

Meltblown nonwovens

Advanced filtering solutions, made in Europe

Radimelt™ meltblown nonwovens are high performance fabrics made of ultra-fine synthetic continuous filaments with diameters in the submicron range (0.5-10 µm). They provide **excellent filtration efficiency** while minimizing airflow resistance, ensuring high **breathability** and **protection** in accordance with the highest standards.

In addition, they cater for a **wide range of filtration applications**, from face masks - surgical, FFP2 and FFP3 - to other air and liquid filter applications.

Bonded nonwoven composites can be produced to suit a number of application specifications.

Main properties

Polymers feed

- Polypropylene, Polyester, Polyamides, TPU and Sustainable polymers

High quality meltblown

- Homogeneous web characteristics
- Low filament size distribution, high hydro-head, high filtration efficiency
- Variable fibre and pore sizes to meet absorption, barrier and filtration specifications

- Can combine different properties thanks to double beam system (gradient structures)
- Bipolar electrostatic charge
- Weight: 5-150 g/square meter
- Net width: up to 160 cm
- In-line Cutting system
- Colours
- Additives: hydro-repellent, oleophobic, flame retardant

Dedicated in-house lab facilities available

Scanning Electron Microscope (SEM) and filter media test:

- test filter media conformity according to the main air filtration regulations
- develop highly customized products
- guarantee real time quality control

Our SEM special features:

- high resolution surface and section imaging
- automatic fibre diameter statistical distribution



Possible tests - filter media test rig

- Flat filter media efficiency test according to EN ISO 1822-1
- Simulation of standard EN 149/ EN 13274-7 with efficiency test on flat filter media
- Simulation of standard EN 14683 with efficiency test on flat filter media
- Full test according to ISO 16890
- Full test according to ASHRAE 52.2
- Efficiency test according to ISO 29463-3

Excellent technology, great features

Our state of the art technology from **Oerlikon** features:



Wide range of polymers

The flexibility of the polymer feed (polypropylene, polyester, polyamides, TPU or Sustainable polymers) allows us to offer a wide range of product portfolio.



Double Beam System

Our Double Beam System with operational net width of 1.6 m and a tight process temperature control offers:

- high-capacity production with reduced/no shots
- high basis-weight uniformity
- wide range of product widths
- low air-perm variation & improved coverage / hydrohead
- highest filtration efficiency
- gradient structures



Forming Table

Our Forming Table for easy clean/substitute and flexible formation allows product diversification:

- adjustable thickness (e.g. for filtration)
- adjustable air-permeability (hydrohead / pressure drop)
- variable fibre and pore sizes to meet absorption, barrier and filtration specifications



In-line calendaring

Our In-line Calendaring unit allows to modulate product porosity and increase filtration efficiency.



Electro-charging unit

Our Electro-charging unit ecuTEC+ allows to create materials that can be charged electrostatically with mono or bipolar charge, significantly increasing filter performance. A number of setting options allow selection of optimal charging method and intensity depending on filter application.



Composite structure

Our Multiple Unwinders allow to create up to 5 layers composite structures.

Wide range of spun and melt combinations



Applications



Air filtration



Liquid filtration



Oil Absorbency



Medical



Hygiene



Protective apparel

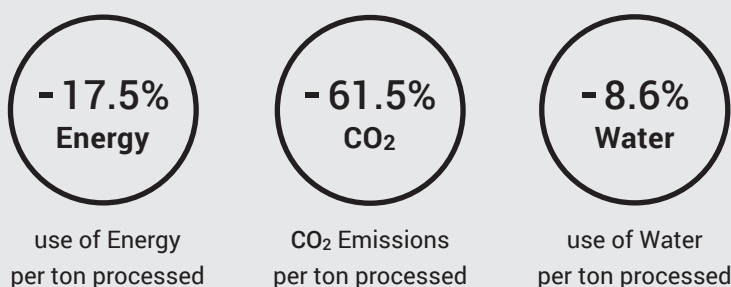
RadiciGroup. Inside your world.

RadiciGroup is one of the most active Italian chemicals manufacturers at an international level. RadiciGroup's diversified businesses operate worldwide and are focused on Specialty Chemicals, High Performance Polymers, Advanced Textile Solutions. Synergistic vertical integration, of polyamide production in particular, is one of RadiciGroup's strengths. Indeed, the Group has total control over its production chain, from chemical intermediates, such as adipic acid, to polyamide polymers, engineering polymers and synthetic fibres. RadiciGroup products are exported all over the world for use in the following sectors: apparel, sports, furnishings, automotive, electrical/electronics and household appliances.

Sustainability

Every day at RadiciGroup we work to make circularity our business model. We optimize the use of materials while fine-tuning our processes, eliminating waste, promoting recyclability from the earliest product design phases. We are always looking for low-impact solutions in terms of natural resources and energy. We rely on certified management systems for Safety, Environment and Energy to keep our companies in line with the highest sustainability standards.

Last 10 years' milestones:



Data Source: RadiciGroup Sustainability Reports



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