THE PRINT TECHNICIANS

Dave, Steven, Colin, Ian, Chris, Rose, Mike, Kevin. These are the group of people that really keep our industry functioning. Lose a salesman, set up a web site. An accountant leaves buy another computer. Lose a director, hire a consultant. The tea lady, sorry liquid refreshment executive, has a baby, rent a vending machine. If one of the first group of people goes to pastures new, consider switching the lights out, lock the doors and go home.

For those who venture into this column more than once you may recall the piece about Homo Ingenius our much berated Works Engineers, well, the above named but anonymous are the other key group of individuals who make things happen The Print Technicians. They may go by other names, Print manager, Technical Manager, Print Supervisor, Team Leader, some may say Prima Donna but not I. Rarely if ever seen in the board room these print gurus can make the dreams and aspirations of the board members a reality. In an ideal world equipment would be fully operational, origination, substrate and inks would all be on time, there would be no unreasonable demands from customers and nobody took a day off sick. Reality can often be the complete opposite to this. These characters, for characters they surely are eat, sleep, drink, dream even fantasise about their work. At trade shows they gather and actually discuss the relative attributes of emulsions and curing systems whilst other mere mortals eye up the crumpet on adjacent stands. (Ed: You can't say "crumpet" Promotional Executive is the term.)

What is so special about these people, they are totally committed to their jobs and they are enthusiastic. Generally these Technicians are self taught gathering their knowledge from day to day experience, studying technical manuals, surfing the net and talking to technical reps, becoming knowledge sponges. Their most important quality regarding technical information is that they do not believe claims until they have proven them themselves. If it works better than their existing product they want to use it. This is where conflict and frustration can occur, because it might be more expensive than the product it is replacing. The immediate reaction of those who control the purse strings is stick with the cheaper option. If using a superior squeegee material reduces the down time and rejects on a machine by 1% the 10% price uplift in price is well worth paying. In reality the gains are often much greater than this. Screen frames that are bowed and twisted wreck havoc on image stability, requests from the Technicians for new frames are ignored until the next financial year. In the mean time the haemorrhage of profits continues. With such conditions being commonplace these enthusiasts spend most of their time fire fighting and simply keeping the process running. It is their very success in maintaining the processes in some form of production even if it is nowhere nears its optimum that conspires against them. "We are satisfying sales so why spend more on production" is an oft-heard warped philosophy from higher places. The reality should be "How can we improve our techniques to increase profits?" This is when these jugglers of men, machines and materials would come into their own. The question may cause them heart failure or at the very least a moderate fibrillation.

One of the characteristics of these practical problems solvers is often an aversion to paperwork so working out justifications for material or process improvements can be the inhibiting factor to their adoption. A well-run business needs a business case for any

form of change and investing in new equipment or advanced materials certainly needs a solid justification. Now here comes the scary part. You give the paperwork averse Technician the tools to put the case for process improvement. You wont change them into accountants over night if ever but if you sit them down with your Accountant or Finance Director and help the Technician construct the justification you will achieve a double whammy. Production people have the opinion that accountants are only interested in not spending money and accountants think that all production people do is waste money. There may be an element of truth in both of these assertions but this sort of exercise can go a long way to removing the barriers. A typical example may be an automatic developing unit for stencil production. To the accountant it could be considered simply as a capital spend but the Technician can explain the advantages, labour cost reduction, reduction in stencil remakes, improved print machine utilisation, improved quality, lower water usage etc. By the end of the discussion, which may include a brave expedition into stencil production, the accountant would have been able to put figures to the various savings and compare them with purchase and running costs. It may also be possible to provide a spreadsheet to the Technician to use for future justifications. It doesn't mean every request will be rubber-stamped by the board but it builds a bridge of understanding between Production and the Finance Department and the board is presented with the detail that enables an informed decision to be made. After all a business is supposed to be a team of people working towards the same goal. Sometimes you wonder if this is so.

One of the recommendations these Technicians may be making is to consider the use pre-treated mesh. Major manufacturers have been offering this material for some time and it may be that all of their meshes may be treated in this way eventually. So what does this pre-treatment mean and why is it advantageous to use?

Pre-treatment can be a two-stage process the first being a micro abrading and the second a chemical treatment the combined effect is to increase the surface energy of the mesh to make it more wettable by the emulsion or the water used for capillary film application. The chemical treatment removes any of the lubricant residues that can be retained on the surface of the thread after manufacture. The result of this is that the mesh is much cleaner than untreated mesh to such an extent that it is normally not necessary clean the mesh with degreasers before applying the emulsion. Another characteristic of this mesh is to provide a more consistent ink flow. This is particularly noticeable when printing backlit applications. Users have also noticed that reclaiming the mesh is easier and the mesh can be returned to near its original condition.

When these pre-treated meshes were first introduced there was a small price premium but this is rarely applied now. From the printer and stencil makers point of view this is simply a better material that produces superior results. A point to take note of is that you must still keep it clean, dirty finger marks will still cause problems and dust continues to be an ongoing issue in stencil production.

Of course your stencil department is the cleanest room in the building, you maintain it at a steady temperature, control the humidity, filter the air, regularly replace the tack mats

at the entrance and provide the stencil technicians with lint free overalls. You may think I am talking about Fantasy Island, no; these stencil production units do exist. If they get a return of more than 1% of their stencils from the print room because of stencil production faults they consider they have failed. Maybe you should do an analysis of faulty stencil returns from the print department. Take account of those that are held back in the stencil department before they get to the print floor. Include stencils that have to be “touched up” by printers during set up and then cost the machine down time, reject material and remakes. If you were to wear a heart monitor as you put the figures into your spreadsheet you could well be up to the fibrillation range well before the final total appeared. You don’t have to resort to beta-blockers or have to have a pace maker fitted just monitor and control the process. Have I heard that somewhere before?