

Thank goodness we are all different in how we look, live, and run our businesses. Wouldn't life be tedious with clones of people and ideas. Of course there are times when replicating a look or product offering can be appealing, fast food chains and football supporter's strips are examples. To some people such similarities are appealing even essential and to others a horror. Both examples are very beneficial for our industry and may they continue in perpetuity. It is unlikely for you to see yours truly burger in hand screaming oaths at the referee any time soon, but you never know.

When we speak of display graphics we tend to think of paper and board of various types but tend to forget the increasing use of glass. Textured glass, coloured glass and printed glass. For most applications glass must either be toughened or laminated. Both of these are opportunities for screen printing. With toughened glass the design is printed onto the surface of the glass using ink containing the pigment, a medium (pine oil) and glass frit (finely powdered glass.) The printed glass then goes into the toughening oven where it is raised to 700°C and the frit melts and bonds the pigment to the glass.

Laminated glass consists of a sandwich of glass and an interlayer of polyvinyl butyral (PVB) The plastic is bonded between two panes of glass under heat and pressure. Once sealed together, the glass "sandwich" behaves as a single unit and looks like normal glass. Toughened glass can be used to produce laminated glass. Similar to the glass in car windshields, laminated glass may crack upon impact, but the glass fragments tend to adhere to the plastic interlayer rather than falling free and potentially causing injury. It is possible to bond a series of layers together to make it bullet or even bomb proof. Cockpit windows on aircraft are constructed of multilayer laminated glass. For all but the most specialized applications the temperatures used in production are nowhere near as high as required for toughening. 70°C is all that is necessary and pressure can be applied in several different ways ranging from a pressurized oil bath to a vacuum envelop. There are several producers for laminated glass in the UK who are happy to process small batches. An innovative printer can print the plastic interlayer and have it formed into a laminated sheet of glass that can create a very effective internal or external functional and decorative feature.

Printing onto glass requires specialist machines and in the UK HG Kippax is the leader. Glass is heavy and fragile before post treating. In feed and out-feed are crucial. Poor quality prints create a very expensive rejects so machine and stencil quality is crucial.

On a larger scale the whole glass fascia of a skyscraper can have vibrant ceramic colours printed on the external surfaces that will last the lifetime of the building. Sometimes rather than geometric solids and tones actual images of people or animals are created by printing individual elements of the image on single windows rather like giant pixels.



Halloween and Christmas is the time when screen printing really comes into its own for those who were fortunate to hear Mark Simpson Chairman of Simpson Group speak at the recent PRISM conference heard how screen printing played such a key part in his Christmas and Halloween campaigns, fluorescent colours, glitter and high build varnishes turned a plain substrate into a vibrant selling medium. It is so important that specifiers know what is possible. Designers must be told how these special effects can provide that extra punch. The FESPA Sensations book gives a whole range of examples demonstrating the art of the possible. If you want a copy of the book go to [www.fespa.com](http://www.fespa.com) or [www.fespauk.com](http://www.fespauk.com).

**SCREEN PRINTED USING SEFAR SWM MESH**



Show it to your customers and see their eyes light up at the special effects possible by combining digital and offset Litho. with screen printing. There are times when I feel sorry for single process print providers, they miss out on so many opportunities and become just a supplier of a commodity that is price driven. Being able to run a project from initial concepts to final finished product has to give the manufacturer more opportunities for profit generation. Do it right and price is secondary. If the finished result creates increased sales and more profit for the end user then it is a no cost transaction. It is not a matter of how much the customer pays for the work it is about returns. Nothing is new, if you look at the cathedrals all around the country many more than 800 years old.

Nowadays they are impressive because of their proportion and architectural engineering but go back to when they were first built and you would have seen the most fantastic coloured graphics all over the internal structures. Externally places like Rievaulx Abbey in North Yorkshire were great white structures with red, green, blue and yellow patterns adorning the walls. Today we would call them Art Deco then they were painted by novice monks and tradesmen. We are not aware of any screen printing but there was plenty of stenciling. Can you imagine what the local people thought of this giant building bursting out of the landscape. These structures were staggering in their cost but delivered in multitudes of worshipers and rich benefactors. It wasn't how much they cost to produce, it was what they delivered to the

**EXAMPLE FROM SEFAR**





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## **DISPLAY YOUR INDIVIDUALITY**

clergy. Just like a well thought out marketing campaign that uses all the skills and resources of a print service provider. So many products are totally dependant on brand recognition for their success. Take the well printed logo or advertising message out of public view and the product would quickly disappear from the market. Twitter you may, Facebook you can but there is no substitute for a vibrant image imposing itself on your conscious and sub conscious mind.

**LINCOLN CATHEDRAL**

