

Markets for Self-Healing Materials: 2015–2022

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Abstracts

This new report from n-tech identifies the commercial potential for the advanced self-healing materials that are currently emerging from industrial labs. Although reversible polymers have been available for quite some time, these need an external stimulus to make them self-repair. n-tech believes that we are on the verge of breakthroughs that will bring truly autonomic self-healing materials into the marketplace, where they will generate revenues in several important applications sectors.

This report quantifies the markets for self-healing materials in consumer products (including consumer electronics); construction (products such as self-healing concrete); the automotive industry; the energy generation sector (turbines and solar); medicine and healthcare; and military and aerospace. The types of materials covered comprise reversible polymers, shape memory materials, vascular systems, capsule-based systems and biologically based materials. We also take a look at newer types of self-healing materials, such as those using carbon nanotubes.

The report provides eight-year revenue forecasts for self-healing materials in all of the applications covered, with breakouts for the various types of self-healing materials. We also discuss the business models currently being employed by the firms focused on opportunities in the self-healing materials space, as well who we think will enter this space in the next few years

n-tech has been providing coverage of the smart materials business for more than six years and believes that self-healing materials are now one of the most commercially promising smart materials products.

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