

CFS achieves precise, uniform application of chemicals to openwidth substrates at wet pick-up levels as low as $5 \%$ and at speeds beyond 3,000 feet per minute.


Gaston Systems' unique foam generator provides controlled and repeatable foam density.


In the parabolic applicator, all foam bubbles travel the same distance from the entry point to the substrate.

## What is CFS?

CFS is a highly controlled, patented system for accurately applying foamed water soluble or water dispersible chemicals at very low moisture levels onto or into substrates such as textiles, carpet, nonwovens, paper and others.

## Benefits

Applying chemicals through a foam medium produces many benefits over traditional application methods.

- Significant chemical savings without sacrificing performance.
- Energy savings up to $60 \%$ due to less water to evaporate; pre-drying eliminated.
- Increased line speeds.
- Improved material aesthetics through more uniform chemical distribution, negligible migration, and elimination of after-treatment for softer hand.
- Controlled chemical penetration into substrate.
- Chemicals can be applied on back and face simultaneously.
- Often produces improved seam strength at reduced latex add-on rates.


## Unique Features

The patented CFS technology features unsurpassed capabilities:

- The foam generator achieves blow ratios of over 100:1 through a unique foamer head design.
- The parabolic applicator assures uniform application across the substrate width.
- The control system provides precision application and repeatability independent of line speed.


## Total Solution Approach

Gaston Systems can provide you with a total solutionequipment, controls, and chemical formulation-to meet your needs. All three components must work together harmoniously in
 application technology leads the industry. This system provides foam at the correct mixture and density-up to over 100:1 blow ratio-and applies it uniformly across the width without streaks.

## Controls

Precise application requires a high degree of control. Gaston Systems' PLC controls all application parameters and foam delivery is geared to range speed. The operator-friendly interface includes help screens and the control system incorporates safeguards to protect your process.

## Chemical Formulation



Correct chemical formulations are as important as the reliable performance of the machinery. With more than 20 years' foam application experience, Gaston Systems will assist customers in finding the right formulations to meet specific application needs. Tests performed on our lab unit accurately relate to and repeat under actual mill application conditions.

## Application

CFS has been used for coating, finishing, pigmenting, and moisturizing a wide variety of substrates. Its unique ability to precisely control add-ons and penetrations allow replacement of pads, vacuum systems, sprays, kiss rolls, print screens, knife coaters, and other wet finishing techniques. A few examples of its flexibility are shown here:

1. Latex application to nonwoven
2. Latex treatment to back of upholstery material
3. Latex coating on drapery fabric
4. Deep, one-sided penetration of binder into trunk liner material, providing a moldable product with a soft outer surface.
5. Binder applied completely through filter material
6. One-sided resin finishing of apparel fabric
7. Yarn treatment in slashing application
8. Wetting agent applied to diaper material
9. Pigment and finish applied to each side of nonwoven with very slight penetration


At Gaston Systems, we take pride in every CFS installation. Over 20 years' investment and development of CFS as a complete systems has made it the leading wetfinish application technology focusing on high quality, flexibility, conservation of resources, increased production rates, and protection of the environment. You will be delighted with your CFS system operation and the competitive advantages it will bring you.


1. On-the-frame upholstery coating
2. Schematic of CFS applied in slashing (patent pending)
3. On-the-frame finish application
4. Latex Coater
5. 220 " applicator used on nonwovens


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