

Functional Printing Market (2013 – 2020) by Materials (Substrate, Inks), Technology (Inkjet, Screen, Flexo, Gravure), Application (Sensors, Displays, Batteries, RFID, Lighting, PV, Medical), and Geography (North America, Europe, APAC, ROW)

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Abstracts

The functional printing technology is advancing from research and development into production and is penetrating many applications like sensors, batteries, RFID, photovoltaic, flexible display, and so on. The production of silicon based components using conventional fabrication methods is found to be costly and faces environmental issues. These issues have pushed the demand for low cost and environmentally sustainable techniques, thus, stimulating the emergence of other manufacturing techniques like printing technologies. The major printing technologies used for functional printing are inkjet, screen, gravure, and flexography.

The choice of printing technology is made by giving due consideration to the properties of the substrates, thickness of film, ink properties, and the cost. Currently, few of the manufacturers have started using new printing technologies, like additive manufacturing processes, to print electronic parts and components on rigid or flexible substrates. Additive manufacturing for production provides great benefits like freedom in design, cost, and high material utilization for the entire production value chain. Other than the conventional methods, even new printing processes are being developed, including micro-contact printing and nano-imprint lithography.

The major barrier inhibiting the growth of the market, currently, is the reliability of the end products (printed electronics), and it is expected that this issue will be overcome by the advancement in the functional printing technology. In addition to this, the market is opposed to the issue of complexity during the manufacturing processes, which require a

high level of accuracy for the desired output.

Scope of the report

The report presents the detailed analysis of the markets for the functional printing; such as materials, technology, and coating; and, also, includes detailed analysis of application segments and geographical split across the globe.

On the basis of materials

The market is segmented into two categories, namely: substrates and inks. Substrates are again segmented into glass, paper, and plastics; and inks are classified into conductive inks, dielectric ink, graphene inks, and others.

On the basis of technology

The functional printing technology market is segmented into inkjet printing, screen printing, gravure printing, flexography, and others.

On the basis of coating

The functional printing coating market is segmented into two types, namely: conductive coating and conformal coating.

On the basis of applications

The functional printing application market is divided into sensor, batteries, displays, RFID tags, Lighting, photovoltaic, and so on.

On the basis of geography

North America

Europe

Asia-Pacific

ROW

Each section provides market data, market drivers, trends and opportunities, key players, and the competitive outlook. It also provides the market tables for covering the sub-segments and micro-markets.

The major companies in the functional printing market, profiled in this report, are Avery Dennison Corporation (U.S.), BASF SE (Germany), Blue Spark Technologies (U.S.), DuraTech Industries Inc (U.S.), E Ink Holdings, Inc (Taiwan), Eastman Kodak Company (U.S.), EnfucellOy (Finland), ESMA (Belgium), GSI Technologies LLC (U.S.), ISORG (France), Koviolnc (U.S.), Mark Andy Inc(U.S.), Nano Solar Inc (U.S.), Novaled AG (Germany), Optomec Inc (U.S.), Palo Alto Research Center Incorporated(PARC) (U.S.), Toppan Forms Co. Ltd (U.S.), Toyo Ink SC Holdings Co Ltd (U.S.), Trident Industrial Inkjet (U.S.), Vorbeck Materials(U.S.), Xaar PLC (U.K.), and Xennia (U.K.).

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