

Sustainable Solutions Begin with Gaston Systems

GASTON SYSTEMS





About Us

GASTON SYSTEMS DESIGNS AND MANUFACTURES ADVANCED FOAM-BASED COATING SYSTEMS FOR THE TEXTILES AND NONWOVENS INDUSTRIES.

Founded in 1998, Gaston System has more than 500 installations worldwide and an international reputation for high quality and innovative technologies to satisfy long term sustainability goals.

In 2022 Gaston Systems joined the Navis TubeTex group of brands. TubeTex was founded in Woodside, New York in 1929. The company supplied machinery for finishing “tubular” knit fabrics.

Since then, the customer base has grown and diversified into many areas outside the core “tubular” knit business such as wovens, open-width knits, nonwovens, technical textiles, home furnishings, carpet and plastic film.

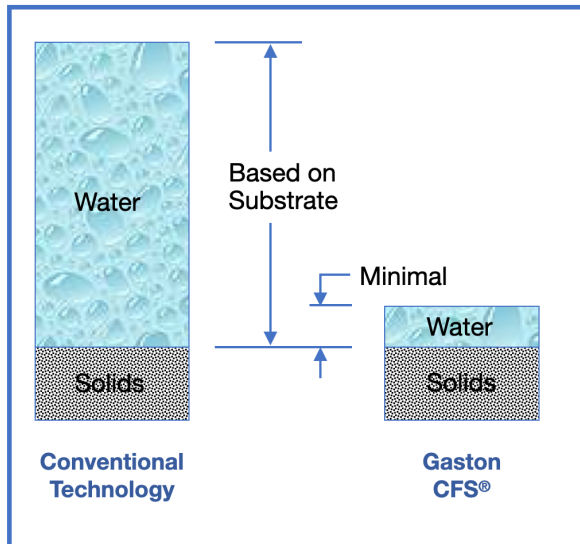
Today the company is flourishing through an ever increasing commitment to organic growth of new technologies and products with a special focus on “green” technologies that decreases water, chemical and energy usage for its customers.

In addition of internal product development, Navis TubeTex continues to acquire strategic companies to better serve existing customers while expanding its customer base.

Contact us for details of our newly renovated technology center. We have multiple, configurable pilot lines. Additionally our technologists and technicians are available for process and equipment support.

Precise Chemical Foam Application Solutions

TECHNOLOGY COMPARISON

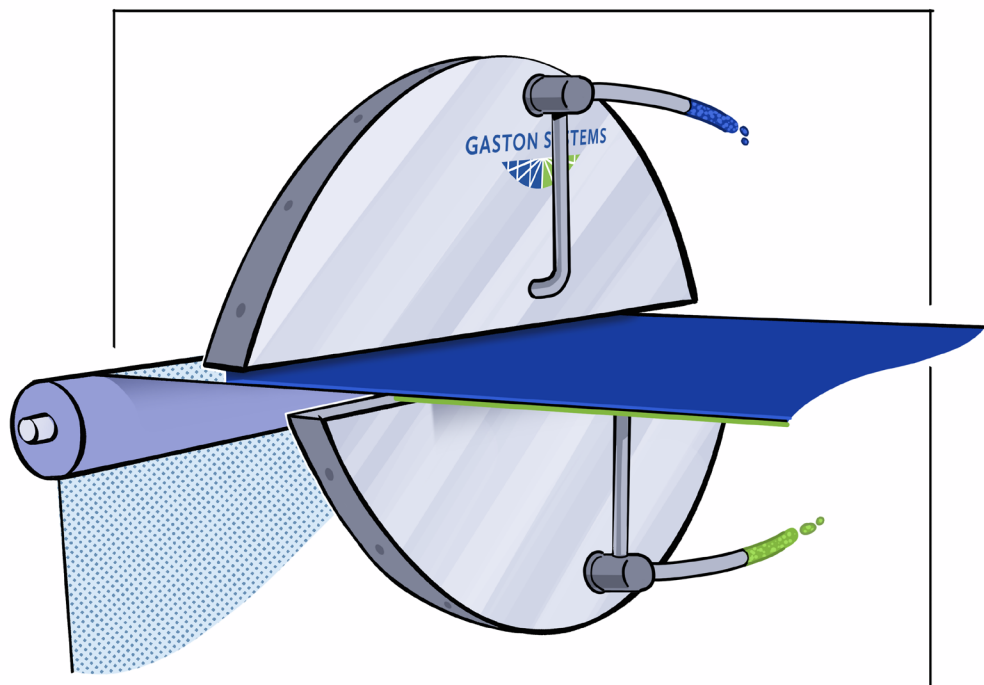


Using propriety foam generation and application systems, CFS® differs from conventional technologies where add-on is based on the substrate not the process.

Our system uses less water thereby reducing chemistry, waste treatment and improved, more efficient drying.



Low moisture Foam Applicator achieves exact, uniform application of chemicals to open-width substrate



Gaston Systems Low moisture Foam Application System achieves exact, uniform application of chemicals to open-width substrates. Our patented system for applying foamed chemistry, at low moisture levels, onto or into substrates such as textile, carpet, nonwoven, or paper webs leads the industry in chemical applications. The flexible system can impregnate deep into the substrate or just coat on surface of web. Single or dual application systems available.



The Microbubble

Key to the CFS success is the microbubble technology which provides a predictable and controlled foam. Only CFS confines and controls the foam for accurate and repeatable results.



The Applicator

Foam is applied under pressure onto or into the substrate. A unique parabolic applicator ensures uniform chemistry application across the width. This technology permits precise control of chemical penetration.




The Controls

Blending, foam delivery and application are managed by latest PLC, digital drives, control software and color touch screens. Preloaded recipe for standard applications are included. Additional process recipes are configurable. Factory 4.0, remote access, and IOT diagnostic capabilities.



The Foam Generator

The Foam Generator provides foam with the correct properties (up to 100:1 blow ratio). Optional injection system provides addition of additional chemicals or dyes.



11 meter wide CFS®
Foam Applicator used
for paper press fabrics

WEIGHTERS/BINDERS

- Polyvinyl acetate
- Polyvinyl alcohol
- Polyacrylic acid
- Acrylic latex, SBR
- Modified starch

FUNCTIONAL PRODUCTS

- Oil & water repellents
- Soil repellants
- Pigments & all other dyes
- Fluoro chemicals
- PCMs
- Anti-slip coatings
- Hydrophilic agents
- Hydrophobic agents
- Anti-static coatings
- Anti-microbial compounds
- Flame retardants

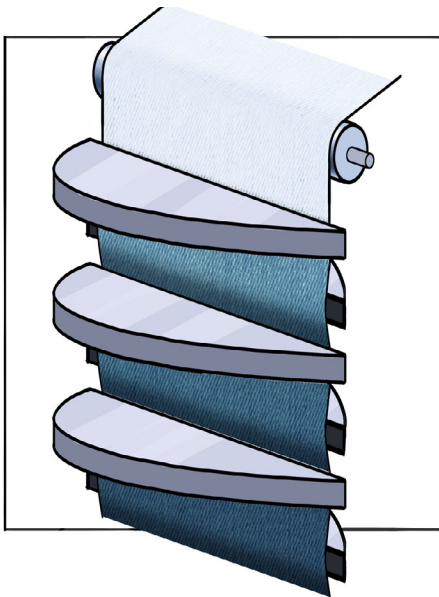
APPLICATIONS

- Automotive
- Carpet
- Moldable fabrics
- Filtration
- Wipes
- Knitted fabrics
- Medical
- Agriculture
- Apparel (woven, knit, nonwovens)
- Construction/Building
- Geotextiles
- Home furnishing
- Yarns

RESINS

- Glyoxals
- Melamine formaldehyde
- Urea formaldehyde

Dyeing Applications



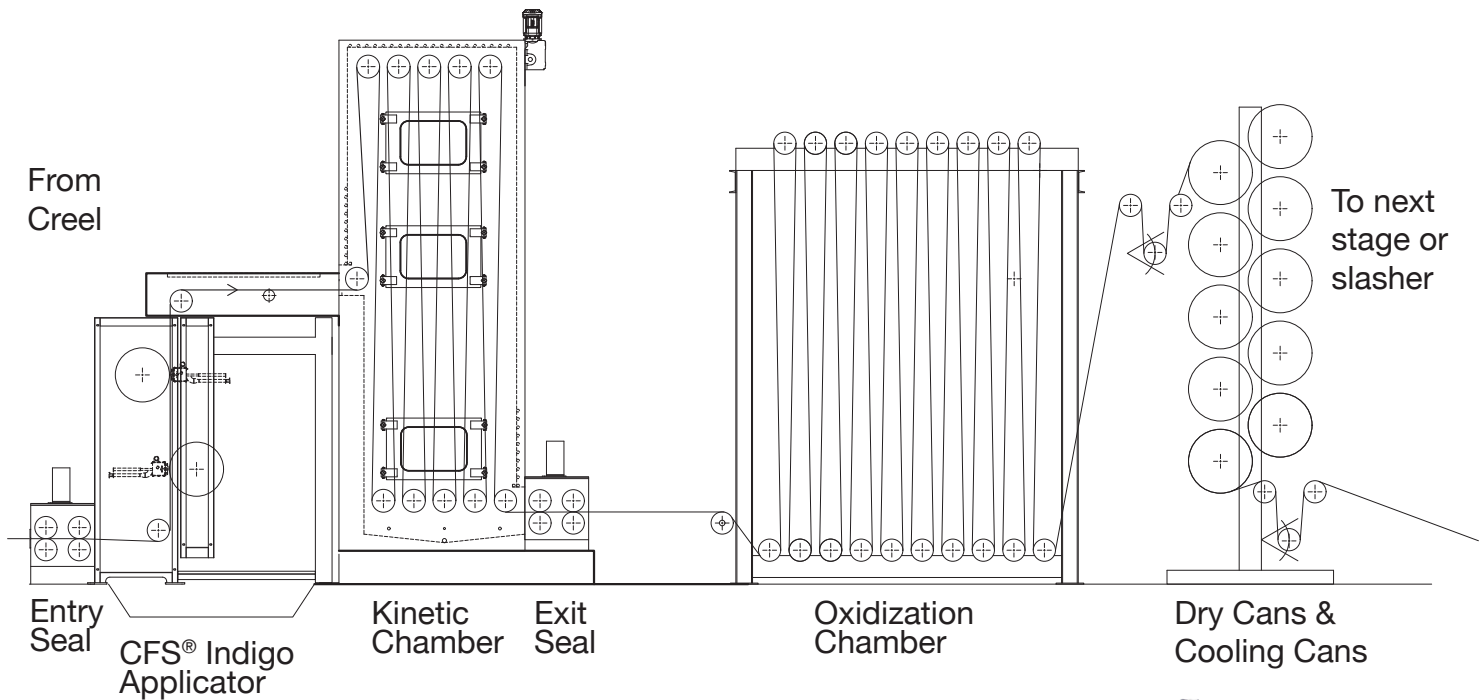
3 Applicators per side CFS®
Dyeing machine

Benefits of CFS® Dyeing

- No migration because of less add-on
- IR dryers eliminated for Pad Dry/Pad Steam processes
- One-side dyeing possible
- Over-dyeing of denim and other fabrics
- Especially suited for dyeing treatment programs (cationic and others).
- Inert and standard atmosphere systems
- Up to six applicators per side per pass for deep shade dyeing.

Single Stage CFS® Indigo

7



CFS® Indigo Warp Dyeing System

Warp Dyeing system using Patented Technology achieves same or better results with significant reduction in resources.

- Eliminates Washing
- Eliminates Caustic and Hydro
- Water Savings >20x
- Electricity Savings >20x
- Reduced mill floor footprint
- Higher line speeds



SCAN FOR VIDEO



CONTACT

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