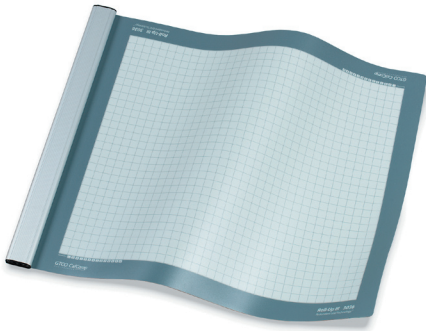


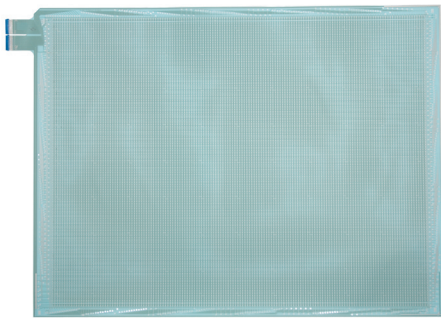
DuPont Microcircuit Materials

APPLICATION PROFILE

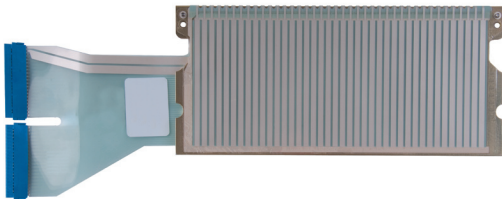
Polymer Thick Film from DuPont Microcircuit Materials Extends Life and Efficiency of Large Format Digitizers



Large format flexible digitizer



Grid for large-format rigid digitizer



Linear potentiometer array

Challenge:

Increase Screen Life, Consistency, and Conductivity Associated with Large Format Printing

Solution:

DuPont products 5000 Silver Polymeric Composition, 5018 UV Cure Encapsulant, and 7102 Carbon Conductor Deliver a Cost Effective, Longer Life Solution for Large Format Digitizers

AgC Technology, a division of GTCO Calcomp, is a leading manufacturer of large format digitizers, meeting systems, and desktop graphics tablets. They also produce custom linear potentiometer arrays, capacitive sensors, and large format planar heating elements.

Large format digitizers present some unique challenges to AgC Technology due to their size, which can range from 20" x 24" up to 60" x 138". The boards are produced utilizing large area flat bed screen printing, and preserving screen life is essential. Since the size of the printed area lends itself to on-screen drying, improved printability was a requirement for AgC Technology. They also sought improved conductivity, a critical component for improved accuracy and overall performance of the digitizer boards. In addition to meeting the technical challenges involved, the solution needed to be cost effective to help ensure widespread adoption in the marketplace.

To address AgC Technology's immediate requirements, DuPont Microcircuit Materials recommended two products specifically well suited to the immediate application, and added a third recommendation that would provide for AgC Technology's future needs as its operations expanded. All of these recommendations AgC Technology subsequently adopted.

Images courtesy of AgC Technology



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DuPont Microcircuit Materials' 5000 polymeric silver conductive ink was proposed because it provides excellent printability, screen life, and could offer AgC Technology a more user friendly printing operation. Indeed, AgC Technology realized significant productivity gains due to their use of 5000 which demonstrated significantly improved conductivity and effectively extended screen life.

DuPont 5018 dielectric material, used in combination with the 5000 polymeric silver conductive ink, further enhanced the manufacturing process by delivering increased quality and consistency, thereby enabling AgC Technology to improve both its cost position and overall productivity.

Throughout this process change, DuPont Microcircuit Materials provided AgC Technology with the technical service and training vital to support the continued success of various printing formats.

AgC Technology is now also utilizing a third product from DuPont Microcircuit Materials as a key component to entering new market segments. AgC Technology testing has shown that DuPont 7102 carbon conductor demonstrates the physical and functional properties and consistent high quality required for circuitry within medical instrumentation, therapeutic medical devices, and military applications. In addition, AgC Technology is now participating in the manufacture of interactive displays for the entertainment industry, backed by DuPont Microcircuit Materials.

To learn more about AgC Technology, visit their website at agctechnology.com.

For more information on DuPont Microcircuit Materials products, please contact your local representative:

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