

# The Global Market for Nanotextiles

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## Abstracts

The Market for Nanotextiles broadly encompasses:

Nanocoated/finished textiles (e.g. anti-bacterial nanocoatings, self-cleaning, flame retardant nanoclays). Most nano-enabled textiles on the market fall into this category.

Nanocomposite textiles fibre materials (e.g. CNTs integrated into manufacture for enhanced strength; smart textiles with sensor elements; conductive textiles; shape memory textiles).

Nanofiber textiles (electrospun nanofibers for protection, conductivity etc.)

Nano-based non-wovens (e.g. barrier nanofilm integrated in layers).

E-textiles/wearable electronics incorporating nanomaterials.

The development of high value-added products such as smart fabrics, wearable consumer and medical devices and protective textiles has increased rapidly in the last decade. Recent advances in stimuli-responsive surfaces and interfaces, sensors and actuators, flexible electronics, nanocoatings and conductive nanomaterials has led to the development of a new generation of smart and adaptive electronic fibers, yarns and fabrics for application in E-textiles.

Report contents include:

Markets and applications of nanotextiles including wearable electronics, E-textiles, apparel, sportswear, footwear, medical textiles and industrial textiles.

Nanomaterials utilized in nanotextiles including graphene, carbon nanotubes, nanocellulose, metal oxide nanomaterials, nanosilver, nanofibers and nanocoatings.

Market drivers and trends

Nanotextiles industrial collaborations and licence agreements

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