PDS International Limited

SCREEN PRINTING IN POINT OF SALE

For a process that was supposed to be dead and buried in Point of Sale applications there are an awful lot of machines producing vast amounts of printed materials. One of the reasons has to be that the industry is waking up to the fact that Digital Printing Technology is simply not up to the mark. With the exception of the Inca Onset digital printing machine, that costs a stonking £1.5 million, those flat bed digital machines and many roll fed are just too slow.

Claimed print rates of 100 square metres per hour and above just are fantasy. In screen printing if a machine supplier says the unit will print at a rate of 400 sheets per hour and the image area is 1.5metres by 2.0 metres that will give you an output of 1200 square metres per hour. If you take off 20% for set up and material removal you have an actual performance of 960 square metres per hour. Assuming you invest £300,000 on a single colour screen printing machine or £300,000 on a digital flat bed. Your digital flatbed will print at 70 square metres per hour because the 100 square metres per hour quoted by the digital printer salesman is the speed the heads will lay ink down not the output speed. Actually to get heavy deposits of ink the print rate could be nearer 40 square metres per hour and with the addition of loading and unload the figure will come down to 30 square metres per hour. Your single colour screen printing press at 960 square metres per hour gives you accurate spot colours, easy varnishing and virtually bomb proof engineering. Yes if most your work is large format four colour work you should invest in a four or five colour line which is serious money but look at how fast it will turn out the work. 320 2/1.5 metre sheets per hour including set up, material load and unload. Of course the digital salesman will say “what about stencil production and reclamation?” These costs are dwarfed by digital ink costs that can be ten times the price of screen printing ink. That doesn’t factor in warranty costs of 10 to 15% of capital cost per year. It doesn’t help that the digital press can only use “approved” inks otherwise the warranty on the heads are void. Just imagine a screen printing machine supplier saying “You can only use a particular manufacturers’ ink.” Imagine him threatening to “switch your machine off,” if you didn’t agree to pay his prices for ink and service. You may think I am being over dramatic but it has happened to a client of mine. Please don’t read into this that I don’t think digital printing machines are a very sensible investment because they are. It is a matter of using them for the work to which they are suited. Shorter run particularly where ink coverage is not too heavy, easy to operate, quick to set up and generally excellent quality. For photo quality work the latest equipment takes the biscuit. But the Return on Investment (ROI) calculations that salesmen present you with are have to be taken with a salt mines pinch of salt.

Of course it is not just a case of screen verses digital for the elephant in the fridge is wide format litho, which, if you can justify the £3Million upwards investment has to dwarf both in capabilities, speeds up to 9000 per hour ink at tuppence a pint (not quite but much cheaper than screen and digital ink.) Computer to plate production, auto plate loading and registration, this technology is the dog’s bones (That was close Ed.)

Recently I have been taking John Keith the new Association Manager for the Digital and Screen Printing Association around companies to see what is happening in the industry. What we saw was that the big players in this industry were investing in litho but were keeping hold of their screen printing kit. Not just holding on but some found that the new

litho equipment increased their overall attractiveness to their clients and the screen print work actually increased. Some were intending to expand their screen facilities, not in every case of course. However, every company we went into was intending to increase their capacity overall. It may be that the people who are farsighted enough to recognise the advantages of belonging to an industry association also have well thought out business plans. What is very clear is that to succeed in the PoS sector you have to be very effective in every area of your business. Some clients want a total solution from conceptual design work to installation in store. There are still a few professional print buyers in clients but increasingly people work in different areas and need the support from their supplier. The solution some resort to is print management companies who sell their services on the basis of cost savings and print expertise. It is a long conversation about the effectiveness or otherwise of such organisations but the end result is that the margins of the supplier get squeezed. It is a strange situation when a company demonstrates success by being at or near the top of the league for printing companies only to have some clients say they must be profiteering. You don't go out and buy plane tickets from a company that is struggling to maintain its aircraft. When the brown stuff hits the fan you want to be in the hands of experts. I reckon BA increased their sales after the near disaster at Heathrow when the superbly trained co-pilot "landed" an aircraft with all engines stopped!

Back to screen printing. It is clear that the process has dropped as far as it is likely to go in PoS although Bill Baxter of Inca Digital considers that the Onset machine will carve into the screen printing applications. Screen printing has consolidated its position with the use of direct to screen technology. The focussed UV DMD™ technology and laser exposure appears to winning over direct projection and printed wax or ink. Consumable costs of wax can be considerable and resolution on direct exposure is improved. Lüscher have demonstrated this with their Jetscreen Wax where they claim the smallest resolved dot being 60 micron whereas their Jetscreen DX will resolve a 20 micron dot. The Jetscreen Wax prints a wax image on a coated mesh whereas the Jetscreen DX directly exposes with a blue laser diode.

If you take a company such as CST who produce ink, wax and laser stencil production systems they quote resolutions of 500 – 1800 dpi for laser, 1000 – 1300 dpi for wax and 720 dpi for ink. Clearly there is a quality differential but if you are producing large format stencils the line ruling can go down to 50 lines per inch or less so the lower resolutions will easily cope with that. As far as Direct Projection is concerned users tend to stay in the area of 50 lines per inch. Although a photopositive is still required its size makes it a low cost item. Proditec are the leaders in this technology and Direct Projection is still faster than laser, wax or ink. Precise speed depends on a series of issues but Proditec claim up to 18 stencils per hour on their fully automatic in line stencil production system. This is a very nice system but interestingly enough in Germany, Benelux, Turkey and the Middle East they sell the Signtronic Stencilmaster. The systems that expose without a photopositive have outputs up to 25 square metres per hour which means the direct projection systems are normally faster. All these companies have been in the business for many years and formed close relationships with others such as SEFAR and Signtronic. They all sell a first class product, capital cost, consumable cost, technical support and production speed all have to be taken into account before making a buying

decision. If you are in the Point of Sale market and intend to stay with screen printing you must be using or considering this type of equipment.

An aspect of screen printing that is being emphasised by FESPA with their Sensations Special Effects book this can be obtained by clicking on http://www.fespasensations.com/ this shows the vast range of effects that can be achieved by screen printing on its own or in combination with other printing processes. Some of these effects have already been used in major campaigns very successfully.

So is there any single factor that will make a successful point of sale provider? No. Increasingly it is a combination of factors but one does stand above the rest and that is professionalism in every aspect of the business. Staff who are trained in teamwork, problem solving, leadership, communication and the many other so called “soft skills.” Without them the company will have a hard time. The difference between success and failure may simply be the way you answer the phone. Talk to the DSPA and see how they can help with you staff development needs.