Product Range
Nonwovens
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World-class products for the Nonwovens market

Voith is a globally active engineering company with production and service sites all over the world. With our broad product portfolio we supply our customers worldwide with reliable products and services for the Nonwovens production.

The overall concept of Voith stands for the application of high-quality products combined with excellent service and support from a global source. We continuously invest in research and development of our products and our production sites. We are a full line supplier and achieve optimal fine-tuning of our products by focusing on long-term partnerships. Voith Nonwovens team delivers essential consumables for your Nonwovens production lines. Our competence and product portfolio is key for many successful applications.
Voith has by far the biggest experience with wet-laid Nonwovens lines with more than 80 installations around the world. Corporates like Glatfelter, Owens Corning, Hengfeng, Aralar, Jinfeng, Johns Manville, Nbond, St. Gobain, Neukölln, GAF, Albaad, Fiberteq are producing their Nonwovens on Voith Nonwovens lines. For efficient operation of their machines they can rely on the expertise Voith offers regarding fabrics, roll covers and service.

**Highly efficient system concept**

by Voith and Trützschler Nonwovens
Collaboration with Trützschler Nonwovens

Voith is also offering solutions for manufacturing wet-laid Nonwovens (WLS) in collaboration with Trützschler Nonwovens, the pioneer and leading partner for Nonwovens production. Once the Nonwovens has been formed by the HydroFormer, it is bonded by the AquaJet, the leading machine solution for hydro entanglement. The white water from the former is filtered via a shared water cycle with downstream production steps, treated and returned to the manufacturing process.
HydroFormer

The HydroFormer is a proven forming system for the production of specialty paper and wet-laid Nonwovens. It offers an especially homogenous sheet formation with long fibers and considerable flexibility especially for producing multi-ply end products.

Benefits

+ Production of multi-ply end products in just one process step
+ Possible use of a wide range of different raw material (pulp, synthetic or inorganic fibers)
+ Highly flexible and cost efficient raw material input: Up to 100% cellulose
+ Minimal fiber losses due to filtering of the white water
+ Decades of experience and technical market leadership in wet-laid processes
PrevoCut

Wet End Tail Cutter for cutting the threading tail and the final format on your machine.

Benefits

+ High pressure water jet cutting technology for perfect cutting results
+ Easy maintenance and service
+ Threading and format cut in one product for limited machine space
+ Fully automated, without any manual intervention
DuoCleaner Excell and Express

The DuoCleaner is an efficient cleaning system for the wet section. With up to ten rotating, fine high-pressure cleaning jets, it acts deep in the structure of the clothing.

Benefits

+ Clean fabrics using high pressure water up to 600 bar
+ Improve profiles with extra cleaning of affected areas
+ Safer for employees and the environment by reducing chemical cleaning
+ Waste water removal by save-all trays or extraction
+ Easy to maintain with quick change parts
+ Tailored systems with a range of cleaning heads and options
The tensioning devices and guides from Voith ensure smooth operation of the machine at all times. Over 6,000 installations worldwide speak for themselves.

**Benefits**

+ Smooth and reliable stretching and guiding of the fabrics
+ Low maintenance costs
+ Exact guiding, tensioning and tension measurement ensures a safe working place
The HDU Guide is a fabric and felt run controller that ensures directional stability of the clothing over a long period. It serves to noticeably reduce edge wear.

**Benefits**

+ Ensures directional stability of the clothing
+ Noticeably reduce edge wear
+ Highly wear resistant
+ Requires lowest air consumption
SensoTension DE ensures exact and reliable dryer fabric tensioning through separation of the tensioning and tension measurement functions.

**Benefits**

+ Reliable and exact fabric tensioning
+ Compact load cell design
+ Redundant signal for fabric tension measurement
+ No vibrations
Non-Contact Drying

Voith’s non-contact drying solutions provide the optimal drying and curing performance at minimal energy consumption and lowest space requirements.

Benefits

+ High energy transfer ratio
+ Even air and temperature distribution
+ Integrated process air system for compact design
+ Development of custom solutions
+ Requirement driven application of NCD technologies
Belt Dryer combination with IR Drying upgrade

Voith’s IR drying increases efficiency, productivity and product quality.

Benefits

+ Highest energy density
+ Space saving
+ Operation cost saving
+ Most precise control
Impingement Dryers/ Through-Air Dryers

Voith offers air drying and web guiding solutions across the whole temperature range up to 400 degrees.

Benefits

+ Air drying & stabilizing with up to 400 degrees
+ Reliable self-carrying modular construction
+ Compact and maintenance friendly concept
Combined Infrared and Air Drying

The drying concept combines infrared and air drying. As it recovers heat by means of thermal coupling, it is especially energy saving.

Benefits

+ Quality increase
+ Reduced operation cost
+ Reduced installation cost
+ Space saving
+ Higher thermal efficiency
Voith’s global manufacturing assets can deliver machine clothing in all widths to meet all Nonwovens production requirements. The yarn production site in Synstrand Voith produces and develops unique yarns with enhanced properties like lowest fibrillation tendency.

Types
- Very fine to coarse woven designs
- Woven single, double and multi layer fabrics
- Spiral fabrics with stuffer and without
- Press fabrics with seam or endless – Voith supplies uniform in-line, easy link, durable pin seams
Voith supplies a full line of custom products for forming, conveying, hydro-entangling and drying of Nonwovens webs. With the full product range from woven to spiral designs all kinds of different application specific needs can be addressed.

**Benefits**

+ High range of permeability  
+ Reduced contamination - less cleaning  
+ Highest abrasion resistance  
+ Reduced fiber bleed through  
+ Excellent formation, web control and web release  
+ Electrostatic dissipation  
+ Excellent web support with high contact area  
+ Proprietary yarn development with enhanced properties
Voith supplies rolls and roll covers in all dimensions and all materials - complemented by a full doctor blades product line and all kinds of mechanical roll service. Furthermore, Voith offers modular Calendering systems, e.g. Nipco or Econip, for a wide field of applications, whatever the process requirements are.

**Benefits**

+ Full roll cover product range to meet all requirements – Rubber / PU / Composite / Thermal coating
+ Run your production with maximum efficiency by perfect match cover & blade and professional roll service
+ Worldwide service (both in-house and on-site)
+ Retrofit Calender upgrade systems can boost older rolling process equipment into a next life cycle
+ Unique Calender systems for specific customer requirements are possible thanks to combinable modules
Air Systems

New machine technologies, but also the processing of different kinds of fibers and raw material qualities, call for customized air system concepts. Key criteria, depending on raw material or process stage, are to secure ideal climatic conditions for the type of production in hand and to separate, recycle and dispose of fibers and dusts.

Products
• Filtering and fiber disposal
• Process and air conditioning (humidifying/cooling)
• Hall ventilation
• Heat recovery
• Control room cooling
• Exhaust air treatment (thermal after-burning)
Air systems play a more and more important role for design and construction of production lines for Nonwovens. High speed and high efficiency machines require innovative and non-standard solutions for suction systems, filter- and air conditioning plants. Voith has developed tailor-made systems for the use in production lines for Nonwovens.

**Benefits**

+ Individual equipment up to 180,000 m³/h for installation outside and inside
+ Reduce the energy consumption of air, steam and condensate systems
Voith takes into account factors such as mill location, possible equipment positioning, optimum air distribution and air supply and noise and fire protection, as well as cost-efficient energy supply, ease of operation and a maintenance programme that incorporates a standardized spare parts inventory where possible.

**Benefits**

+ Optimal air distribution and air supply
+ Safe removal of heat and humidity
+ Suitable production environment
+ Active protection of the building
Voith considers the complete process ventilation for the design of the most economic heat recovery systems. Single- or multi-stage heat recoveries reduce operation cost and improve the ecological footprint of your operations.

Benefits

+ Energy savings
+ Reduction of CO₂ emission
+ Clean transitional surfaces
+ Pressure losses are reduced
Thinking critically. Thinking ahead. Making things even better. And at the same time being a partner you can always rely on. Our services include assembly planning and supervision, full assembly, commissioning and associated tasks like optimization through problem analysis at a process engineering and product quality level. We also offer training to improve the capabilities of your personnel or customized advanced training programs.

Our Services (extract):
- Measurement / Analysis
- Assembly
- Commissioning
- Training
- Maintenance / Inspection
- Audits
- Provision of spare parts
- Mechanical Roll Service