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Article 6

The Future is Bright,
The Future is Screen

We may actually be winning for whilst our new Government is forecasting fiscal strangulation and high unemployment our industry is experiencing a different climate; that is one of optimism. The impression is that we have taken most of the major hits and the pain is going to be felt by the public sector. Such startling revelations that Business Link has managed to spend £30Million a year on its web site gives a hint of the profligacy that our taxes have been enabling over the years. This will stop as Business Link is disbanded and the services they provide are passed on to local councils. Whether this is right or wrong is not for me to comment but this level of wastage cannot continue.

So what is this to do with screen printing, everything. As I visit companies who print throughout the UK the message comes through load and clear. “Screen printing is profitable” and from the reaction of exhibitors at FESPA very healthy thank you.

A recent visit took me to Screenprint Productions at their new facility in Brighouse Yorkshire. Martin Hicks was bullish about the performance of his screen printing department and his very experienced team. Their level of expertise in screen printing enabled Screenprint Productions to take on work that other printers couldn’t consider. Their already considerable range of screen printing equipment is being added to with the acquisition of a four colour line that Martin already has jobs booked onto this equipment before it is installed and expects it to attract even more work as it comes on stream. Screenprint Productions also has digital printing facilities both flatbed and roll fed and has considerable experience in all aspects of the technology. It is the screenprinting department that really pulls in the profitable work. One of the keys to success for Martyn is his solid Yorkshire approach to financing the continued growth of his company and that is never to be dependant on the banking industry. He knows far more about his business and market than any desk bound financial gatekeeper. Martin is bemused at the messages that screen printing is finished. Every day his company is creating value for itself and it clients by finding new applications for screen printing. He sees the synergy between the processes and is able to provide product that has a value greater that the sum of its parts.

There will be more about the FESPA exhibition in the prism column but of the products I saw at the exhibition the most innovative from outside the UK was a stencil reclamation system that used no chemicals and provided a completely clean mesh. How is this done you may ask? With water pressure, not just high pressure in normal terms but 600 Bar; that is 8800 psi to you and me. This compares to conventional pressure washers that go up to 2700 psi but that pressure is impractical to use in stencil reclamation. A water pressure of 8800 psi is huge; it is equivalent to being 2.84 miles under the sea. Managing these pressures is the key and making them safe to use. Mega pressure water is ejected onto the coated mesh by what looks like a shower head that consists of a single row of jets. The head traverses across the coated stencil and rotates as it does so such that every part of the emulsion is impacted by what I can best describe as liquid lasers. Jets of less than a millimetre direct massive hydraulic forces on the cured emulsion and completely remove it from the mesh. Remarkably there is no damage to the mesh that is left completely free of any debris. The team who designed the system

come from a high pressure control background. What I liked about the system was zero chemicals and a price that is below many stencil reclamation systems. I was told that it would also remove cured and uncured ink but that would have to be filtered out of waste water before disposal into the sewerage system. In addition they have a frame cleaning system that removes cured adhesive at a monstrous 24000 psi. This is genuine innovation and is currently only available from the manufacturers.

Natgraph is the foremost producer of screen printing related products in the UK. New ultra efficient dryers stand out from other manufacturers. Recognising that drying and curing determine the speed of print the dryer can control print speed and even provide the power supply for the printer, all this adds up to highly efficient printing which is the most environmentally friendly option of all. It was their exposure unit with a 450 exposure surface that caught my eye.

Alan Shaw of Natgraph explained how the unit had been designed to take the guesswork out of stencil exposure this equipment can actually maintain the surface temperature of the glass and will remove the effect of heat on the size of the photopositive. The angled glass increases the distance from the UV light source which in turn virtually eliminates light scatter. Well done the team from Nottingham you are showing the way forward for our industry.

NATGRAPH ANGLED EXPOSURE SYSTEM

Richard Rolt of Rolt Marketing is cautious about exhibiting his specialist roll fed screen printing systems but it is fair to say that he was delighted with the results. Manufacturing systems since 1985 Richard has produced a combination of his most advanced printer and drying system yet.

ROLT ROLL TO ROLL SCREENPRINTER

Richard has a very healthy order book having recently completed a biosensor production line, a decal manufacturing line and with a thermal transfer and further multi-colour decal lines in production. Nearly 90% of Rolt's production is exported. As well as producing standard machines Rolt will satisfy a client's "impossible" demands with brilliant innovation. As always drying and curing

governs print speed but highly efficient specialist dryers can provide extended drying lengths in a relatively small footprint. Richard feels he will achieve business valued in seven figures from this one show.

SCREENREADER STENCIL CALIBRATION INSTRUMENT

Laurie Mullaney was deluged with enquiries for his ScreenReader stencil calibration instrument. Previously it has only been possible to measure the origination and the final printed image. The ScreenReader fills the missing link by being able to measure the developed image on the stencil. This allows the printer to measure the key elements of the process starting with the photopositive then the stencil and finally the finished print. With this information adjustments can be made to the RIP to provide a specific standard either a litho standard or simply consistent colour reproduction. When computer to screen is used the system is even more valuable as there is no photopositive to measure. The software included with the ScreenReader produces correction curves (Data) that can be fed back into the RIP resulting in a print output to whatever standard you require. Of course you have to be consistent in your press settings and ink densities.

Small Products went big at FESPA 2010 with particular interest in their comprehensive range of “Special Effects” inks manufactured in the UK. Few people are aware that the “Sensations” special effects book produced by FESPA was largely printed with Small Products screen printing inks. Dak Patel their MD was delighted to explain how his special effects screen printed inks could help the printer sell his product at a premium price. Interest came from all over the world and resulted in firm orders.

Even the giant Sun Chemical was pushing hard its new range of Sun Promo inks for the for indoor and display materials along with screen printing inks for containers, optical discs, IMD, glass and plastic cards. Fellipe Mellado stated that Sun Chemical has a “continued commitment to the graphic and industrial markets” and Robin McMillan said that Sun are “Developing next generation inks and staying ahead of the curve.” “Screen printing inks are a key element in our development going forward and there is more to come.”

Across the board there was real enthusiasm and optimism about the future of screen printing. Just watch this space.