

# Expertise in screen making

Andreas Ferndrigger describes 50 years of screen printing innovation.

Founded in 1967 by H U Grünig, Grünig-Interscreen is celebrating 50 years of dedication to automating and standardising the screen making process. The company's product range has been vastly extended under the management of Marcel Grünig and Andreas Ferndrigger since 2002 and having entered a strategic partnership in 2011 with SignTronic AG, offers customers tailored overall solutions for the perfect printing screen.

## AUTOMATION EXPERTISE

When applied to screen manufacture, automation is setting standards in the field of almost operator-less screen preparation, involving various processes. Grünig has been designing equipment and systems for automating the screen preparation processes for 50 years. In recent times, the company's engineers have systematically worked towards the objective of combining various processes by integrating them into an in-line solution.

The extensive product range covers all screen sizes from 100mm x 100mm up to XXL screens measuring 5m x 12m. In this context, it does not matter whether the solutions are required for the industrial, textile or graphic markets, as the ultimate goal in state-of-the-art screen

The automatic in-line G-COAT 415 A40 system.



The latest model of G-WASH 170 XM modular machine.



printing will always be the perfect screen. Products cover stretching, gluing, coating, drying, washing, developing, preparation and water treatment.

## STRETCHING AND GLUING

Ever-growing requirements relating to printing quality can only be met if the industry succeeds in achieving increased mesh stretching precision and fastening. Printers working with smaller screens often need large quantities in top quality and within the shortest possible time. Until now, the gluing process based on two-component PU glue was extremely cumbersome and time-consuming. And the productive cycle of many mesh stretching machines was hampered because of an excessively long reaction time of the glue.

The recently developed G-STRETCH 275 UV BOND LED solution sets benchmarks in the automation of stretching and gluing processes. The installation can be flexibly adapted to the screen dimensions, regardless of whether only one or several smaller screens need to be treated simultaneously. It goes without saying that all available meshes can be used, including polyester and stainless steel, in addition to precoated SEFAR PCF mesh. The mesh is directly inserted from the reel and fastened

in the required dimensions by means of a rapid and simple procedure. Then the stretching process is initiated and the mesh is automatically tightened to the final value, according to pre-programmed parameters.

G-STRETCH 275 UV BOND LED also features fully automatic mesh gluing with UV glue. The frames are prepared with quick-reacting UV glue. In a subsequent step, the UV LED exposure head moves over the screen frames, thus curing the glue. This provides the benefits of a considerably faster gluing process and increased output, as well as improved screen quality.

An outstanding characteristic of this overall solution is the possibility to use pre-coated SEFAR PCF mesh directly from the reel. Until now, the automatic gluing of PCF mesh used was a complicated and time-consuming activity. ■



The G-STRETCH 275 UV BOND LED offers a maximum degree of automation, as well as standardised stretching and gluing processes.



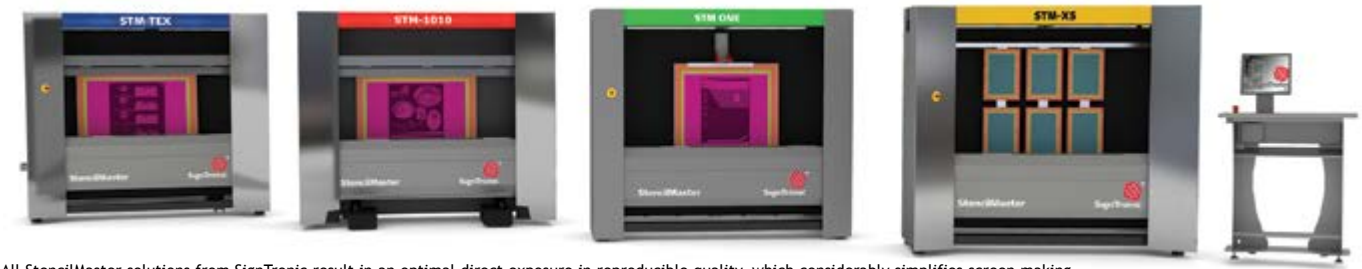
G-STRETCH 270 SPECIAL with additional support to insert the frames.

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All StencilMaster solutions from SignTronic result in an optimal direct exposure in reproducible quality, which considerably simplifies screen making.

# Screen printing - better than ever

According to Andreas Ferndrager, screen printing continues to offer unparalleled possibilities.

Screen manufacture is the crucial weak point of the screen printing process. Far too often, users seem to forget that this process is decisive for print quality, print output and especially, their associated costs.

Along with partner Grünig-Interscreen, SignTronic dedicates its activities to the screen manufacture and preparation processes. Under the slogan 'the perfect screen', together they offer solutions that can be summarised by the terms 'technology' and 'automation'.

In the field of CtS direct exposure, technology is indispensable

for forward-looking companies.

The purpose of this technology is to eliminate various screen preparation processes and – based on the artwork data – to expose the screens directly and without any deterioration of quality, without film, montage, vacuum frames etc.

This advanced screen printing technology offers two essential aspects that should be kept in mind:

- Considerably improved printing qualities with smooth transitions/continuous tones, sharp details and lines up to photo-realistic prints that look digital but have actually been achieved by screen printing.
- Substantially lower screen costs and – thanks to shorter set-up times – reduced costs result for the overall process, as well as increased printing output.

## WIDE PRODUCT RANGE

SignTronic has been offering CtS direct exposure technology for more than 13 years and now delivers the third generation of StencilMaster equipment. Now smaller, front loader versions are also available: STM-ONE for smaller screen quantities in sizes up to 1200mm x 1200mm and STM-XS for very small screens for multiple image production with up to 16 screens simultaneously.

## INDUSTRIAL EXAMPLE

In this wide field of applications, screen printing has an opportunity to demonstrate its full potential and strengths. Regardless of whether the articles to be printed are glass, porcelain, labels etc, screen printing always offers the optimal solution. An indispensable necessity, however, is a controlled screen making process.

As a market leader in this field, SignTronic is in a position to offer a distinctive quality in HR technology, with a resolution of 2400 dpi. For the highest standards, model STM-1010HRC is offered. This equipment is a modular construction, employing standalone or in-line concepts and a resolution of 2400 dpi. For ceramic applications, an option is provided for photorealistic prints and the finest half tones.

## LATEST SOLUTIONS

SignTronic offers state-of-the-art technology for screen printers, advocating solutions for improving decisive processes:

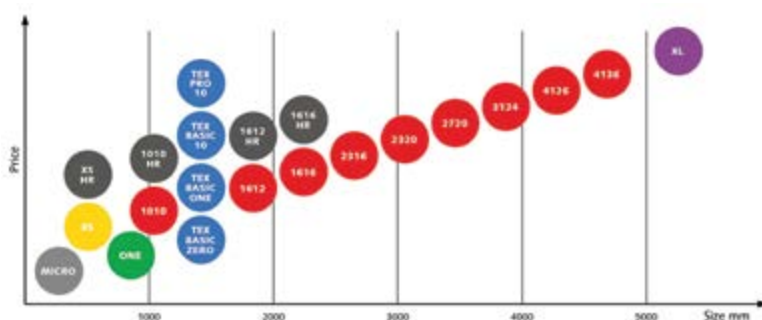
- CtS direct exposure for film-free screen making.
- Independent from film and film exposure.
- Significantly improved printing quality.
- Considerably lower screen costs.
- Noticeably fewer process steps.
- Personnel reductions.
- Improved workflow.
- Enhanced production capacity.

The technology of digital direct exposure is the decisive process when it comes to modern screen making. But SignTronic goes one step further: In co-operation with Grünig, automation solutions for screen making are offered.

The significance of the 'perfect screen' continues to grow, with CtS technology and automation of ever-increasing importance. And the term 'the LAB', coined at SignTronic a few years ago, is turning into a benchmark that will successfully make its point. The company is especially pleased to note that this trend is evident in all important market segments; industrial and textile, as well as in graphic screen printing. ■



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SWISS SCREEN TECHNOLOGY 

# FOCUSING ON THE PRINTING SCREEN



## AUTOMATION

sets new standards in screen making. Whether you need solutions for **Industrial**, **Textile** or **Graphic** applications – the core of modern screen printing is always «the perfect screen».

# Grünig

STRETCHING  
COATING  
WASHING

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**FESPA  
2017**  
8–12 May 2017  
Hamburg/Germany

SWISS CTS TECHNOLOGY 

# DIGITAL CTS DIRECT EXPOSURE BROUGHT TO PERFECTION



## TECHNOLOGY

the decisive factor permitting direct exposure on the screen, without compromising on quality. Your advantages? Elimination of processes, **film-free solution**, improved printing quality and **lower screen costs**.



# SignTronic AG

DIGITAL  
SCREEN  
MAKING

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