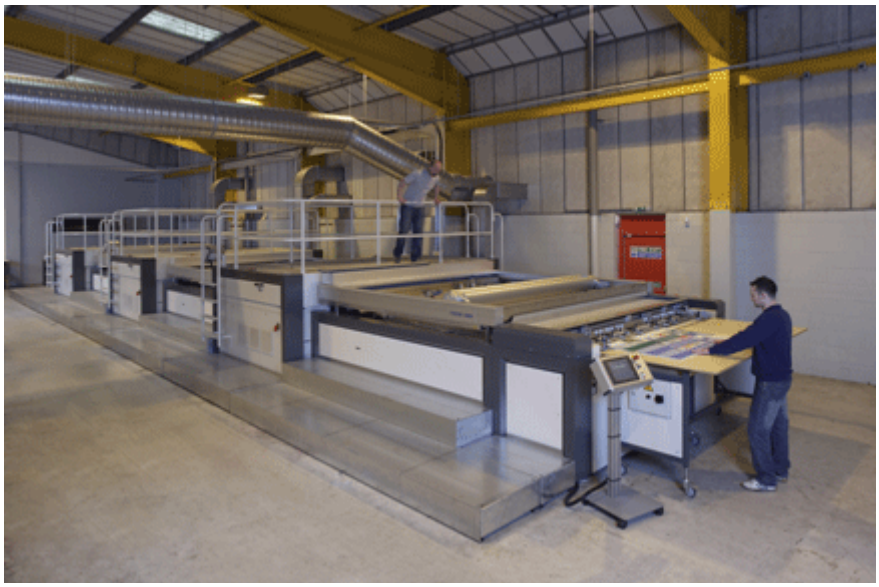
So television is no good for our children. It disturbs their sleep, affects their hormone balance, could be a contributory factor in the development of autism, creates socially inept people etc etc. That is what the medics are telling us. Several august papers have been published in the Lancet of late detailing the consequences of parking your child in front of the box or LCD screen to keep them amused. Have you noticed how when a child watches a screen how they become completely immobile, transfixed by the moving images. The same to a lesser extent happens to adults. It seems that for the brain to manage the 2D moving images it requires a lot of processing power so it shuts down the motor functions. I am sure some neuroscientist will have a rational explanation but that is simply my opinion.

Thinking further on this topic, why do DVD players and even televisions have a “freeze” function? It is quite simple; if you want to study a situation in detail you stop the action. Your brain needs time to process the information so you can make decisions rather than just react. Things change when you are relating to other people when watching moving images. An example is a crowd of football supporters watching a giant screen they replicate the mass hysteria of a real football crowd with all its violence and obscenities. So where the heck is all this leading? Large format advertising. Generally this is viewed when the target audience is on the move, walking, driving, being driven. Going back to the freeze frame on the DVD, if you try to recall an incident the brain presents you with one or several still images. So you can study them in detail. Similarly if an advertiser wants to send a message in an instant a stationary image is the most effective and cost effective way to do it, particularly if the target audience is on the move.

Now there is no doubt that display screen technology is going to have a significant effect on the Point of Sale Market. Kings Cross tube station is a case in point. The escalators, the platforms, the end wall of passage walkways are all being targeted as sites for display screen technology, also known as Digital Point of Sale. Remarkably there are 82000 advertising surfaces at this venue; only 2000 of them will be used for Digital Point of Sale the remaining 80000 are available for printed media. Then there is the small item of cost of equipment for 2000 displays. £35 Million! That is just for the equipment, installation and software not the content. This is serious money. Its success can only be judged over several years. There is no doubt that this or similar initiatives will prove to be a success but there is still a great deal of mileage in printed Point of Sale particularly large format advertising. Which is where I come to large format screen printing.

The UK has the highest concentration of multi-colour large format screen printers in the world, 75 plus machines are in companies throughout the UK. The events that give a lead to what is happening in this industry are the recent change of state of SIAS and the loss of SVECIA as a main line manufacturer of printing presses. Both manufacturers have hundreds of presses still in use in the UK many of them large format multi-colour lines. Fortunately there are several very able organisations that can service the equipment so printers should not be compromised.

THIEME 5060



The success story with regard to large format multi-colour lines is Thieme GmbH, represented in the UK by Thieme KPX in sunny Huddersfield. Bill Kippax their MD is very bullish about the market he says that Thieme have a 9 month order book for multi-colour lines. This order book the longest in their history and he is selling several complete multi-colour lines in the UK along with extending 2 colour lines to four. It would be fair to say that the situation regarding the other two manufacturers has to be of benefit to Thieme. What it also says is that screen printing in the Point of Sale and Packaging sectors is far from dead. The success of Thieme is a result of continuous investment in technology and seeking new markets for their industrial range of equipment. Screen printing is still the most effective means of laying down a controlled thickness of ink over a precisely controlled area. Bio-medical sensors, solar panels, electroluminescence, architectural glass, flat screen displays etc are all areas that are providing expanding opportunities for screen printing. The problem is that there are not enough manufacturers in Europe like Thieme GmbH who are capable of taking up the challenge and who can follow their lead of taking the screen printing process forward.

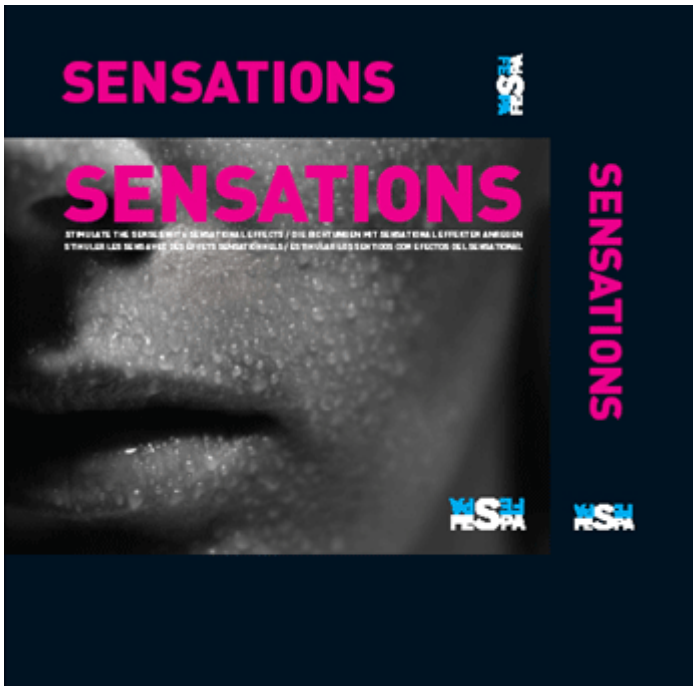
With the apparent rush towards Digital Printing and Offset Litho Printing at the expense of screen printing it is easy to forget the fine qualities of screen printing applicable to Large Format. These qualities are the ability to apply a substantial film of ink and control dot gain. There are moves to create a screen printed image that matches the offset litho standard, why? Why would screen printers want to reduce light-fastness and produce a print will less vibrancy? It is silly. Surely we should be demonstrating the impact of screen printing. In recent comparisons of the same image the screen printed version had far more punch than the litho or digital print. “Screen printing brings an image to life,” sounds like a good and valid slogan to me.

Have you noticed recently how you see more and more external posters that are losing their colour? People are being sold digitally or offset litho printed images when they

should have been screen printed. It is a matter of market ignorance. As screen printers it is our responsibility to make clients aware of the advantages of screen. From a sales point of view screen printing could be sold as a premium process. “Anybody” can print a digital image but it takes skill, experience and the right equipment to screen print effectively.

An initiative that exhibits the new confidence of screen printing practitioners is the “Sensations” Special Effects Portfolio launched by FESPA at the Berlin exhibition. It shows the ability of screen printing to provide an added value premium to every other printing process. The portfolio is an essential tool for any screen printer wishing to increase their product offering and market penetration. It demonstrates the wide range of inks that can be applied with screen printing.

SENSATIONS PORTFOLIO



Ranging from Thermochromic to magnetic inks the “Sensations” Special Effects Portfolio is the most comprehensive example of what special effects are possible using screen printing. Many of these inks are far more expensive than conventional screen printing inks and require slight changes in stencil configuration, courser mesh and or thicker stencil build. The key issue is the selling price of the finished print can be much higher then conventional printing. Your ink suppliers will be able to tell you what special effect inks they can supply, if you find their range is limited get on to Mike Turner at the DSPA or yours truly and we can point you in the right direction. If you want to obtain a copy of the “Sensations” Portfolio talk to Mike or myself.

The use and acceptance of digital control in printing equipment has gone a long way to resolving quality variation within a production run. It is in the production of the stencil where this precision must be matched.

The stencil being the foundation of the screen printing process is an area where big strides have been made with pre-coated mesh, capillary films that provide an optimum Rz across a range of meshes, meshed frames that combine steel and polyester and other subtle developments that assist the screen printer in their drive for better productivity.

Increasingly printers are using Computer to Screen to improve quality and efficiency along with considerable cost savings. Though these systems are a significant investment pay back can be very swift. CTS now comes as ink or wax printed onto a coated mesh or direct exposure with focussed UV light or UV lasers. The equipment becomes part of the digital workflow that is now available to screen printers. The companies to visit are SEFAR, KIWO, Luscher, Sign-Tronic, Proditec, Thieme etc.

Mesh reclamation is an area that can be so problematic for screen printers particularly with the increased pressure from environmental legislation.

With several screen reclamation equipment manufacturers in the field I was impressed by the innovative approach of Chim a French company whose business is the production of a range of environmentally sympathetic chemicals. They saw a market opportunity for a screen reclamation system that did not use solvent-based chemicals to reclaim mesh. Surfactants under very high pressures (140 bar) are used to remove ink residue, cured emulsion and importantly the stains that so often remain after reclamation. Normally these stains are removed with highly corrosive anti-stain preparations. The effect of these materials is to weaken the mesh and disposal of the chemistry is a problem. The chemicals used for the Chim process are in a closed loop so there is no need to top up as the system monitors the number of frames and the condition of the chemistry. So effective is the Chim system that the manufacturers will guarantee better than 95% of the meshes that leave the system are clean, dry and ready for coating again otherwise you will get your money back! Chim are the only equipment supplier that also manufacture the chemicals for use in the system, they deliver clean and collect contaminated material. You are dealing with one supplier who can customise the chemistry to suit you. Because the Stretched mesh lasts considerably longer than that which has been subjected to anti-stain or the abrasion of brushes used in some systems.

Screen printing machines that remember all previous settings and automatically fine-tune for perfect registration. Dryers that feedback to the printing machine so that it adjusts to the drying/curing needs of the ink and substrate. Automation, process control, predictability are all techniques that are essential to success in the screen printing process. The future is here now.