



Great flexibility, unique products

Stork Prints CFT coating and finishing system

Stork Prints

spgprints®



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In today's highly competitive market, delivering ultimate flexibility, superior quality, and unique end products is no longer a choice. It is a must. Stork Prints gives you a competitive edge. With, for example, our CFT coating and finishing system. An extremely versatile and multi-functional coating and finishing system, which offers you excellent reproducibility, top quality, and the opportunity to add unique features to your products.





Great flexibility, unique products

The Stork Prints CFT is compatible with an exceptionally wide range of chemicals, substrates and techniques. Its modular design makes it easily adaptable to specific applications or future developments, and simplifies integration into many different production line types. Also, it is extremely accurate, very easy to operate and highly cost-effective.

[Rotary screen technology: various applications, easy reproduction](#)

Much of the CFT's superior performance and flexibility has to do with its incorporation of rotary screen technology. It enables you to use stable, meta-stable and unstable foam as well as paste and glue. Printing, coating and finishing, dot coating... the possibilities for variation are endless, but at the same time processes are strictly controlled, and results can easily be reproduced. Also, with rotary screen technology, substrates are led through the machine with virtually no tension, which enables you to use the most delicate, flexible and sensitive fabrics. For extra flexibility, you can have a knife coating system added to your Stork Prints CFT. You can also start out with just the knife coater and equip it with rotary screen technology later.

[Reliable solutions, excellent support](#)

Stork Prints not only offers the CFT, which can be tailored to your specific needs, but also a broad range of screen types, in terms of mesh size, thickness, percentage of open area and hole diameter. It enables you to accommodate many different types of substrate, optimally control the amount and penetration rate of chemicals, and therefore to produce an endless variety of applications on a single machine. All of these products come complete with the market know-how and excellent support of our worldwide network.

Our fully equipped Technology Centre in Boxmeer, the Netherlands, enables you to test new applications and develop products in a proper production environment, in close cooperation with both Stork Prints specialists and other leading suppliers, such as chemical manufacturers.

Techniques and applications



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Paste based printing and coating

The Stork Prints CFT can be used for many different types of paste based coating and finishing. By using an engraved screen and coloured printing paste, for example, you can turn it into a one-colour printing machine. But it also enables high-quality coating of low-weight add-ons, and the manufacturing of products such as air bags, sportswear, waterproof clothing, and tablecloths.

Dot coating

Another unique feature is dot coating, which you can use to apply glue in dot patterns on interlinings and laminating material. This not only results in glue savings, but also enables you to keep laminated fabrics breathable because there is no solid layer of glue in between. To achieve a better grip, you can use screens with a random pattern. You can also use dot coating to create anti-slip patterns.



Foam based coating and finishing

The use of instable foam enables extremely even distribution and therefore the application of very small amounts of chemicals. This can result in significant chemical savings and more economical processes. It also offers the opportunity to develop new types of applications. For example, one-sided impregnation. Instable foam based finishes require less drying time, which considerably increases production speed. You can use the Stork Prints CFT with three different types of foam.

1. Stable foam

For applications such as black out coating or for lamination with membranes. In this case foam is a micro porous adhesive structure that keeps the laminated product breathable.

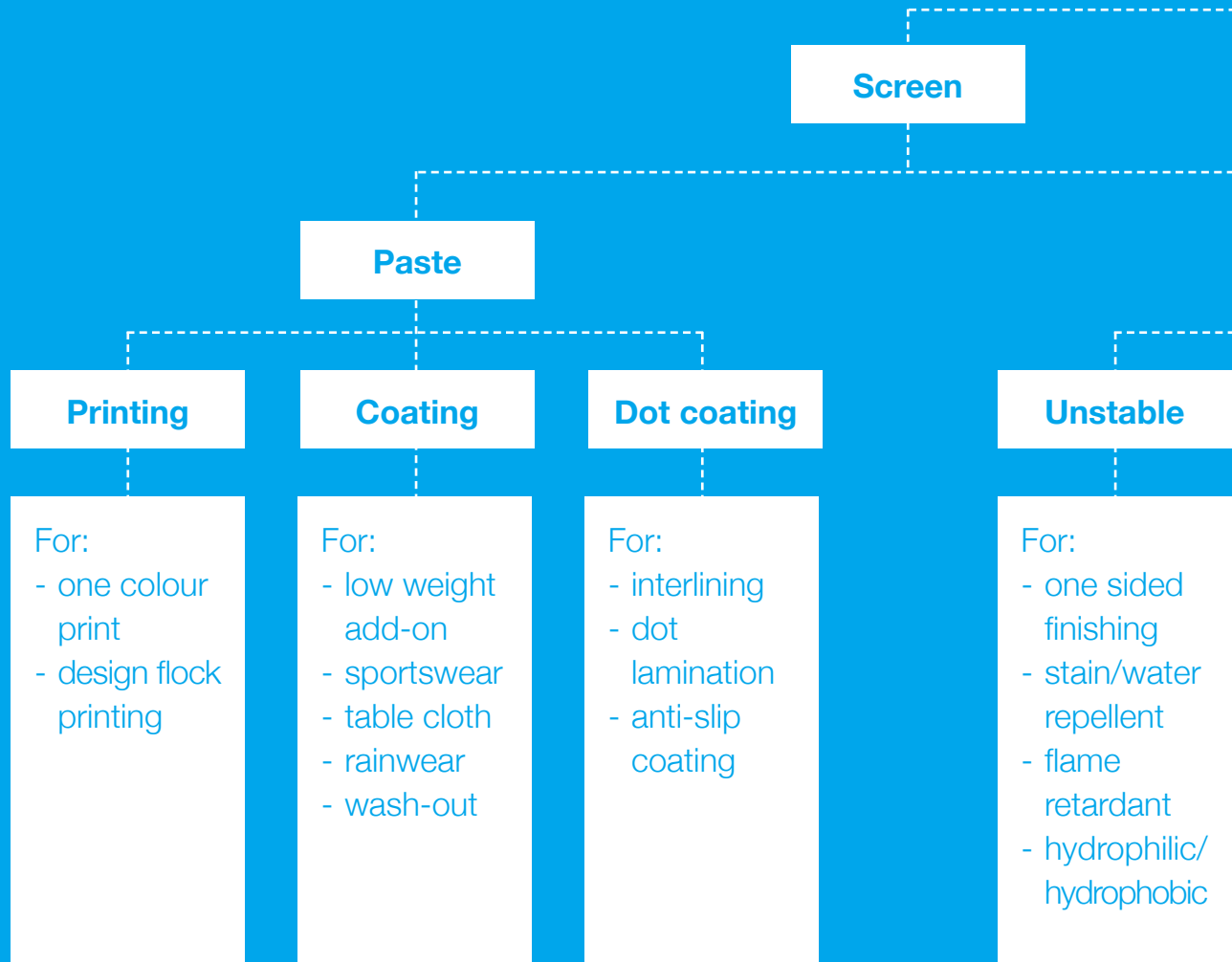
2. Instable foam

In this case foam is used only as a carrier for impregnation chemicals. The foam is very weak and is due to collapse shortly after it is added to the substrate. Only the impregnation chemicals remain evenly distributed on the substrate. Instable foam can therefore be described as a minimum add-on process. Instable foam can only be supplied to the machine in a reproducible way under pressure. For this process Stork Prints has invented the unique closed squeegee system.

3. Meta-stable foam

The characteristics of meta-stable foam lie between stable and instable foam. It should generate a layer of binder, but should also penetrate into the substrate. This foam is for example used for back coatings of upholstery fabric or mattress drill.





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CFT system

Knife

Foam

Paste

Foam

Meta-stable

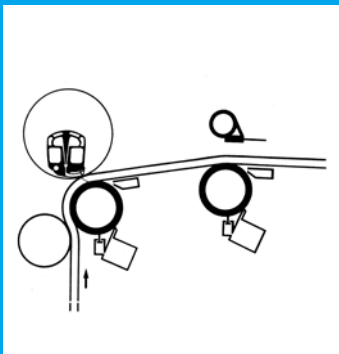
Stable

- For:
- shift resistant
 - back coating
 - pile bonding

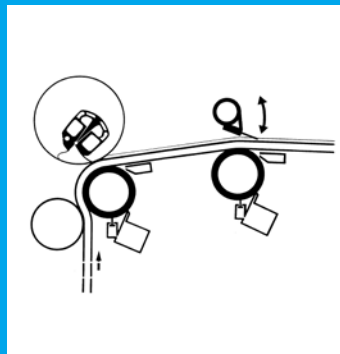
- For:
- membrane lamination
 - PUR coating: leisure wear

- For:
- coating
 - blinds
 - shower curtains
 - umbrellas

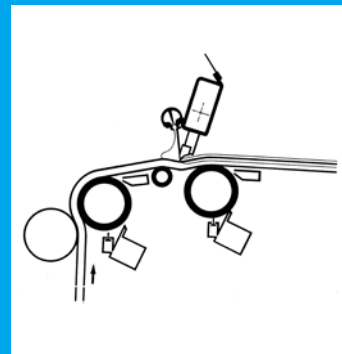
- For:
- stable foam coating
 - back-out



Foam finishing

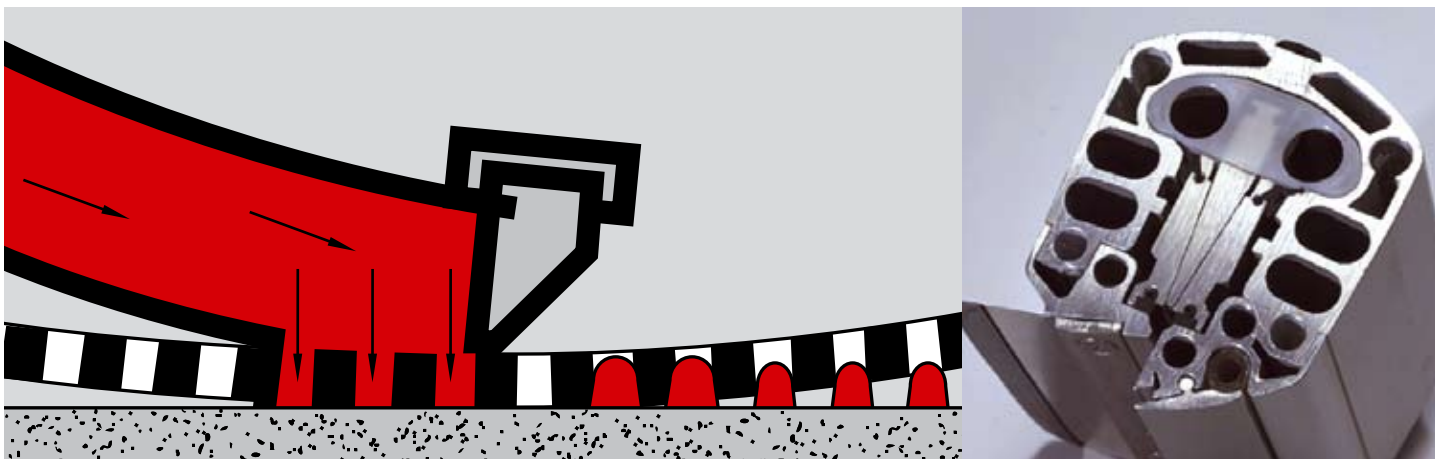


Paste/foam coating



Knife coating

Three squeegee types for tremendous application diversity



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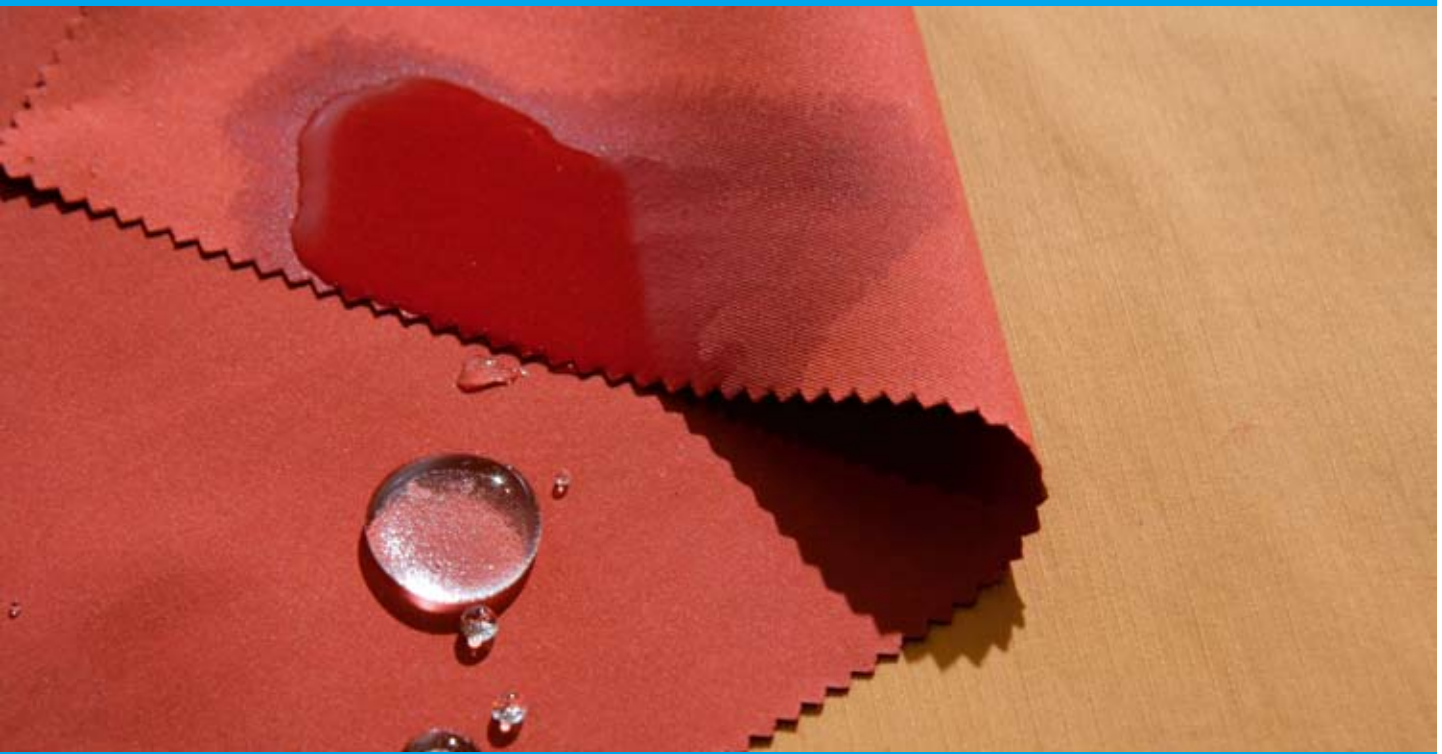
The Stork Prints CFT is compatible with three different squeegee types, which gives it exceptional flexibility and enables a tremendous diversity of applications.



Easy operation
The Stork Prints CFT is easily operated with a touch screen panel. It enables you to accurately adjust parameters such as knife and squeegee settings, which improves reproducibility and operation errors.



No more paste or foam leakage
The Stork Prints CFT has a dedicated rotary screen drive, which keeps the screen rotating even when there is no web transport, thus avoiding paste or foam leakage.



1. Closed squeegee system.

The consistency of instable foam is too fragile to withstand the shear stress of a conventional application system. By trying to apply it with shear stress as generated in open blade or roller systems or between two gearwheels it would break down uncontrolled. There is only one way to handle and to transport it: under pressure, in a closed distribution system. Stork Prints developed a unique system for applying unstable foam, the closed squeegee system. This type of squeegee is equipped with two blades, which act as a distribution slot. The two blades at the end of dosing cassette guide the foam under pressure to the substrate. The blades are slightly bent and maneuvered in an almost horizontal position, which ensures smooth contact between the squeegee blades and the screen. The upper blade has a Teflon tip, which forms a right angle with the screen. To keep the blade in close contact with the screen an airflow bag, inflated with pressurized air, is positioned above the blade. This way the foam is kept under pressure, which enables a reproducible and controlled add-on of unstable foam.

2. Open slot system

For steady foam and paste applications that require a very steady level, Stork Prints has a patented open slot squeegee system into which the paste is fed from two sides. This way, paste or foam is optimally distributed across the entire screen width, regardless of the flow speed. The flow rate is controlled through a separate paste/foam processor. The squeegee slot is only open in the position of the substrate. Two inflatable tubes that can be adjusted depending on the substrate width, seal the edges.

3. Standard squeegee system

The standard version, which consists of a single squeegee, is perfectly suitable for applying pastes with a normal flow behaviour. In this version the paste level is controlled by a level sensor.





Use the Stork Prints CFT coating and finishing system to add value to your products

❑ 10

Relief applications

Relief textured car interior fabrics, anti-slip dots, nonwovens with spacer dots. Numerous technical textile products require relief printing or coating. Of course, you can also use this to add an attractive look (and feel!) to fashion products. The more relief an application requires, however, the harder it is to produce.

The amount of paste needed for relief printing obviously requires extremely open screens. In normal printing conditions, a screen will not let any paste through until it is squeezed through by a squeegee blade. As screen holes exceed the size used for traditional printing, however, the screen is no longer able to withstand the paste's pressure. The pre-flow, paste flowing out of the screen prior to reaching the tip of the squeegee blade, stains the outside of the screen, and when it reaches the counter roller, it is squeezed out onto the substrate.

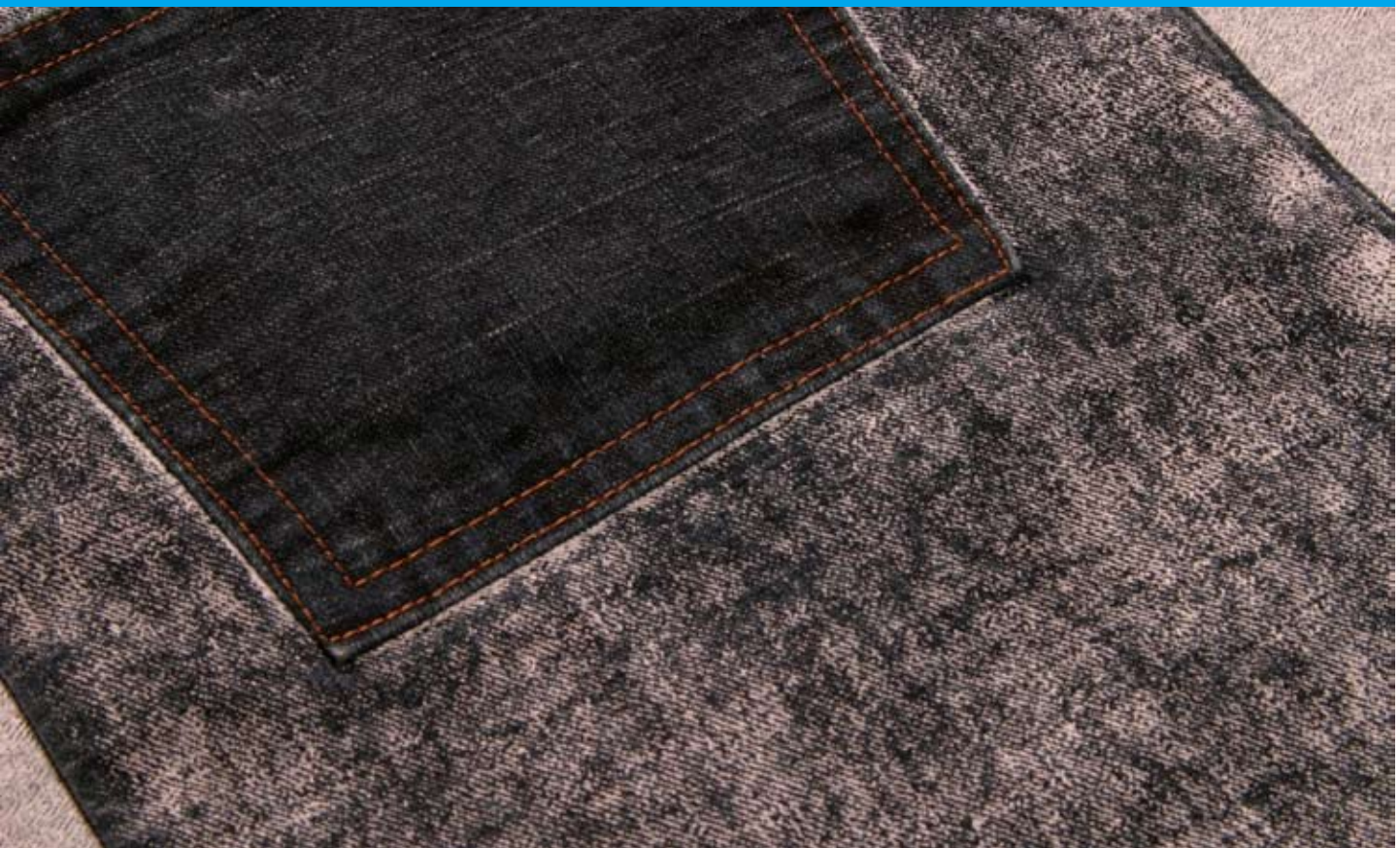
To solve this problem, Stork Prints has developed the unique closed squeegee system, which keeps the paste as well as the stable foam between two blades, and guides it properly to the right application point. If you use this system in combination with the CFT coating and finishing system, you are guaranteed ultimate process control and exact reproducibility.

Denim coating applications

As jeans fashion changes extremely quickly, a great deal of flexibility is required on the part of denim producers. Coating technology, an increasingly popular method for creating special designs and effects on denim, enables you to keep up with jeans fashion season after season.

Screen coating in particular offers some considerable advantages over other coating technologies. As the screen and the fabric run at the same speed, there is no friction between them, and not too much tension on the fabric. Therefore, both very light and very heavy fabrics can be processed on the same machine without any problems. You can use rib-like or other structured fabrics without the risk of threads and fibres being ripped. Stretched denim and other sensitive fabrics are safely and easily processed. What's more, seams, holes, slacks, selvages or damaged fabrics will no longer cause production interruptions.

Unstable foam is a relatively new denim application technique, which offers some additional benefits. Unlike conventional paste coating with air knife technology, unstable foam enables you to add subtle fashion and colour effects. As you can limit chemical penetration to the top of the substrate, you can easily manipulate the effect by a subsequent washing process – sometimes even with fewer washing cycles – and at the same time maintain a very soft hand.



Stork Prints

Stork Prints is the leading provider of system and application know-how in textile and graphics printing processes as well as two-dimensional, high accuracy, metal precision products.

For further information, please visit www.storkprints.com.

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