

Setting standard in screen making

Andreas Ferndrigger discusses the latest advances in screen making.

For many applications, the screen printing process continues to be a method that offers unbelievable possibilities. In far too many instances, screen printing sets itself unnecessary limits, eg by not systematically optimising the individual processes, by failing to benefit from the latest state-of-the-art and by forgoing automation.

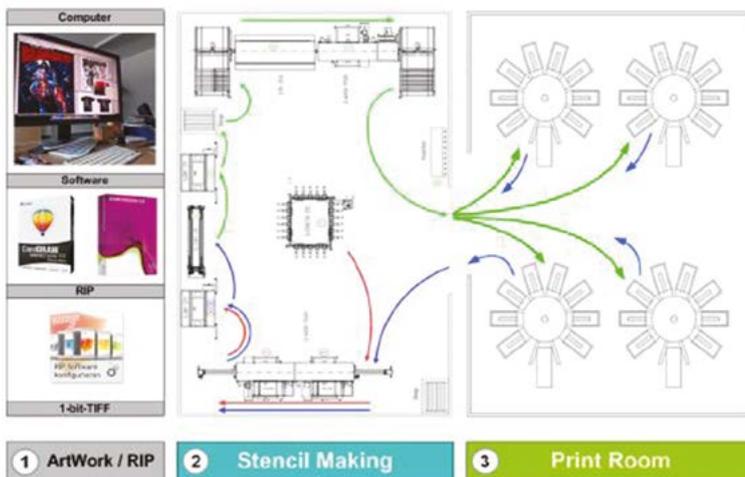
Screen making is one of the elementary factors in the screen printing process, as this is the crucial point that determines printing quality, printing output and – essentially – costs. Since their creation, Swiss manufacturers GRUNIG and SignTronic have focused their activities on screen making. Under the motto 'the perfect screen', they offer solutions that can be summarised in the following two terms: Technology and automation.

For almost 50 years, GRUNIG has offered equipment and machines for automating the screen making procedure. In recent times, the company has systematically concentrated its efforts on an optimal interlinking of the various processes by introducing in-line solutions to the market. It makes no difference whether the solutions are destined for the industrial, textile or graphic printing market segments. Automation sets the latest standards in the sector of almost operator-free screen making, involving a variety of processes.

The product range available covers stretching, gluing, coating, drying, washing, developing, preparation and water treatment. Together, GRUNIG and SignTronic have developed the LAB concept, where screen making is positioned as an important link between the artwork/RIP and printing departments.

COATING

In the coating sector as well, the trend towards increased automation continues unabated. A growing number of customers are standardising their screen sizes, which considerably facilitates the implementation of an in-line coating process.



In the LAB concept, screen making is positioned as an important link between the artwork/RIP and printing departments.

The same is true where the use of coating emulsion is concerned. The shorter the list of required parameters to be taken into account, the more simple the automation will be.

An automatic and thus standardised coating should already be a matter of course, as this is the only way to meet stringent requirements. If a customer wants to use a CtS direct exposure system, this means that he will automatically have to resort to automatic coating.

With its G-COAT 415, GRUNIG offers a modular concept that covers virtually all customer requirements, regardless of whether they include standalone, front or side

loader versions, fully automatic in-line solutions with emulsion replenishment, cleaning of the trough edges, feeder technique and cabinet dryer G-DRY 590.

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 pre-coated SEFAR PCF mesh. The mesh is directly inserted from the reel and fastened



Pre-coated PCF meshes, ready for the UV-LED exposure process.



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

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.■



Automatic in-line G-COAT 415 A40 system, implemented for a customer in the USA.

ABOUT THE AUTHOR:

Andreas Ferndrigger is Sales and Marketing Director at Grünig-Interscreen

FURTHER INFORMATION:

Grünig-Interscreen AG, Schwarzenburg, Switzerland
tel: +41 31 734 2611
email: fa@grunig.ch
web: www.grunig.ch

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

Grünig-Interscreen AG · CH-3150 Schwarzenburg
www.grunig.ch · mail@grunig.ch

**DRUPA
2016**
May 31 – June 10, 2016
Düsseldorf/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

Sign-Tronic AG · CH-9443 Widnau
www.signtronic.com · info@signtronic.com