

Competitive drying solutions Efficiency, reliability, and sustainability



ANDRITZ neXecodry

Nonwoven dewatering and drying technology



▲ Operating principle of the ANDRITZ neXecodry drying technology

The neXecodry drying technology, a combination of dewatering and drying technology, was designed by ANDRITZ Perfojet to make significant reductions in the energy consumption of existing spunlace, wetlace (wetlaid and hydroentaglement), and airlace production lines. Nonwovens producers achieve better quality fabrics with higher bulk and no pattern degradation.

What is neXecodry

neXecodry drying technology is a combination of three specific factors: initial dewatering of the web after the bonding process, achieved by means of vacuum extraction (neXecodry S1), dryer/exhaust heat circulation and recovery (neXecodry S2), and the new design of the dryer itself (neXdry). neXecodry is a further developed technical solution in which priority is given to direct energy recovery (patent pending) with virtually no losses. neXecodry is coupled with web temperture and moisture control (auto-tune), which automatically optimizes the process parameters in real time. neXecodry is delivered with an on/off control mode that allows plants to see the benefits of using this system in production.

Quality obtained and maintained

In addition to the economic considerations, the quality of the nonwoven fabric is improved as a result of optimized drying and production stability.

It is important to understand what neXecodry does not do: it does not come into contact with the web, it does not alter the product properties, it does not degrade the web pattern, even with sensitive fibers, and it will not overheat and overdry the product. These advantages maintain perfect conditions for premium quality nonwovens in terms of bulkiness and softness.

▲ Energy consumption (thermal and electrical) for a

complete spunlace line producing 50 gsm

Benefits

Easy to use

Up to 35% energy savings

Premium quality nonwovens

Quick and easy installation

Available for new and existing lines

34% savings

neXecod solution

Small size, but economically huge

While neXecodry is available for new production lines, it was also designed to be transported- and installed easily in existing lines and thus to improve the economics of any spunlace, wetlace, and airlace nonwovens plant.

The neXecodry solution from ANDRITZ Perfojet is an innovative approach that meets the main market requirements: the best quality of nonwovens produced so far, a sound economic payback, and easy installation and maintenance.

ANDRITZ neXdry - innovative dryer for high-line capacity: neXline eXcelle



▲ neXdry drying technology designed for high line capacity at low energy consumption

neXdry is a through-air dryer designed and manufactured by ANDRITZ and available for spunlace, wetlace, airlace, spunbond, and spunjet processes at very high production speeds. It includes high evaporation capacity and low power consumption for electrical ventilation. neXdry is equipped with a completely new drum - the U-Drum (patent pending). It can be supplied with one or two drums depending on production characteristics. The U-Drum has an extraordinarily large open area of 96%, which

ANDRITZ neXdry Avantage - compact dryer for medium-line capacity: neXline aXcess



 neXdry Avantage: drying technology for medium spunlace capacity

neXdry Avantage drying technology is designed by ANDRITZ Perfojet and made by ANDRITZ Wuxi in China. This efficient dryer is the perfect solution to meet the demands of spunlace producers for a capacity range up to 12,000 t/a. This compact dryer, which can be integrated easily into the neXline spunlace aXcess hydroentanglement line, offers two types of heaters: gas burners or oil heat exchangers. It is supplied with the ANDRITZ rope insertion system, which allows easy web feeding into the neXdry Avantage through-air dryer.



Benefits

- Versatility
- High performance
- Extremely durable
- Roll-out design
- Quick and easy maintenance
- Rope insertion available
- Deckle bands to set precise working width

Characteristics

- 1 or 2 U-Drums
- Working width: up to 6 m
- Speed: up to 1,200 m/min
- U-Drum: 100% stainless steel
- U-Drum: large open area of 96%

permits high air flow at low pressure drop for extremely efficient drying. Its structural rigidity and integrity are such that it can be offered on lines with large working widths. Producers can optimize their neXdry equipment with neXecodry technology.

Benefits

- Compact design
- Low operating costs
- Quick assembly on site
- Easy to use

Characteristics

- Standard drum diameter: 1.6 m
- Working width: 2.5 or 3.6 m
- Speed: up to 200 m/min



ANDRITZ Perfodry 3000 - proven dryer

for various processes



Benefits

- High moisture removal
- High energy efficiency
- Deckle bands to set precise working width
- Roll-out design
- Easy maintenance

Characteristics

- Working width: up to 5.5 m
- Speed: up to 400 m/min
- Drum diameter: 2.8 m

Perfodry 3000 nonwoven through-air dryer with robust design

Two decades ago, ANDRITZ launched the Perfodry 3000 through-air dryer on the spunlace market. It soon became a reference in the spunlace industry and, then spread to the wetlace and airlace markets. ANDRITZ Perfodry 3000 removes up to 1,300 l/h.m of moisture at the high throughput speeds of modern spunlace lines. Designed to provide optimum drying, the Perfodry 3000 has a simple and durable

ANDRITZ has developed the neXaqua

high-efficiency dewartering device for use

in wetlaid and all kinds of hydroentangle-

ment processes. In combination with a

suction device, the neXaqua system

reduces residual moisture in the web con-

siderably and is especially useful at high

production speeds. This leads to a re-

design. Wet and dry temperature zones can be adjusted individually and dry nonwoven fabrics while maintaining web bulk and softness. The neXecodry technology can be integrated partially into the Perfodry 3000.

markable reduction in energy consump-

tion throughout the subsequent drying

process. The deflection-controlled S-Roll

technology provides an even dewarter-

ing effect across the entire material width,

irrespective of the line force applied.

The moisture profile zones (sides and

ANDRITZ neXaqua squeezer High-efficiency dewatering



neXaqua dewatering device

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