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# A VERY SPECIAL LIMITED EDITION

Collaboration of companies adds to the creation of the 'Soul Bird'

The Print House Group, based in Burgess Hill in the South East of England, is accustomed to taking on challenges in screen process printing. When Peter Kiddell, a Director of the FESPA UK association contacted Graeme Richardson-Locke to ask if the printer would like to support the Screen Printing Now Conference by printing a limited edition art print for its delegates, he agreed willingly.

As a long-standing member of the FESPA UK Association it offered the opportunity for The Print House Group to raise its profile. It

also gave the company the occasion to work with the sponsors of this exciting event and presented a great chance to showcase the special qualities of screen-printing.

It was during the early stages of discussion that Richardson-Locke introduced the idea that Sanna Annukka would be a great designer to collaborate with on the project. Her appreciation of screen-printing was really useful as the brief was considered and there was no doubt that her distinctive style would appeal. In addition, her ability to get the best from the process was a certainty.

## SCREEN-PRINTING BENEFITS

The final design would need to focus on some of the key benefits of screen-printing. It had to include a large area of opaque white ink to be printed on bright gold Mirri Board. It would then be printed with a succession of Pantone spot colours in close register including an area where one transparent colour would print over white and gold, appearing opaque on white.



Feeding the ATMA semi-automatic press



Finished artwork for Sanna Annukka's Soul Bird limited edition



Marabu's lab carried out various ink tests



A high build UV varnish provided the finishing touch

but would change the metallic gold to an alternative metallic shade. As the whole idea was to create a print that would show off screen-print's talents, it included the requirement to include 2pt text and finish with a high build structured UV clear varnish.

The artwork came back in the form of the 'Soul Bird' image and was welcomed by all those involved.

Of course the image was just one, albeit very important, aspect of the project. The first of the sponsors was PaperlinX who provided the 370 gsm gold Mirri Board, of which samples went to Marabu UK who were supplying all the inks. The company was tasked with establishing the best ink technologies to use throughout after running a number of adhesion and shade tests. The solution was to match the colours using a solvent-based opaque white with hardener for the base coat. This was to be overprinted in UV-curable spot colours and finished with the high build UV varnish.

While Marabu was managing the ink supply, G Bopp & Co ensured the printer had the best screens to work with. This company knew the importance of using the correct aluminium profiles to ensure the frames wouldn't distort under the high tensions that Richardson-Locke had requested. Hurtz aluminium frames were used with a mix of polyester plain weave monofilament and stainless steel meshes. These were tensioned to 20 Newton/cm giving the confidence that the tight registration accuracy would be maintained.

#### LOW STENCIL PROFILE WITH OPTIMISED RZ

The screens were delivered to MacDermid Autotype whose sponsorship included supplying the highest quality stencils. David Parker, Screen Marketing Manager, provided world-class facilities by opening up the company's training school to make the stencils. It was decided to use Capillex CP as a capillary film to provide the benefits of a low stencil profile with optimised Rz to give the best edge definition. The film was especially useful when printing the fine text trough a 400.25 stainless steel mesh. The 24.140 screen used to print the high build UV varnish was set up using an 80 micron capillary film mounted to the screen using MacDermid Autotype laminating fluid that prevents excessive penetration of the film during the mounting process.

*Continued over*



*Sanna Annukka's distinctive style made her the ideal designer for the project*

# Natgraph

## WE'RE DRIVING DOWN



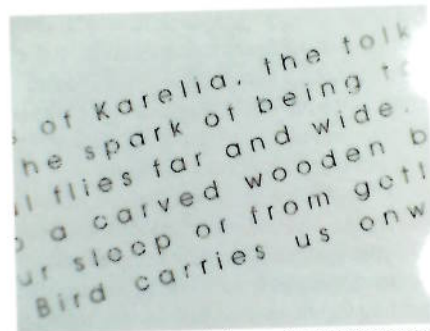
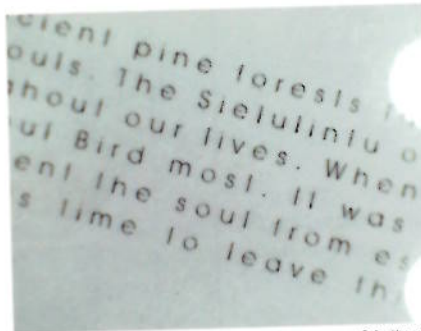
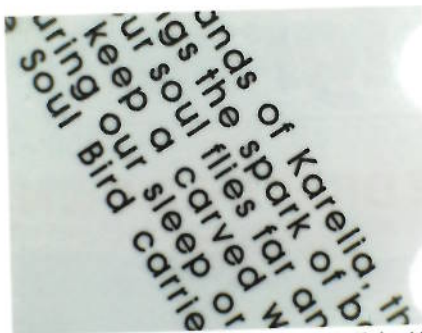
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The image to the left shows final film for 3pt text with Avant Garde medium. The two to the right illustrate the unsuccessful attempts to run 2pt Avant Garde light on the image setter at different angles, all leading to incomplete formation of the type

As with any technically challenging job, The Print House Group production team felt that a wet proof was essential to check that any registration issues would be assessed before committing to the full print run. During this proofing run the decision was made to dry the white print on drying racks as even the lowest temperature hot air drying would distort the stock by up to 1mm.

Richardson-Locke stated that this wet proofing, while time consuming, led to the best outcome when printing the 550 run, and prevented any unforeseen problems.

The production run began with printing the white base coat on the ATMA semi-automatic press. The most difficult elements of this were avoiding dust contamination and keeping the ink film smooth across the large area of coverage.

Then followed the sequence of UV spot colour inks, some being more straightforward than others to print. The second was Pantone red 186C and third Pantone blue 308C, both unchallenging once checked for colour



Waste was trimmed off so that the finished prints were ready for framing



During proofing it was decided to dry the white print on racks

accuracy, adhesion and dimensional stability. The Purple Pantone 241C was the transparent colour which required special attention to ensure no squeegee blade lines were visible in the printed film. The fifth colour in the sequence was the Dark Blue Pantone 2695C which, when printed, really demonstrated how satisfying the final limited edition would be.

### COMPLEX YET FANTASTIC

It only remained to run the 3pt text through the 400.25 stainless steel mesh. This was set up using a thixotropic thickened UV cured ink. The print suffered from bleeding around the type and, despite our team's efforts, it was clear that the ink was the cause of the problem. The solution was surprising – to swap out UV for a gel retarded solvent-based system. Within ten minutes it was clear that a winner had been found. This supported the team's widely held view that screen-printing is a complex process that is fantastic in experienced hands.

By this point Sanna's image was almost complete and high build UV varnish was the finishing touch. The UV gloss varnish from Marabu UK was printed using a 24.140 polyester screen with the 80 micron capillary film stencil. This led to a very thick deposit that bought a new texture to the edition.

Once the printing was complete and,



The Soul Bird framed and ready for display

apart from having a very happy print team, the decision was made on the best trimming method. The conclusion was made to die-cut the job to ensure the heavy varnish wasn't damaged in the guillotine stack.

All that remained to do now was a 100% inspection to make sure every recipient would get an fabulous example of screen-printing to take to the framer and hang in their home or office.

### ENTHUSIASTIC RECEPTION

Richardson-Locke had filmed the production process to create a show reel for the company and to provide FESPA UK with footage to complement the filming of all the other elements of the project. The Print House Group has posted its film on Vimeo and YouTube under the title Sanna Annukka Soul Bird limited edition. He was also very pleased to present the production story to the delegates at the Screen Printing Now conference and was greeted with an enthusiastic response when the limited edition was distributed.

The Print House Group utilises a wide range of printing processes to achieve the appropriate balance between budget and quality. But it remains committed to screen-printing for special finishes and where customers need high levels of durability and light-fastness as the company is thus far without any serious competitive threat.

From the perspective of the FESPA UK association Peter Kiddell states: "The project demonstrated the capability of its membership in working together to achieve a unique limited edition screen-print. Screen-printing has a great deal to offer the market in terms of fine art and its increasing adoption for leading edge technical applications. Screen-printing will continue its 4,000 year old history into an exciting future." ■

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