



2009  
September

Binders and Office Products

In my business I am fortunate to get around the country and the world visiting companies involved in our industry. Some pessimists speak as if business stopped overnight as soon as the word recession was mentioned. If you were a mortgage broker making toxic loans then there would have been a terminal crash. What is clear is that there are many companies beavering away with healthy order books. None more so than Stevensons Advertising Plastics of Kirkham near Preston. Established in 1967 this company has provided a trade service to suppliers of ultrasonic welded plastic products that are screen printed.

**I DON'T EXPECT TO BE APPLYING FOR A JOB  
AS A GRAPHIC ARTIST ANY TIME SOON!!!**

Not very exciting you may say, who wants excitement at the moment? A steady business with satisfied clients and a growing order book will do me nicely thank you. That is what Andrew Stevenson their Managing Director and his team have created. It is the diversity in the range of products that explains to some extent their success but probably the most important issue is the concentration on providing the customer with an excellent service and making it easy for them to do business with the company. Andrew makes a point of knowing the progress through production of every job. Most are short lead time some within the day. All this adds up to a total service to his customers that in difficult times will enable them not just survive but prosper. Another lesson we can learn from Andrew is the ability to pick a company name that says what you do. Most of us end up with initials or names that say nothing about our services. Type "advertising plastics" in Google and there you have five entries for his company on the first page. Remember Consignia that reverted to The Post Office after a disastrous launch. Something much closer to home the change from the DSPA (Digital and Screen Printing Association) to prism was challenging to say the least.



One of the challenges for the production of binders and office products is the use of PVC. There are conflicting schools of thought on the environmental probity of PVC that I am not qualified to write about but suffice it to say its use is widespread and will be for a long time. When you compare the amount of PVC used in binders and folders and compare that with extruded PVC used in double glazing there is not contest. Users of PVC in our industry aim to use as much recycled material as possible. Polypropylene is used wherever it is suitable.



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Much of the fabrication of binders, place mats etc is done by Ultrasonic Welding. This uses the vibrations set up in the process to weld two similar plastics together (preferably identical.) Sound is generated that cannot be heard by the human ear and this is concentrated through a device known as a horn. The vibrating horn is brought into contact with a two pieces of plastic one on top of the other and the vibrations created between the two surfaces cause them to melt and fuse together. This fusing process will only work when the plastic is amorphous rather than crystalline. ABS, Acrylic, Polycarbonate and PVC are amorphous whereas Polypropylene and Polyethylene are partially crystalline. For more information on Ultrasonic welding techniques you will find [www.powerultrasonics.com](http://www.powerultrasonics.com) an excellent resource. There is much more to Ultrasonic welding than the enraged screeches that emanate from some badly set up Ultrasonic welding machinery. Where Ultrasonic welding is not suitable heat in the form of hot air or conduction using contact can be extremely effective. Polyethylene is ideally suited to hot air welding.

No matter what process is used for joining, staking, forming etc you still have to print the message on the substrate. Screen printing still covers most if not all of the applications. Of course if images are four colour process then the line ruling of a print that is viewed within arms length should ideally be better than 80 lines per inch, preferably over 100 lines per inch. This is where the marriage of digital and screen technologies can be perfect. However if the volume is large and fine resolution is required lithographic printing can take over. Producing the product where substrates are finished and formed is where the skill and added value lies. If the application is simply line colour and particular Pantone matches screen printing still remains the most cost effective solution. If you don't think so have you couldn't have bought any digital printing ink recently or watched the plodding performance of all but astronomically priced digital printing machines. For short runs digital printing has to be the best bet. Print and cut increases the viability of digital printing as an additional finishing process is removed. I get the impression that the market is becoming less pro or anti digital and screen. Hot foil blocking and even heat applied transfers are used extensively. The combination of various processes can provide very attractive effects. Innovative design will entice purchasers into buying added value products to everyone's benefit. Those practitioners who can select the most suitable printing method for the particular application are the ones who succeed. Sometimes it can be rather like trying to put a nail in with a screwdriver or a screw with a mallet. Using the wrong process is the way to lose money faster than setting fifty pound notes alight.

With this sector of the market the printing processes used are just part of the overall product offering. They have to work in combination with other operations. Normally the plastic substrate be it PVC, Polyethylene, Polypropylene etc is printed before assembling into the product. On occasions items that have already been produced are printed in their finished form. This is where Pad Printing can find its place. The item may be too uneven to screen print, too delicate to foil block or too awkward to print on a flat bed digital printing machine. Pad printing requires limited capital investment but has the capability to print a wide range of substrates and designs. You only have to visit some of



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the sub-contract printing companies to see the versatility of the various processes in the hands of experts. Much of the equipment will be twenty years old but still earning very good money for the company. There is no substitute for experience and the ability to be able to adapt equipment and methods to suit a particular application. Practical skills like this are the backbone of our industrial development, it is a travesty that they should be considered as secondary in our “knowledge based economy” where academia is thought to be so much more relevant than the ability to design, build and operate solutions to practical problems. These are the people we need to be hunting out and supporting for they offer a real future as compared to the “kings new clothes” of financial manipulation and spin.