filtrate after as few filtration cycles as possible. Once again, the influence of the fabric design becomes apparent: The closer the knit of the fabric structure, the more particles are retained.

TEST THE SUITABLE FILTER CLOTH WITHOUT OBLIGATION

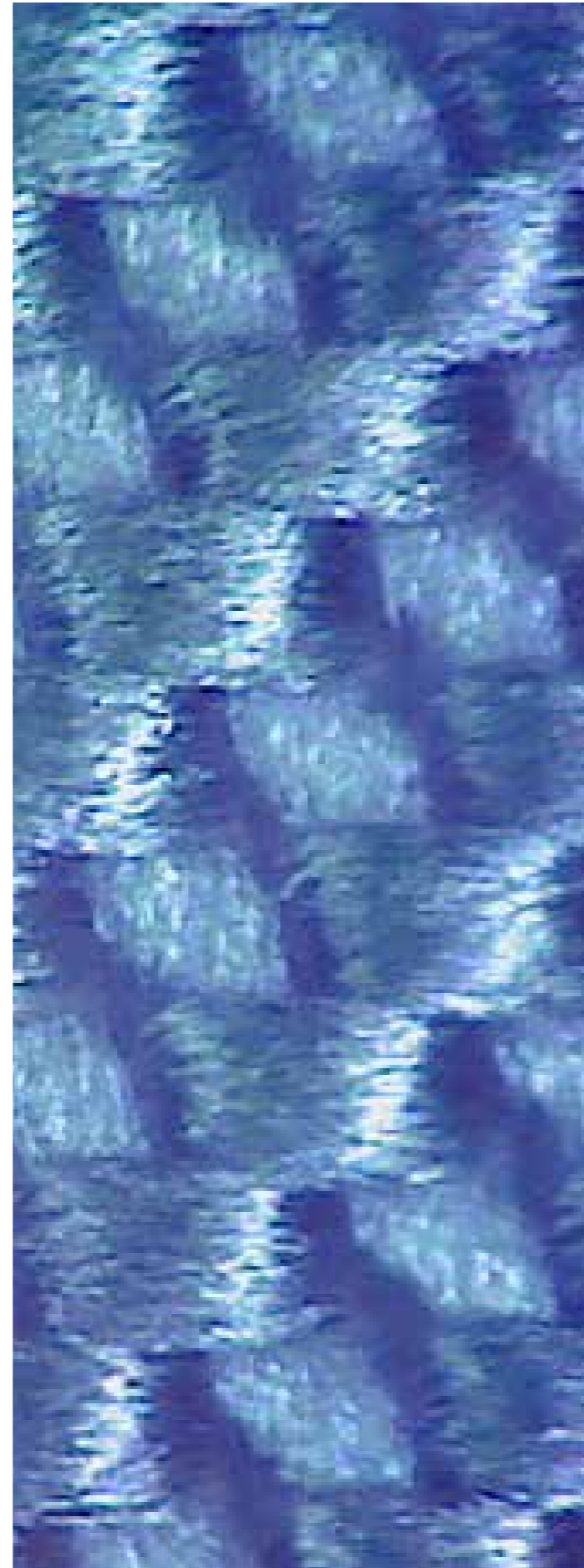
Our service aims at determining the filter cloth that provides the optimum filtration for your process, with the lowest possible resistance and assuming an acceptable level of particle breakthrough. Our #FiltrationExperts carry out field tests for perfect results. This way we can determine the ideal filter cloth for your filtration process. Test our recommendation free of charge and without any obligation.

FILTER CLOTH CRITERIA

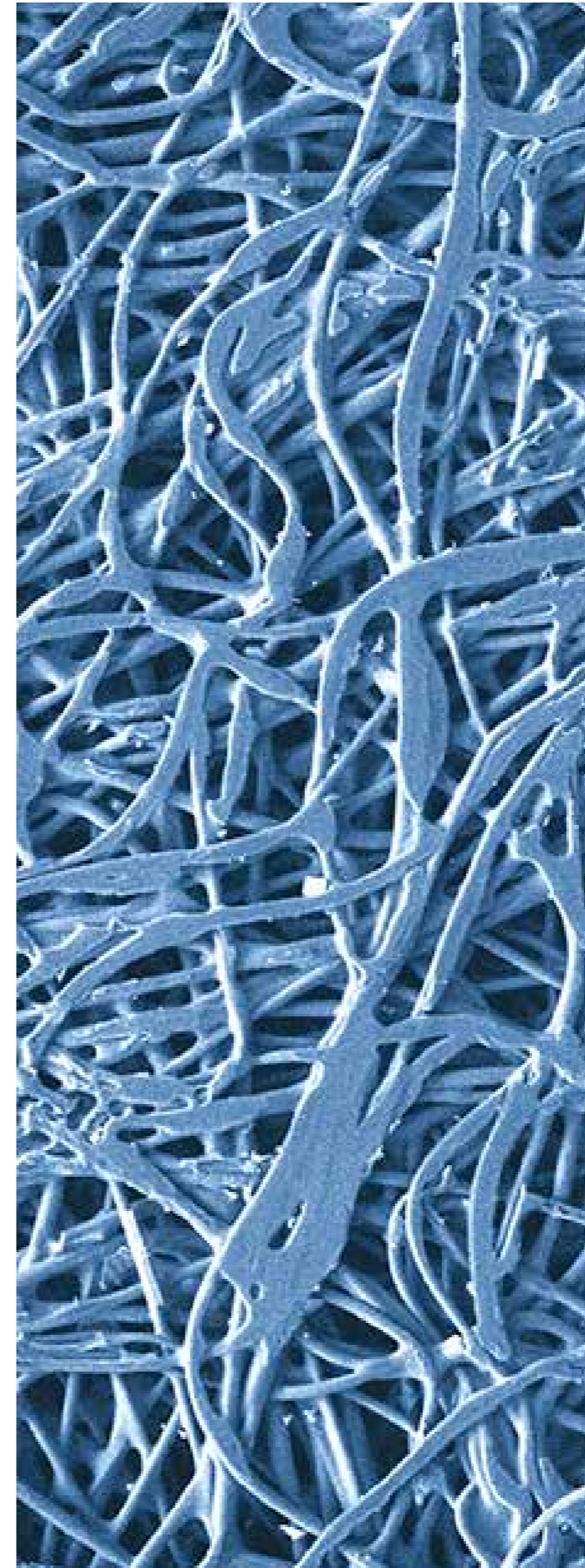
- Filtration equipment and applikation
- Properties of the suspension and filter cake
- Residual moisture in the filter cake and clarity of the filtrate
- Pore size, pore shape and number of pores per cm²
- Air permeability
- Fabric type or design
- Particle retention



LENSER PRESS TEX Mono



LENSER PRESS TEX Multi



LENSER PRESS TEX Composite

LENSER PRESS TEX

Choosing the right fabric design for your filter cloth is a key criterion in the efficiency of your filtration process.

In general, we differentiate between three product families: The basis is usually a synthetic granulate made of polypropylene, polyamide or polyester. Out of this material, yarn in form of mono filaments, multi filaments and staple fibers is produced and finally processed into three standard fabric types.

LENSER PRESS TEX MONO

The benefits of mono filament fabrics are minimum clogging, high throughput, excellent cake dryness and perfect cake release. However, It also has less tensile strength and less sealing properties at the frame area of the filter element.

LENSER PRESS TEX MULTI

The multi filament fabric are needed for robust solutions as well as good retention of fine particles. Due to the rough yarn structure, the cake sticks more strongly to the cloth. This means a greater risk of blinding and requires frequent cleaning cycles.

LENSER PRESS TEX COMPOSITE

This is a modern, specially built-up and finished short fiber construction. We differentiate between standard composite and pre-formed composite fabrics (LFC). The benefits are clear filtrate, high yield and easy mounting. Due to the high fabric density, cleaning cycles must also be considered here.

OUR POSSIBILITIES OF CLOTH FASTENING

Depending on the area of application, filter cloths have different properties and characteristics – and the fastening techniques for LENSER PRESS TEX filter cloths are just as varied.



The filtration equipment and the application decide primarily which mounting option is the most suitable. It must always be secure and non-slip, but also easy to install and time-saving.

LENSER has a wide selection of filter cloths and additional mounting options. We are always developing new and innovative ideas to make work on the filter press easier for your staff. We also bear assembly and replacement in mind.

LENSER MOUNTING OPTIONS

There are different filter cloth designs that prefer different forms of mounting. For the majority of applications, we advise using the classic barrel-neck filter cloth with eyelets at the edges, which are secured with cable ties. The use of Velcro fastenings is also increasing, because operators want to prevent cut or broken cable ties from

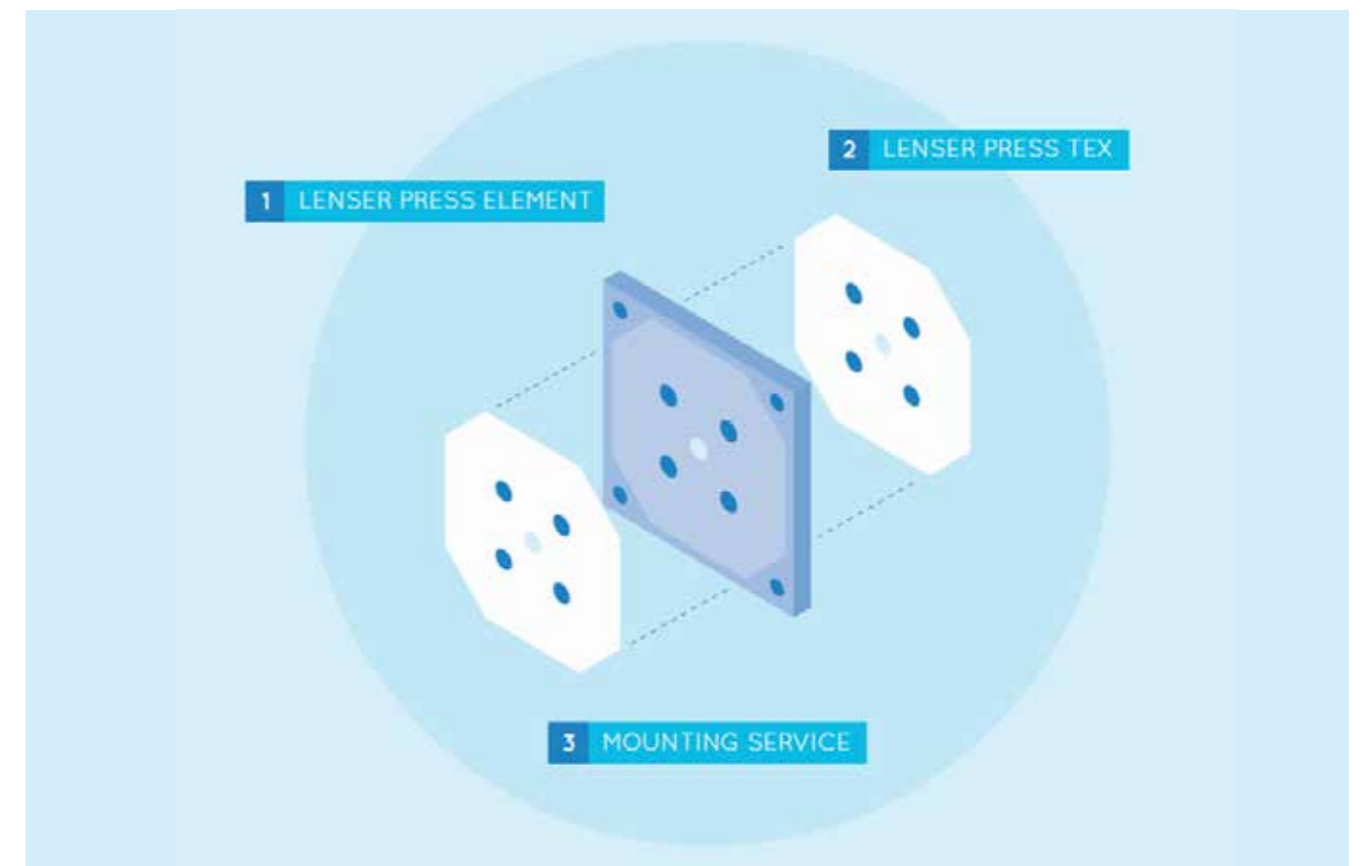
contaminating the product. The drape-over filter cloth in combination with a distribution ring or a cloth grommet is a good alternative to a barrel-neck design. Single filter cloths for head and endplates can be reliably and easily fixed with re-usable plastic caps. These are much easier and faster to install and are also secured with eyelets or Velcro fastenings.

For gasketed filter elements, LENSER offers the classic, filter cloth with sewn-in EPDM cord, as well as the innovative LENSER EASY-FIT, which matches the cloth clamping groove perfectly and requires practically no tools.

Ask your #FiltrationExpert about suitable options to optimize cloth mounting and and capitalize on high maintenance cost.

FULL SERVICE OPERATION BY CHOOSING LENSER 3-IN-1

LENSER looks after all tasks related to your cloth assembly. With LENSER 3-IN-1 you get your filter elements and the associated filter cloths pre-assembled ready for installation.



From application-specific manufacture of your filter element, through the analysis, selection and delivery of the appropriate filter cloth and on to initial assembly: Your #FiltrationExperts are at your side and deal with the entire installation process.

RELY ON YOUR #FILTRATIONEXPERT

Our experts are well trained and has the know-how of over 50 years of filtration expertise. We will assemble the appropriate filter cloths

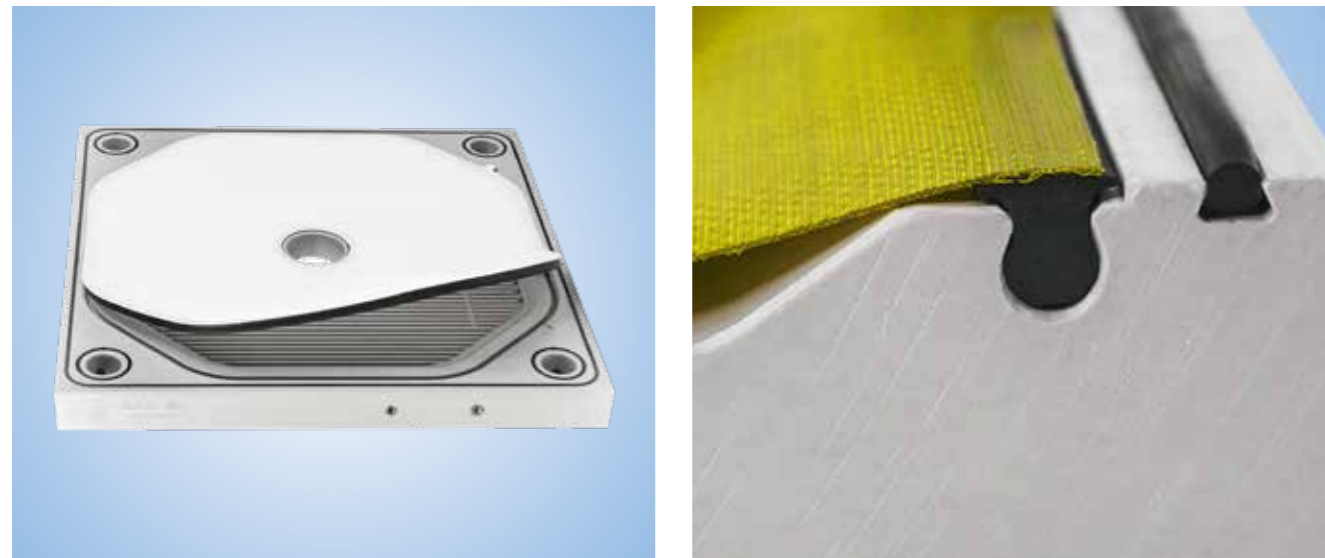
quickly and professionally on your filter elements before delivery. We pay attention to accurate fit, as well as a tight and wrinkle-free assembly. This means that you can insert the filter elements directly into your filter press after receiving your order.

REDUCE THE DOWNTIME OF YOUR PRESS

Save time and personnel costs by having your filter elements delivered ready for installation.

LENSER EASY-FIT: LATEST TECHNOLOGY FOR LEAK-PROOF DESIGN

Save time and money with our gasketed filter elements when replacing filter cloths. Use the LENSER EASY-FIT filter cloth and benefit from our elastomer sealing technology.



FEATURES

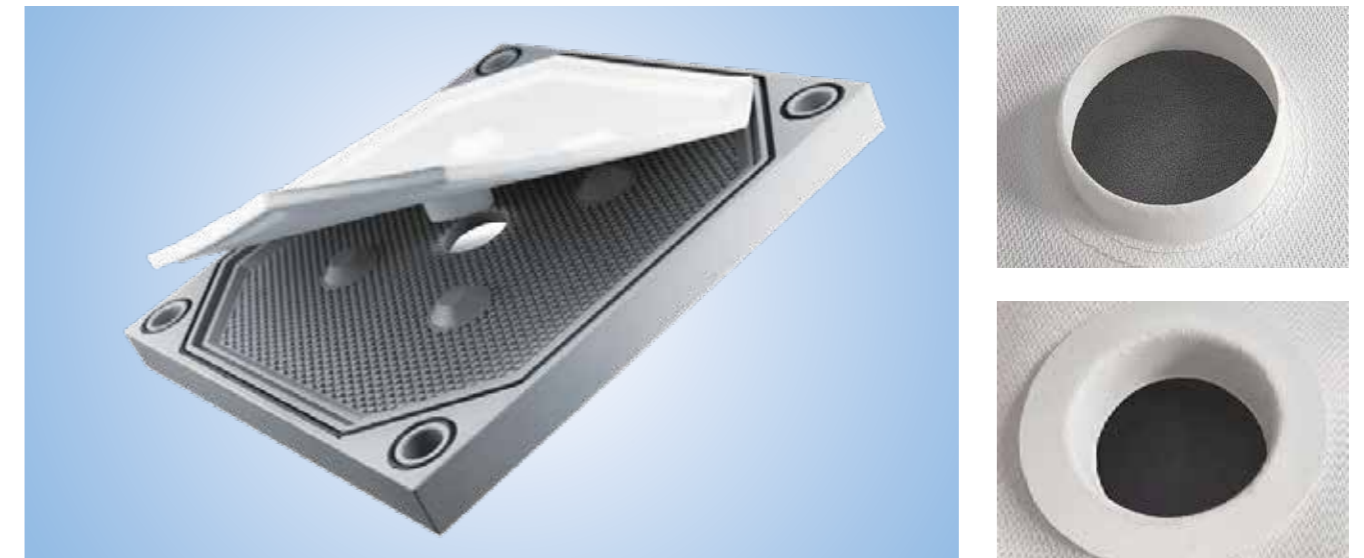
- Fast and easy to install
- Leak-free filtration and safe operation
- No further fastening materials are required
- Elastomer seals can be recycled
- Fulfills the guidelines of EC 1935/2004 and EC 10/2011 as well as complying with FDA regulations
- High quality, good tensile strength and excellent elasticity
- Hydrophobic coating is available on request
- LENSER EASY-FIT is available in all sizes based on polypropylene, polyamide or polyester

YOUR BENEFITS

- Quick assembly
- Short downtimes
- Designed for gasketed filter elements
- Exchange of cloth without removing the filter element
- Compliant with food
- Long service life due to robust design

LENSER LFC AND LFC-HYBRID: INNOVATIVE CONNECTOR

The easiest way to change filter cloths:
Use the LENSER Formed Composite (LFC) for gasketed filter elements and the LFC-Hybrid filter cloth for standard filter elements.



FEATURES OF LFC

- Plug-in neck consisting of male/female part
- Sintered fiber construction perfectly adapted to filter element geometry
- Suitable for low and high pH values
- High retention of fine particles
- Robust surface finishing
- Hydrophobic coating available on request

FEATURES OF LFC-HYBRID

- LENSER LFC-neck sewn onto proven LENSER PRESS TEX filter fabric
- Available as a single or drape-over filter cloth
- Fabric fastening with eyelets and cable ties or with Velcro

YOUR BENEFITS

- Quick and easy installation
- Short downtimes
- Exchange of cloth without removing the filter element
- No leakage due to perfect fit on LENSER filter plates
- Long service life due to robust design
- Can be retrofitted
- Can be used for almost all applications and brands

LENSER PRESS TEX: TECHNICAL DATA AT A GLANCE

LENSER PRESS TEX – TECHNICAL DATA

Formats (mm)	Standard formats: 250, 400, 470, 630, 800, 1000, 1200, 1300, 1450, 1500, 1500x2000, 1600, 2000, 2440 These formats are available in open and closed versions. We carry larger and differently dimensioned formats on request.
Feed port position	Standard feed ports: center feed, off-center feed, corner feed
Pressure	Depending on the version, standard products are suitable for a maximum filtration pressure of 8 bar or 16 bar.
Temperature	From 5 °C up to 130 °C
Materials	Filter cloths can be made of the following materials for specific applications: <ul style="list-style-type: none"> • Polypropylene (heat stabilized and if necessary calendered) • Polyamide (heat stabilized and if necessary calendered) • Polyester <p>Other materials on request.</p>
Product family	LENSER PRESS TEX Mono (100% Mono, Mono/Multi) LENSER PRESS TEX Multi (100% Multi, Staple fiber) LENSER PRESS TEX Composite
Filter cloth types	Backing cloth, single filter cloth, barrel-neck filter cloth, drape-over filter cloth, sealing edge, LENSER EASY-FIT (CGR), LFC, LFC-Hybrid
Services	LENSER 3-in-1

What are the challenges in your filtration process?

Even the smallest adjustment in your process flow can make a big difference. Filter cloths also contribute significantly to the success of sustainable filtration.

LENSER is the first port of call and a competent partner in choosing the right filter cloth for your application. Our selected supplier network guarantees optimum solution procurement for any application. Trust in our many years of expertise.



LENSER Filtration GmbH
Breslauer Strasse 8
89250 Senden
Germany

p. +49 7307 / 801-0
info@lenser.de
lenser.de/de

All data, information, statements, photographs and graphic illustrations in this leaflet are without any obligation and raise no liabilities to or form part of any sales contracts of LENSER Filtration GmbH or any affiliates for equipment and/or systems referred to herein.

© LENSER Filtration GmbH 2020. All rights reserved. No part of this copyrighted work may be reproduced, modified or distributed in any form or by any means, or stored in any database or retrieval system, without the prior written permission of LENSER Filtration GmbH or its affiliates. Any such unauthorized use for any purpose is a violation of the relevant copyright laws. LENSER Filtration GmbH, Breslauer Strasse 8, 89250 Senden, Germany. LEN.EN.01.07.20

