

## ADVERTORIAL



## Phillips Precision Medcraft

*INTELLIGENT DELIVERY. New innovations in graphic technology change the way your products are presented and how they communicate through QR code technology.*

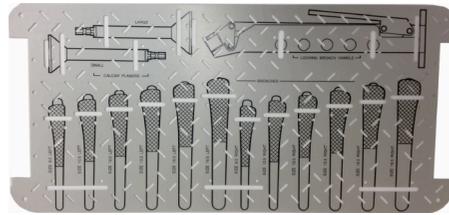
### Customer Q & A with Michael Phillips, President of Operations Delivery Systems Division

**“My company has been looking for new options for our delivery systems and other devices. What trends has PPM seen or developed themselves that might influence our Marketing or Purchasing teams?”**

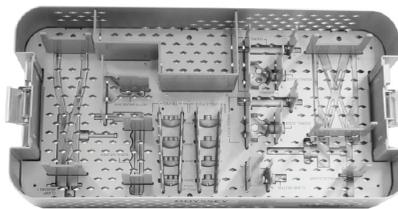
For years we have seen many changes in our industry, the case and tray business, including our OEM's own R&D departments. One constant demand is always... 'lighter is better' which is met by altering designs, adding plastic features, adding more ventilation holes, etc. Other items such as case latching techniques, case feet, handles and stacking abilities are also always addressed. Items like these (with cost effectiveness in mind) have changed dozens of times but the graphics really have not changed much at all due to the harsh environments they are put through and what has been available to us.

Today, case and tray graphics continue to be silkscreened using 2 part epoxy inks, from only a few major manufacturers in the United States. These inks are manufactured to work in a wide variety of industries but 'not' specific to medical. The ink companies will not certify their performance in any industry, especially the medical industry. These inks are simply just not designed to withstand the harsh cleaning environments we put our products through. There are also many human factors during the screening process. From a manufacturing stand point, this is something we've never felt comfortable with. In fact, there are over 500 different elements in the screen printing process that could yield failure in the field of any industrial application. Top consultants in the screen printing fields agree.

20 years ago, when Medcraft (PPM as we are known now) began, cases and trays were silkscreened with these inks since everyone was already using them and our clients requested it. We would lay down basic outlines of the instruments and implants.



After approximately 5 years Medcraft innovated the screen technique called "vector graphics." This application added depth perception to the instruments and implants by adding half tones to the outlines.



As this became the standard throughout case and tray manufacturing, we were still limited to the silkscreen process and subject to the same failure possibilities. Even when silkscreen performs at its maximum, the success rate will still not out last the product, leaving OEM's at a loss.

**“Given that the industry seems satisfied with silk screening, what issues have traditional graphic processes created that could be solved by alternative methods?”**

Silk screening is an analog process. For every color in an image there has to be a physical screen manufactured from artwork, then to film, then to screens. In some cases we have over 7 different colors in a case and tray which would yield 7 different physical screens. The cost of seven screens for one time charges in development is not something 'we' would want to pay for. Just imagine having over 1,000 different products in a manufacturing facility that will need a minimum of 2 different screens for inside the tray and outside the tray, not to mention multiple colors. All of these screens have a shelf life of approximately 5 years depending on use. These screens wear out from usage and harsh cleaning agents which in turn means the silkscreens have to be purchased again – something our clients are not keen about since at times the cost comes out of their budget.

Then there's traceability! All of these screens must be stored and their whereabouts tracked at all times. At PPM we employ a barcode system for this and it's still time intensive. Due to the work load, like our OEM's we send some screening projects to our vendors to manage overload, so traceability is important. This also adds cost when making a new screen for revisions. Imagine, having to destroy screens (that were expensive) because a single number changed on an instrument's part number. Multi-colors are another problem. Clients will either stay away from this due its process, time and cost, or will reluctantly do it because it's required of them. What happens is this; every time different colors are featured on one side of the tray (i.e. the inside graphics), you must screen a color, dry it in an air circulated oven for a length of time, let cool and now produce the second color, so on and so forth. This, as you can see, can be very time consuming and costly.

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**“What type of research and development activities went into the development of DCG?”**

For years we have been looking for alternatives to silk screening knowing there had to be something out there that would eliminate such an outdated process and bring case and tray graphics to the digital age. Three years ago we decided to research graphic applications that were radically different to what our industry was accustomed to for the past 20 plus years.



Discovering the DCG process required 2 years of extensive research, trials, errors, and long evenings-to-mornings of development. Finally we created a bio compatible imaging process that sits 'below' the surface of the anodic coating of standard aluminum cases and trays.

Our internal testing, along with outside lab testing and reports as well as two years of client feedback, indicate that DCG is durable far beyond the silk screening process. It's also much safer than traditional silk screening as review of MSDS sheets (material safety data sheets) reveal. We have also received very positive feedback from our clients and their customers who are impressed with the zero failure rate this process has received. Our process is currently under evaluation for its patent process, which should be complete over the next few months. We're able to secure this patent because our process is distinctly different than anything else in our industry. And our DCG process is now validated at PPM. If you have a vendor(s) doing this in house, it would be prudent to ask if theirs is a validated process.

**How would my company benefit from DCG technology?**

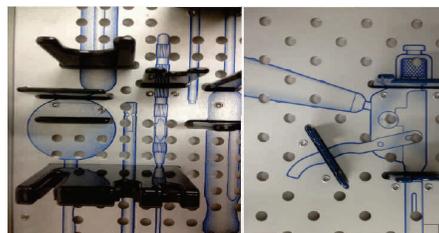
Digital Contact Graphics have produced many major results compared to other

graphics programs in the industry. First and foremost, since the models supplied to 'engineering' today are far better than years ago, our art department is able to create images that are photorealistic for your clients. Imagine going from a case with just one company color silkscreened 2D vector graphics to 3D crystal clear images.



There are many ways to employ images with your cases and trays. We can provide actual photographs to lay down if customers provide us with instruments and implants before they start to think about cases and trays. We've also built custom modeling software for our company and artists to effectively implement this process.

There was a question brought up recently by one of our customers that made sense, and we had to figure it out quickly. They asked, if you're the only vendor out of our 5 that can provide this process, how can we lay down 'your' graphics on 'our' trays and have our other tray vendors continue with conventional silk screening? To accommodate them, since they're obligated to have more than one case and tray vendor, we decided to "dumb down" the graphics to match the look of silk screened graphics. We made one sample of each for evaluation. From two feet away, two different people chose the DCG tray when asked which one was silk screened.



From there the question was answered, better yet, this company now has the choice of not sending all of their case work to us,

but if they like they can send us their top sellers with higher quantities to start 'saving' money.

Color anodize. We know what color anodize finishes look like after visiting an autoclave time and time again. Some colors receive different results, DCG receives the same no matter what color. Color anodize is costly, and more parts have to be engineered for the esthetics of your case if you choose to go this route. With DCG, we now replace costly color anodize for your cases. Since the colors are imbedded into the aluminum and not on the surface you 'cannot' scratch the color like you would a color anodized part.

Smart Cases. Because this is new technology, Medicraft is the only provider to offer you QR coding. We've set the ball rolling with a few clients and it is definitely catching on. We now QR code cases that link doctors, marketing and hospital personnel with your information. It's simple as holding your PDA device to the side of a case and code, it will then direct any information your customers might need. This includes and is not limited to company websites, product information, cleaning instructions, marketing video and techniques on usage of the product, inventory etc. It is limitless when you think about it, and since these graphics are scratch resistant you will always be able to scan it. Our clients simply create the URL and we provide the QR code. Every piece is tested during production.

The cost of all of this? "NOTHING" it's part of the art work you are already paying for. Best of all, this new DCG technology is safer for the end user. Unlike silkscreening inks it's impossible for it to wind up in someone's body because it doesn't sit on the surface so instruments cannot get to it. We're certain that with all of the FDA regulations our customers have to endure, this is one more feature our customers are sure to love.

See us at:

**2012 AAOS • OMTEC • NASS**

**7 Paul Kohner Place • 50 Bushes Lane**

**Elmwood Park, NJ 07407**

**Regional Office: Austin, TX**

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