



**2002
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PROUD OF THE SCREEN PRINTING PROCESS

The more I see of the screen printing process the more I recognise what a brilliant process it is. Adaptable, efficient, profitable, innovative and challenging. What other printing process has such a potential for use in so many applications? Where has there been a greater adoption of emerging technologies but still maintaining the core process.

Unlike other analogue printing processes screen printing has a dynamic mechanism that puts work into a medium to enable it to become active and coat a surface. Only digital printing comes near to screen printing in this action. They are both ejecting fluids through openings onto substrates but screen printing has the huge advantage of only having to use mechanical and hydrodynamic forces. Unlike digital printing that has the complications of a combination electromechanical, electronic, mechanical and hydrodynamic forces with the added twist of complicated chemistry.

It is the purity of the screen printing process that makes it so attractive not just to graphics printers but the increasing number of other applications that are suited to the process. Of course digital printing will continue to make inroads traditional screen printing areas. The positive effect of this is to encourage practitioners to look for other opportunities.

Without exception all our forward thinking clients (We are those bl...y consultants who help you to improve your profitability) have successfully entered new markets that often develop into their main line activities. In every case this involves first wresting control of the process from the solvent sniffing brigade who claim it is a Black Art and treating it as an engineering process. Gone are the days of 10% over's or under's. Imagine buying a car and the salesman saying will you accept it either complete or with the clutch missing or an extra set of headlights. Madness, for sure but that has been custom and practice in this industry for years. Life is now about Just in Time Delivery, Zero Defects and valid Certificates of Conformity. These are not barriers to the competent but objectives and incentives. These changes are apparent in the whole of industry. Changes that have taken place in the ISO Quality Standards demonstrate this. Reduced emphasis on the paperwork mountain and increased is the need for Standard Operating Procedures with the opportunity for continuous improvement and of course greater emphasis on training.

Just because there are additional threats to the process it doesn't mean we have to capitulate. With what we now know about screen printing and its ancillary processes it is possible to increase your income without driving up costs. I know it is somewhat trite but *work smarter*. Really think about the process, involve everybody in process improvement. Bring in a different perspective on a problem. It is amazing how the logical organised mind of an accountant can sometimes cut through the muck and bullets of production and make an "obvious" improvement suggestion. So often situations deteriorate through simple pig-headedness of the management. If the recommended stencil thickness is 3 microns for a four colour process ink why continue with 7 microns when it causes dot gain and skipping just because "That is how we have always done it". Many a time suppliers will be heard saying, "The customer will not allow the problem to be solved." This is because the customer perceives successful people to be self sufficient and deem it a failure on his part if he is not the one who solves the problem.



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These attitudes are not the sole preserve of the screen printing industry it is a virus attacking all organisations. Put these aside and take the process forward.

The vast majority of screen printing companies are either Micro Small or Medium sized enterprises as defined by the EU. Micro is less than 10 people and less than 10million Euro. Small less than 50 people and less than 50 million Euro and Medium less than 250 people and less than 50 million Euro. We are not alone there are 19 million small and medium-sized enterprises in the European Union representing 99.8 % of all EU enterprises and employing more than 74 million people. This is where the growth is.

Many of us are chasing the big boys when in reality we should be looking lower down the chain, where service and innovation are the key factors rather than the mega companies who buy maybe even bully on price alone. It is easy to get depressed by the actions of the multi-nationals shutting down their facilities in the UK and Western Europe and simply profiteering on the cheap labour of Eastern Europe and Asia. Wouldn't it be nice if the EU specified minimum levels of pay, health and safety and environmental legislation in the sweat shops that are our competitors. You only have to fly over the Far East to see the devastation of deforestation and that lung melting smog. People watch television, surf the net and see the quality of life that is attainable in the West. They will want it and it costs money, hence higher wages and improved environments which cost money, transport costs money, excess insurance costs money, reliable delivery cost money. Hang in there the price bullies will be back when eventually the bean counters have realised there is a large hidden cost to apparently low prices.

So back to the SME's where the real growth is, the growth that is profitable. The niche markets, the total solutions to clients, long standing partnerships. Most of all the major players in our industry started with smaller clients who grew. Even the big boys in our industry get most of their profitable business from companies who would not be expected to buy screen printing. The major contracts provide turnover and the big names but it the smaller clients who generate the profits.

In our business we probably get an in depth knowledge of more companies than most organisations. Our work means that we see how a company operates warts and all. It can be a challenging exercise for company managers. It is vital that all those involved buy in to the concept of the positive aspects of their business being viewed from a different perspective. At times it can be like open heart surgery essential but you still have to be brave to take it on.

So what are the key issues that manifest themselves?

- 1) Communication. At its simplest members of the organisation must talk and listen. Answers to the questions are so often within the company. It is surprising what support is available from subordinates if the statement is made "I really don't have an answer. What do you think?" The first time this is said there will be a startled look from your subordinate followed by a range of alternatives. Assuming you act on one or more of these and crucially provide feedback then in the future



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suggestions will be freely given. Better still problems will not become apparent because the team would have avoided them or fixed them without involving you.

- 2) Removal of barriers. "But we have always done it this way". Getting communication moving makes examining alternatives much easier. Challenge the practices that are becoming choke points in the organisation. "It always takes 30 minutes re-mix the ink". "We always have to spot out stencils" etc etc
- 3) Back to basics. Most people involved in screen printing do not understand how the process works. Provide them with the information that takes the mystery from the process. "The ink is rubbish it does not stick". The uninformed will change the ink manufacturer. The informed will; Check the surface energy of the substrate. The drying/curing effectiveness of the dryer. The thickness of the ink deposit. Have brought the substrate up to the temperature of the print shop before printing. Ensured that the ink is mixed correctly. That it is not past its shelf life or pot life. Now that is more like it. Nothing clever just the basics.
- 4) Never assume. The only assumption you can be sure of is that some of your assumptions will be wrong. The classic was a company who had densities specified in Standard Operating Procedures for four-colour process inks. They had huge problems with consistency of colour from one printer to another. When questioned all the printers used different density readings, the SOP's had never been shown to them. Amazingly they had ISO 9000. At least the paper work was correct.

In spite of our belief in and enthusiasm for this wonderful process we all have periods of self-doubt but don't worry we are world-class technicians compared to some others found across the pond. In a technical article it was suggested that for long stencil life we should tension our mesh to 45 Newtons and put our stencils out in the sunshine to cure the emulsion. It must be to do with the depletion in the ozone layer or an outcome of The Environmental Conference in South Africa. Free energy, suntanned stencil technicians. That is if you don't mind wasps in your emulsion.

The last three companies I have visited have been full to bursting with work. Two in POS and one industrial and they are all looking to improve their production methods and expand their markets. There are profits to be made if you are businesslike and innovative.