

Reicofil
The comprehensive
package for the efficient
production of all kinds of
nonwoven.

If you are in the process of setting up a nonwoven production facility, if you are thinking about investing in a new line, or if you want to expand your product portfolio, there are hundreds of questions to answer and many decisions to make. We are at your side from the selection of the line design and technology through the planning stage of the production site, as well as the installation and commissioning of the

line. We remain at your side for the further development of your products. We assure the quality that markets require, the productivity that makes you successful, and the reliability that lets you sleep soundly at night.



With Reicofil as your partner, you can count on:

- Typical line availability of 7200 h/a
- Constant next-level nonwoven quality
- Maximum energy efficiency and productivity
- On-time delivery
- Carefree commissioning
- Ongoing support from experts
- Reliable life-time service

OUR SPECTRUM

6	Living Nonwovens
8	Hygiene Nonwovens
0	Medical Nonwovens
2	Industrial Nonwovens
4	Filtration Nonwovens
4 6	Agricultural Products
8	Consumer Goods Industr
0	Reicofil Technologies
2	RF5 Technology
4 6	RF Smart
6	RF Melthlown

Bico Technology

Competencies and Services Research & Development

Service

High Loft

28

30

32

34



LIVING NONWOVENS

Nonwoven quality that all can rely on - for greater safety, comfort, and wellbeing all over the world.

Nonwovens accompany us from the first day of our lives right up to the last. In diapers, face masks, air filters, or agricultural nonwovens, the material enhances the wellbeing, safety, and comfort of people worldwide.

Nonwovens are a material that contact our skin directly, thus a material that deserves the highest quality. Become a producer that delivers precisely this quality.

Living Nonwovens: Watch the video now



Reicofil Processes for **Hygiene Nonwovens**

22 RF5

RF Smart

High Loft

Lines for Hygiene
Nonwovens
A lifetime of
superior care.

Hygiene nonwovens accompany us all through life: From baby diapers to femcare articles and incontinence products, nonwovens ensure hygienic standards, quality of life, and participation in life. Reicofil nonwoven lines produce the entire range required, in particular, thin, very voluminous, hydrophobic, and hydrophilic nonwovens.

As a Reicofil customer, you can also respond quickly to new trends as we observe the markets to provide you with the technologies you need for your future success.

Applications:

- Baby and adult diapers
- Femcare articles
- Incontinence products
- Baby wipes
- Cosmetic articles, and more

Ω



Reicofil Processes for **Industrial Nonwovens**

Applications:

- Geotextiles for road, dike, and agricultural construction: erosion control, filtration, reinforcement, drainage, separation layers, slope stabilization.
- Structural engineering: bitumen carriers, roofing underlays, sheeting membranes, laminates.
- Automotive: interior trim, soundproofing, insulation
- Packaging nonwovens: envelopes, tea bags, clothing packaging.
- Furniture nonwovens: mattresses, pillows, bed pads, disposable bedding, upholstery backing, underlining, interlayers for seating furniture.

Lines for Filtration Nonwovens Nano-size dimensions.

They clean our drinking water, protect our environment and health, and can save lives: Filters must reliably fulfill their function. In water, air, gas, blood, and other media, they retain ultra-fine particles and droplets that measure nanometers. Reicofil Meltblown is the

ideal material for this. It is just as suitable for absorption: The fine fibers of Reicofil Meltblown material have excellent absorption and barrier properties, for example for wipes or as a barrier layer in composite products.

Reicofil Processes for Filtration Nonwovens

22 RF5

RF Smart

RF5 Meltbown

Applications:

Filtration

- Air filters (cabin air filter, indoor, A/C systems)
- Industrial gas filters
- Liquids (benzene, water, etc.)
- Blood filters (dialysis)

Absorption

- Absorbent and cleaning wipes
- Oil extraction media



REICOFIL TECHNOLOGIES

The quality of your nonwovens and the reliability of your production line determine how well you perform in your markets. With our technologies and know-how, you lay the right foundations to build and to develop your business successfully.

RF5 Technology Supplying established markets with next-level nonwovens ecologically and economically.

With the RF5 technology, you can reliably produce large volumes of particularly lightweight, soft, and strong nonwovens to meet the highest quality requirements.



Line availability to give you peace of mind

With RF5, you can produce without a care because the technology is the most reliable nonwoven production process on the market.

Productivity for your success

With RF5, you produce top-quality nonwovens more efficiently than with any other technology.

At 1.200 m/min.

Energy efficiency to preserve the environment and assure your profit

RF5 systems manage the conversion from pellets to nonwovens at greater energy efficiency than any other technology on the

1.0-1.6 kWh/kg

Quality to satisfy the most demanding customers

Average or even fluctuating nonwoven qualities are a risk to applications that are supposed to provide protection and safety. RF5 lines produce a constant, consistent high quality to give your customers the peace of mind they need.

Product properties to create a competitive edge

Thanks to ultra-fine filaments, uniform coverage, convincing strengths, and impressive softness, RF5 helps you deliver nonwovens that allow you and your customers to create new end products.

RF Smart Breaking into small and

emerging markets with next-level nonwovens.

Thanks to adapted capacity and a high level of standardization, you can enter smaller and emerging markets quickly and successfully with RF Smart.

Your RF Smart line produces nonwovens of the highest Reicofil quality - ideally suited for tough hygiene, medical and technical applications.

Easy start-up with low investment

With RF Smart systems, you reduce your investment costs and start production faster since the system is highly standardized and can be integrated into existing buildings.

High sales prices due to top quality

Profitable production with moderate capacity

High capacity is only an advantage on large markets. The RF Smart line is adapted to the requirements of smaller markets, therefore ensuring profitable production within local requirements.

Annual capacity from 2.000 t to 16.000 t

Quick return on investment thanks to reliability

Your RF Smart lines are as reliable as any RF line: Rely on predictable high productivity and a reasonable return on investment time.

RF MeltblownProduce filter materials that converters trust.

Produce meltblown nonwovens of consistent quality for safe filter applications and superior absorption properties.

Two technologies in one line

RF Singlerow Meltblown RF Multirow Meltblown

For top elasticity and absorption properties

for top barrier and filter properties

Perfect if you:

- intend to produce ultra-fine filaments
- want to combine high filtration performance with breathability
- prioritize a balance between output rate and quality

Perfect if you:

- intend to produce meltblown with high elasticity
- want to achieve excellent absorption properties
- prioritize very high productivity

Applications Filtration of

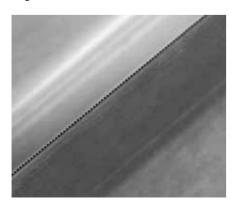
- Gas
- Air
- Liquids

- Blood

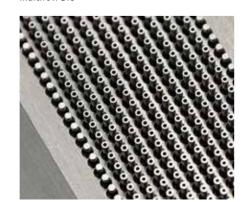
Applications:

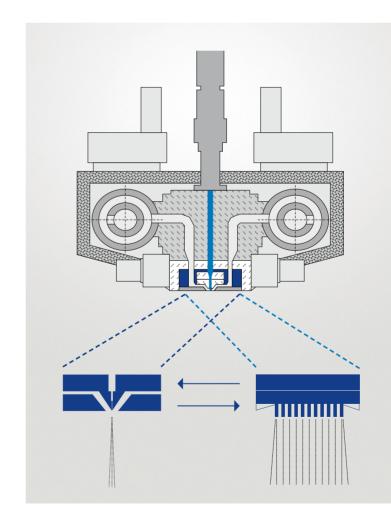
- Absorbents
- Elastic nonwovens
- Liquids
- Filters

Singlerow Die



Multirow Die





Interchangeable Meltblown cassette for Singlerow and Multirow

To cover the full range of Meltblown applications, our interchangeable cassette allows you to switch from Singlerow to Multirow technology and back. The optional cassette is retrofittable on all Reicofil Meltblown lines.

Pefect if you:

- intend to produce Meltblown with different properties
- require a flexible response to market needs
- want to shorten reset times

Bico Technology Two raw materials, endless possibilities.

Bico means: We combine two different raw materials in every single filament. This opens the door to you as producer to obtain product properties that are unattainable with mono-fibers - top mechanical strengths, crimping to increase volume, or filaments that can be split by water jets, for example.

A product variety that opens doors to you

Each combination of two different raw materials and different filament structures provides you with specific physical, haptic and optical properties. In this way, you always meet the exact requirements of your nonwoven and become a producer that can deliver perfectly matched products in terms of softness, elasticity, or stretchability.

Strength properties that make your production more profitable

With core-sheath Bico technology, you can achieve higher tensile strength with the same cross-section weight. This gives you the scope to reduce material usage and lower manufacturing costs.

Other possible applications for coresheath structures:

With the combination of polyester and polyethylene:

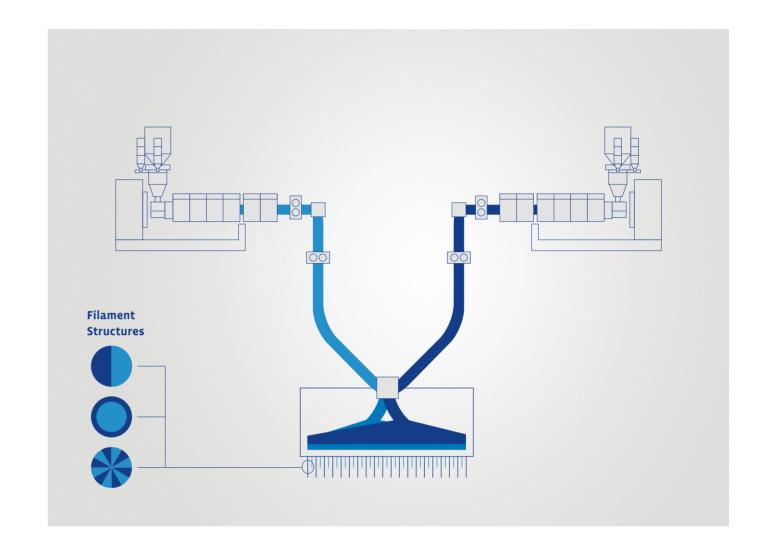
gamma-radiation resistant medical products

With additives and batches in the filament core and sheath:

- UV stabilizers
- Flame retardants
- Hydrophilicity
- Coloration

Volume that makes other nonwovens look flat.

When appropriate raw materials are used in a side-by-side arrangement, the filaments crimp, creating a volume previously unimaginable for nonwovens. Offer a new dimension of softness.



High Loft Voluminous nonwovens in 3D format.

Create competitive advantages

Special properties are not always visible with nonwovens. This is different with High Loft. Produce exclusive qualities which your customers can see and feel. The soft, voluminous High Loft nonwovens, which can compete with cuddly bear fur, visibly enhance products, such as diapers or filters - for exclusivity that makes you stand out from the competition.

Benefit from the exclusive Reicofil licensing model

Not everybody can offer High Loft: Reicofil is the exclusive global licensor for the eminent High Loft product. We are continuously developing the patent portfolio for our licensees.

COMPETENCIES AND SERVICES

Investing in the right line technology is the first decisive step to successful production. But not the last. Even after the start of production, we are by your side with our Service Team, our process engineers, our market experts, and our research and development capacities to ensure and expand your business success over the long term.

Research & Development Score points with innovative products.

The question "Produce or develop?" does not crop up with Reicofil. As our customer, you automatically have access to the world's largest research and development center for nonwoven production and in cooperation with institutes worldwide such as the Saxon Textile Nonwoven Institute in Chemnitz and the Nonwovens Institute at NC State University in Raleigh. Here you develop your products of the future, and test new raw materials while your own lines continue running.

High-tech for tangible results

- 1800 square meters, the world's largest laboratory for nonwovens development
- Technologies for processing all spinnable raw materials, including biobased raw materials
- RF5 Bico composite line SSMMMSS for hygiene and medical applications
- RF Meltblown line for filtration applications
- RF Bico nonwoven XSXSX line for industrial nonwovens
- Analytical lab

Competencies for smooth trial procedures

- Trial planning
- Trial execution
- Trial evaluation
- Product development

Solutions for sustainable production

- Reduction of cross-section weight
- Processing organic raw materials
- Processing post-consumer waste
- In-line recycling production scrap
- Energy-efficiency packages



Service From planning to the entire service life of the line.

Reliable service is crucial for your long-term success. That is why we believe service begins with the first conversation and ends only when you decide it's time.

Technical support

Malfunctions can often be analyzed and eliminated immediately by remote access. Our on-site service is also available to you personally and worldwide. We support you in all issues concerning your line and, on request, we provide you with process support for your production line.

Technical Hotline: +49 2241 481-140

Process Hotline: +49 2241 481-148

service-rf@reifenhauser.com

After Sales Service

With professional inspection, maintenance, repair, and modernization, you maximize the service life and performance of your production machinery and effectively prevent machine downtimes. In this way, you can continue to produce competitively at the highest product quality even decades after the purchase of your Reicofil system.

Genuine spare parts

Genuine spare parts enhance the performance of your machines. Our precise identification of over 5,000 different parts helps you always to find the right product quickly and accurately. If in stock, we make all parts ready for international shipment within 48 hours and thanks to worldwide storage capacities, we offer the best possible supply.

Spare Parts Hotline: +49 2241 481-141

parts-rf@refenhauser.com

Retrofits

If your requirements change, upgrades and modifications are an economic alternative to a new investment. Our extensive portfolio gives you access to the technical innovations of our Research & Development division.

modernization-rf@reifenhauser.com



TAKE THE FIRST **STEP NOW TO LONG-TERM SUCCESSFUL** PRODUCTION.

Our sales team looks forward to receiving your inquiries.

Discover our product range:



Reicofil info@reicofil.com www.reicofil.com







/reifenhausergroup

Reifenhäuser Reicofil GmbH & Co. KG

Spicher Strasse 46 53844 Troisdorf, Germany T +49 02241 481-0 F +49 02241 481-744

info@reicofil.com www.reicofil.com