



Reifenhäuser

REICOFIL

The Extrusioners

Reicofil Nonwoven Lines

Know-how and technologies to make you the supplier in demand.



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:

- Highest line availability and OEE
- Maximum energy efficiency and productivity
- On-time delivery
- Carefree commissioning
- Ongoing support from experts
- Reliable life-time service

OUR SPECTRUM

06

Living Nonwovens

08

Hygiene Nonwovens

10

Medical Nonwovens

12

Industrial Nonwovens

14

Filtration Nonwovens

16

Agricultural Nonwovens

18

Consumer Goods Nonwovens

20

Reicofil Technologies

22

RF5 Technology

24

RF Smart

26

RF Meltblown

28

Bico Technology

30

High Loft

32

XHL

34

Competencies and Services

36

Research & Development

38

Service

40

Sustainability

42

Contact



LIVING NONWOVENS

**Nonwoven Quality
Everyone 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 materials 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
24	RF Smart
30	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

22	RF5
24	RF Smart
26	RF Meltblown

Lines for Medical Nonwovens With Uncompromising Safety.

Applications:

- Supplies for doctors, nurses and patients: mouth guards, face masks, hair protection, gowns, shoe covers, etc.
- Work materials: surgical sterilization products, disposables, disposable clothing, protective nonwovens, wound dressings, plasters, etc.

In hardly any other sector safety and cleanliness are as essential as in the medical sector, especially in the highly critical operating room environment. The entire outfitting of medical personnel and work materials, such as face masks, gowns or wound dressings, would be inconceivable without nonwoven products.

Nonwovens with highest barrier properties help prevent infections and protect lives. Backed by many years of expertise, we know what is essential, so we collaborate with experts from the medical engineering sector to develop the right products.

Lines for Industrial Nonwovens Focus on Function.

They protect dykes and roads from being washed away, they insulate our cars, and keep insects at bay: Nonwovens also provide important and very diversified functions in road construction, the automotive industry, agriculture, and the construction and furniture industries.

With Reicofil technologies tailored to each individual application, you can help the industry provide needed products with even higher quality, lighter weight, or greater functionality.

Reicofil Processes for Industrial Nonwovens

22 RF5

24 RF Smart

Applications:

- Geotextiles for road, dyke, 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

22	RF5
24	RF Smart
26	RF5 Meltblown

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.

Applications:

Filtration

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

Absorption

- Absorbent and cleaning wipes
- Oil extraction media

Lines for Agricultural Nonwovens From Seeds to Transportation.

Successes and yields in agriculture are more dependent on external influences than in any other sectors. That is why solutions are in global demand to protect our crops - from seeds to transportation.

Nonwovens for insect protection or early harvest nonwovens to cover plants: Nonwovens protect against insects, frost, create a growth climate, and are therefore a valuable harvest assistant.

Applications:

- Insect protection
- Crop covers
- Plant protection
- Seed blankets
- Biodegradable plant pots
- Weed prevention
- Early harvest nonwovens

Lines for the Consumer Goods Industry For Hygiene and Durability.

We all have high demands for safe and clean consumer goods - especially in the food industry. Therefore, Reicofil nonwovens in packaging provide reliable protection against contamination, preserve food, and ensure its transportation.



Applications:

- Food packaging
- Clothing packaging
- Carrier bags
- Transport packaging
- Clothing
- Home textiles
- Floor coverings

REICOFIL TECHNOLOGIES

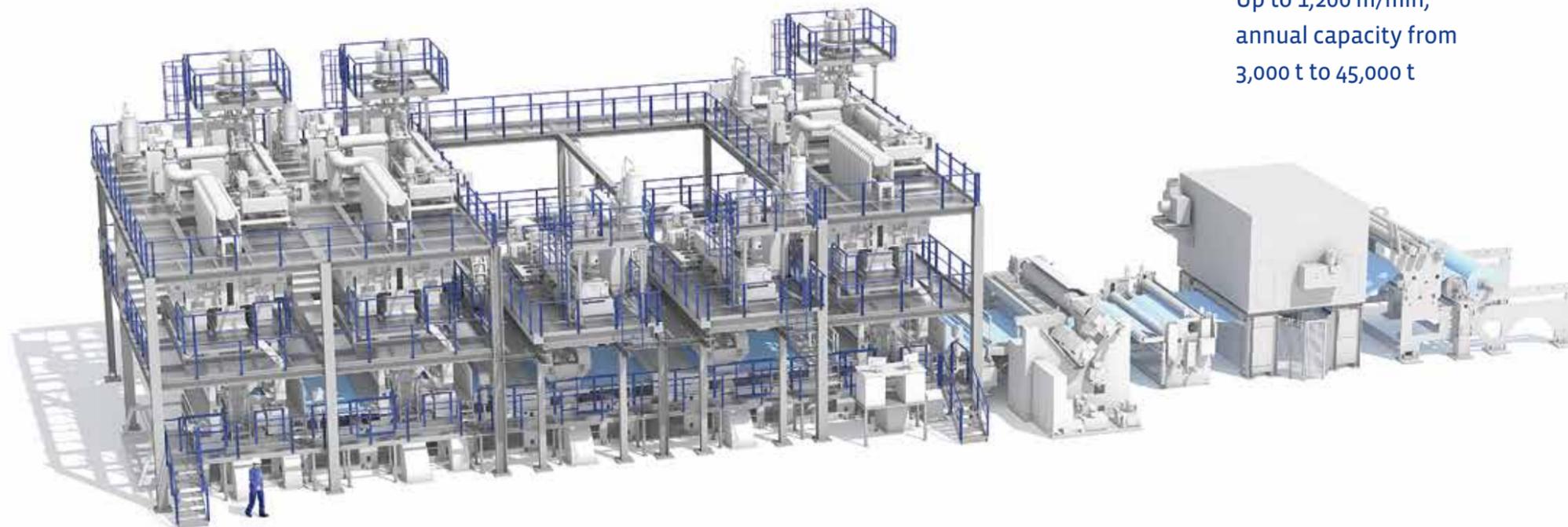
The quality of your nonwovens and the reliability of your production line determine how well you perform in your markets. With our technologies and know-how, you lay the right foundation to build and to develop your business successfully.

Discover our
product range:



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 ensure you are on the safe side

With RF5, you can produce carefree because our 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.

Up to 1,200 m/min,
annual capacity from
3,000 t to 45,000 t

Energy efficiency to preserve the environment and assure your profit

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

1.0-1.9 kWh/kg

Quality to satisfy the most demanding customers

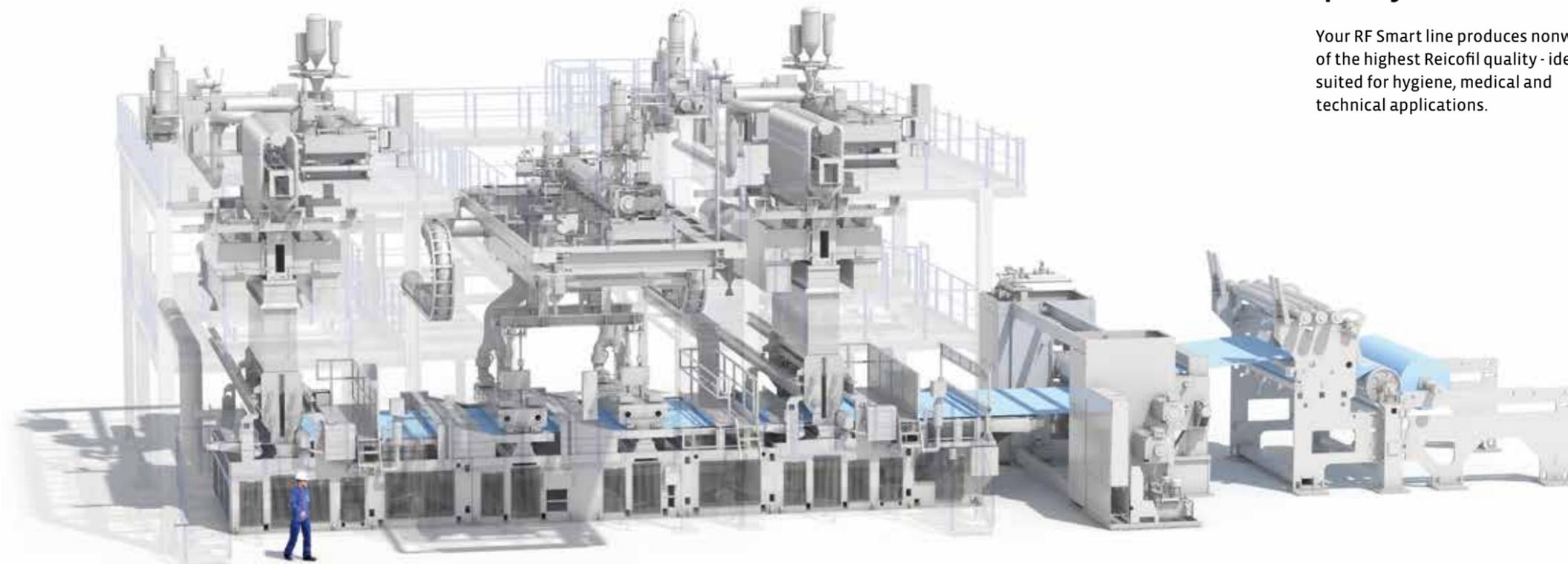
Fluctuating nonwoven qualities are a risk to applications that are supposed to provide protection and safety. RF5 lines produce a constant, consistent high quality to give your customers the safety they need.

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 Enter Small and Emerging Markets with Next-Level Nonwovens.

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



Easy start-up with low investment

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

Profitable due to top quality

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

Cost effective 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 cost effective production within local requirements.

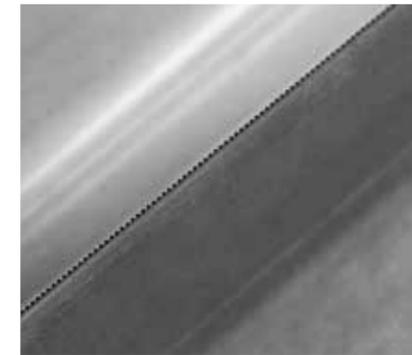
Annual capacity from
2,000 t to 16,000 t

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.

RF Meltblown Produce Filter Materials That Converters Trust.

Produce high-quality meltblown nonwovens with best filtration or superior absorption properties.



Singlerow Die

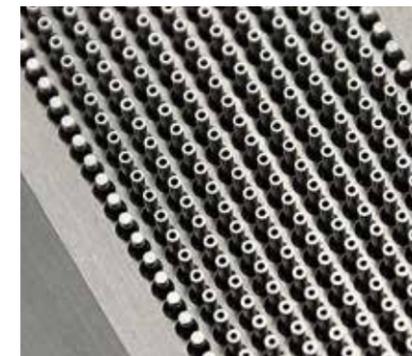
RF Singlerow Meltblown for top barrier and filter properties

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

Applications:

- Gas filtration
- Air filtration
- Filtration of liquids
- Blood filtration



Multirow Die

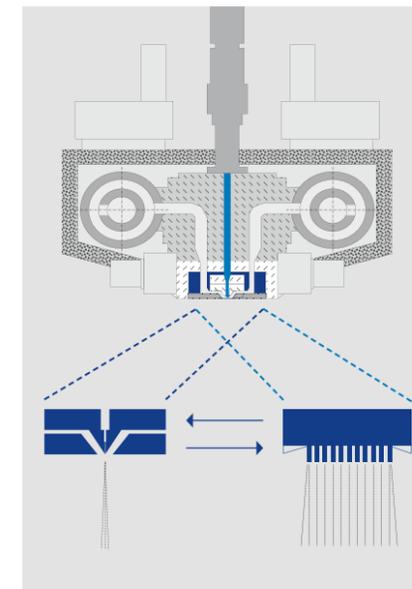
RF Multirow Meltblown for top elasticity and absorption properties

Perfect if you:

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

Applications:

- Absorbents
- Elastic nonwovens
- Liquids
- Filters



Interchangeable Cassette

Interchangeable Meltblown Cassette for Singlerow and Multirow

Perfect if you:

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

Combine two technologies in one line:

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.

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.

Other possible applications for core-sheath structures:
With the combination of polyester and polyethylene:

- gamma-radiation resistant medical products

With additives and batches in the filament core and sheath:

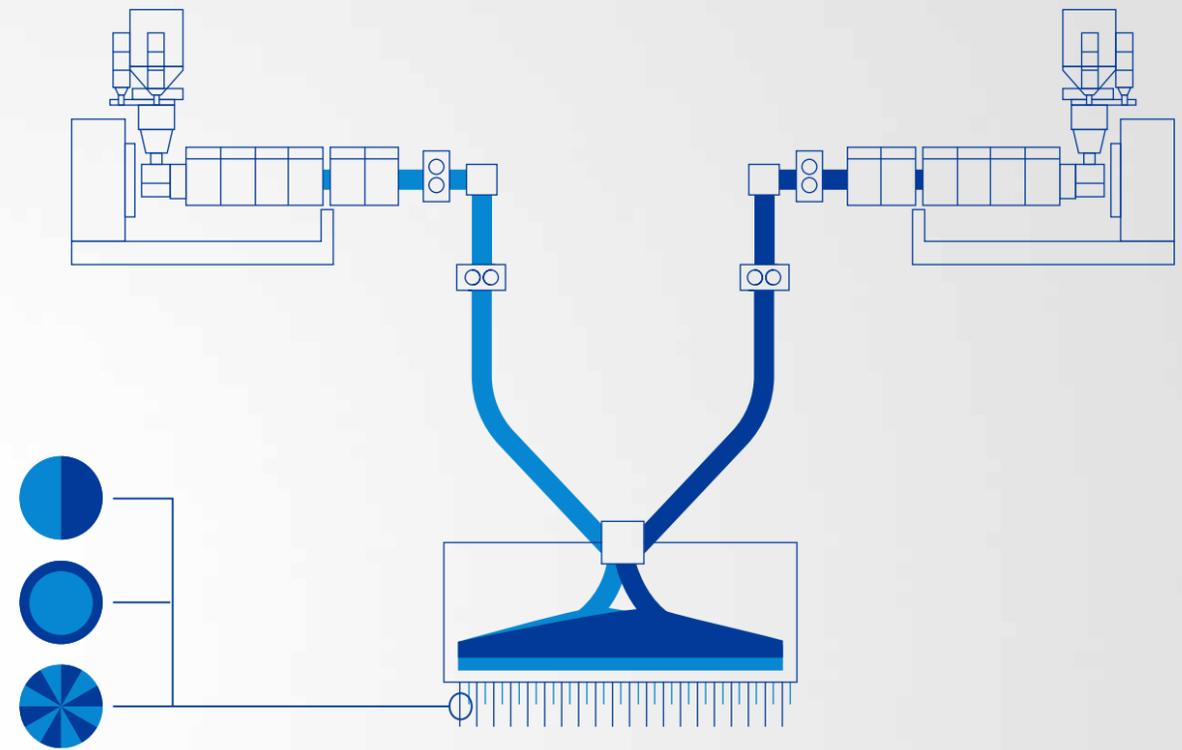
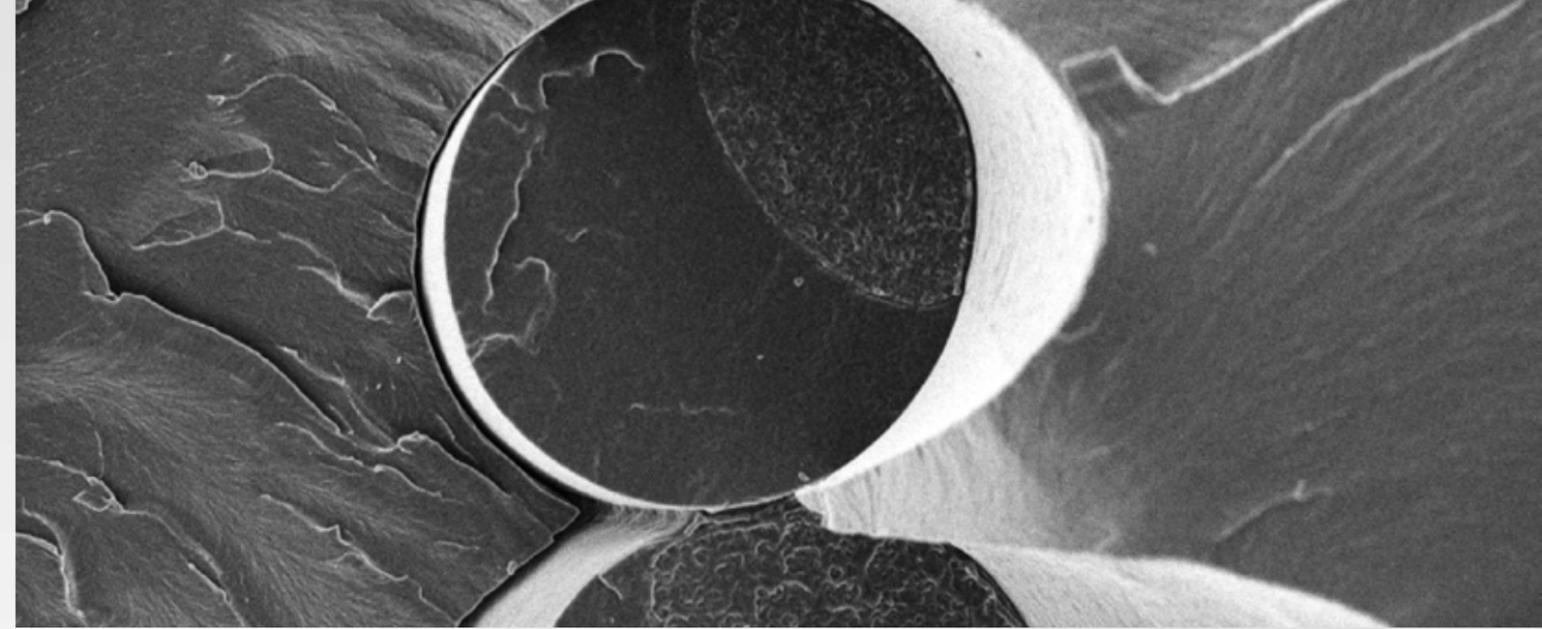
- UV stabilizers
- Flame retardants
- Hydrophilicity
- Coloration

Strength properties to make your production more profitable

With core-sheath Bico technology, you can achieve higher tensile strength with the same fabric weight. This allows you to reduce material consumption and lower manufacturing costs.

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. This allows you to offer a new dimension of softness.



Side by Side
50 : 50



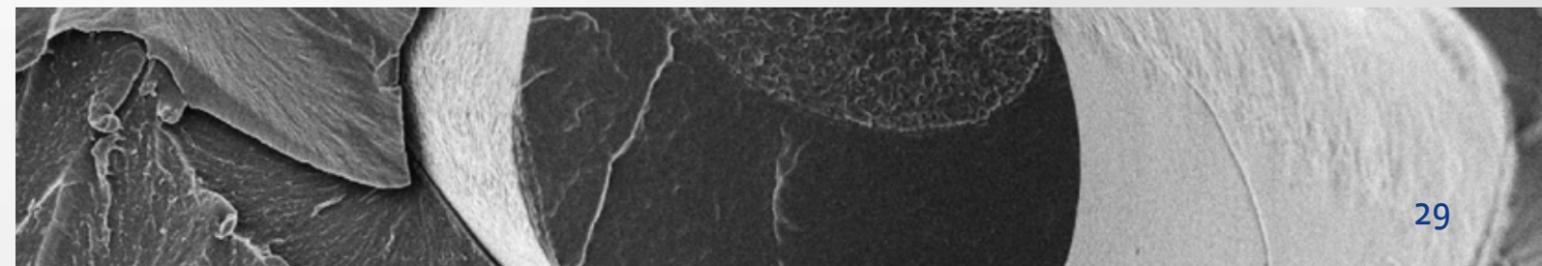
Core / Sheath
80 : 20



Segment Pie (16)
50 : 50



Excentric Core / Sheath
50 : 50



High Loft Voluminous Nonwovens in 3D Format.

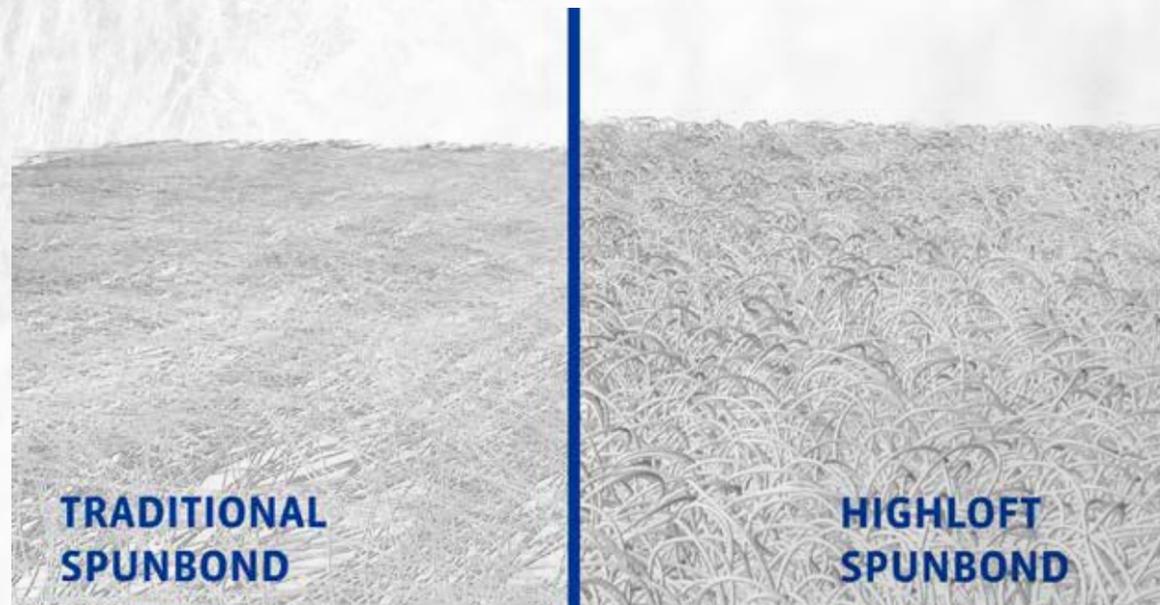
Special properties are not always visible with nonwovens. This is different with High Loft. Produce exclusive qualities which your customers can see and feel.

Create competitive advantages

Soft, voluminous High Loft nonwovens can compete with cuddly bear fur, and visibly enhance products, such as diapers or filters - for exclusivity that makes you stand out from the competition.

Benefit from the 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.



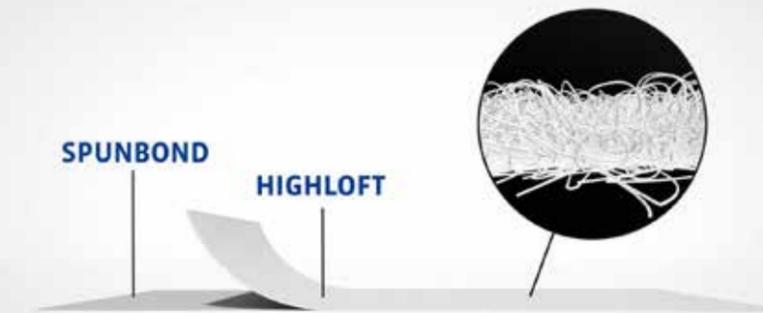
Technology

High Loft is based on the established Reicofil BiCo Technology, processing two different raw materials. The fibers crimp before laydown. Depending on the applied bonding, such as hot air or a special open calender pattern, the thickness and the softness of the nonwovens can be varied according to the needs of the application.

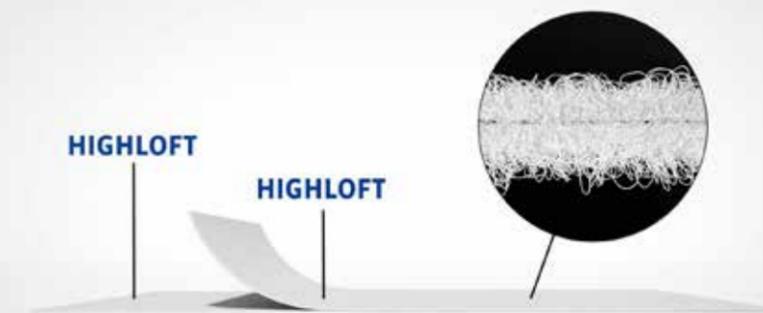
Applications

High Loft is the perfect choice for applications in the hygiene industry. Diapers or Femcare products, to name only some, can be upgraded considerably by using such soft and bulky spunbond nonwovens. But also industrial applications such as filtration or sound insulation can be targeted. Your options are manifold.

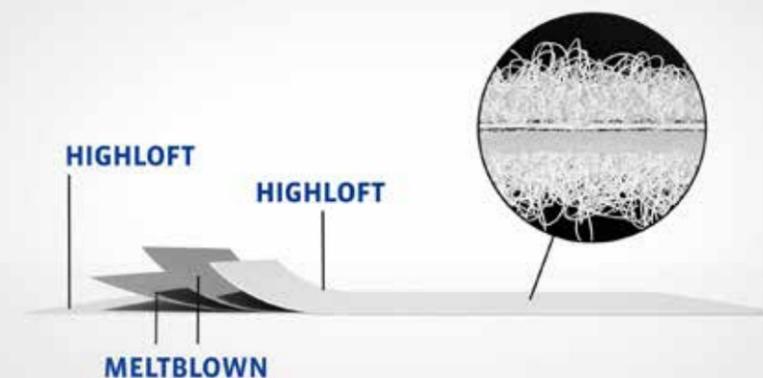
Semi High Loft: First layer uncrimped for elongation as low as possible



High Loft: All Spunbond layers are crimped for a bulky and soft touch



High Loft: Works also as an SMS composite



XHL Technology for Extra High Loft Nonwovens

If you want to become a sought-after and premium supplier on the market with extra soft and drapable nonwovens, then XHL is your gamechanger.

Manufacturers of baby diapers are looking for nonwovens that are particularly soft and adapt well to the baby's body shape. As a nonwovens producer, however, you have only ever been able to satisfy one of these properties, and thus have not been able to make your customers 100 percent happy.

With Reicofil XHL technology, you can now produce nonwovens that combine exceptional softness and super drapability in one material. The outstanding soft touch is unique and intended for use in the hygienic sector.

USE A PROCESS THAT PAYS-OFF...



Productive

Production speeds up to 700 m/min. without losing thickness.



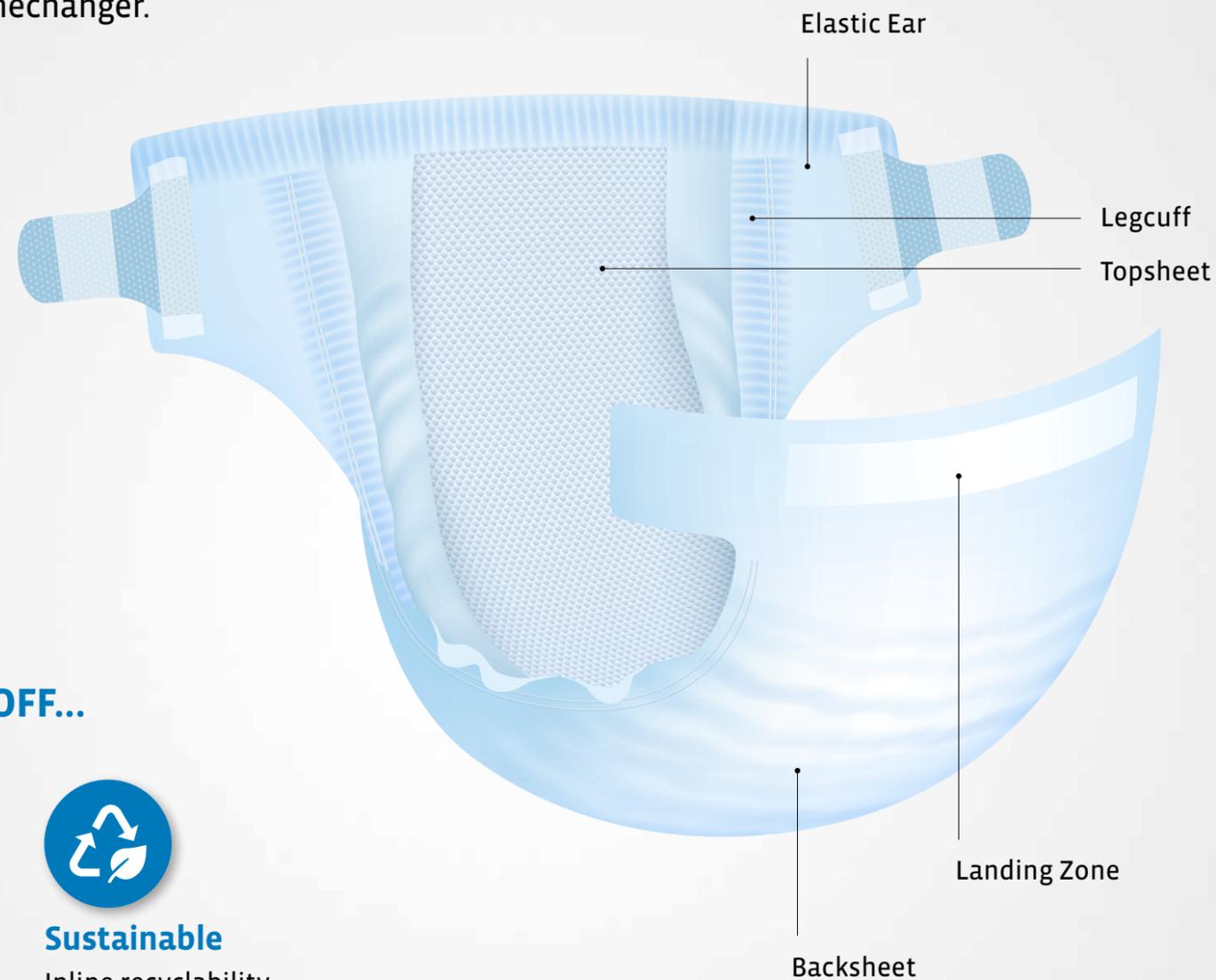
Profitable

Margins that help you to enhance your business success.



Sustainable

Inline recyclability and downgauging potential from 20 to 16 gsm.



...TO PRODUCE BETTER MATERIALS



Super Soft

Unique feel and softer than carded products.



Drapeable

Adapts perfectly to the baby's body shape.



Durable

Abrasion resistant - even when worn from active babies.



Good looking

Superior opacity and printing appearance.

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 fabric weight
- Processing organic raw materials
- Processing post-consumer waste
- In-line recycling production scrap
- Energy-efficiency packages

More information:

We would be delighted to give you a more detailed presentation of the Reicofil Nonwovens Technology Center and its capabilities.

Just give us a call!
T +49 2241 481-0



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

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@reifenhauser.com

Retrofits

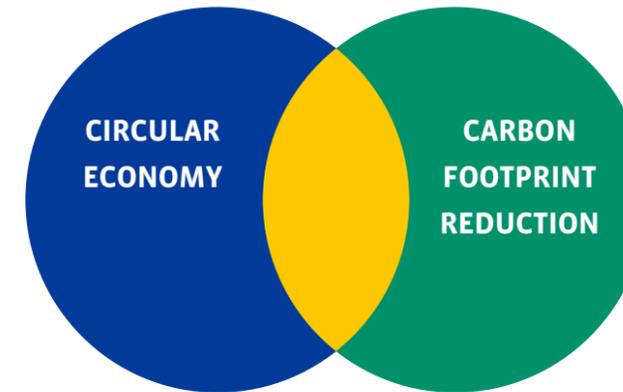
If your requirements change, upgrades and modifications are an economic alternative to a new investment. Our extensive portfolio gives you access to the technical innovations of our Research & Development division.

modernization-rf@reifenhauser.com

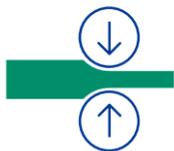
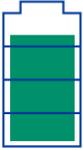


Sustainability

In the past, nonwovens were mainly required to be economical and functional. Today, sustainability is also in demand. But how can you find the right balance between all these demands? Sustainability should also be economically worthwhile. The solution should be based on clever technologies and an understanding of what materials and end applications must achieve on today's markets. We support you in transforming challenges into opportunities, so you can make your contribution to sustainability that also pays off for you in economic terms.



Establishing a circular economy is difficult with products such as diapers and medical products. We at Reicofil focus on carbon footprint reduction and help you to produce high performance nonwovens with less material and energy.

- 
Achieve material savings (downgauging)
- 
Process biobased raw materials
- 
Reduce scrap
- 
Save energy
- 
Manufacture recyclable products
- 
Manufacture products from recycle

Combining sustainability and profitability: Learn more



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

Our sales team looks forward to receiving your inquiries.

Reicofil

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