Smart Structures in the Construction Industry: A Market and Technology Forecast - 2016 to 2025

Description: This report pinpoints the opportunities for smart structures in the construction industry and quantifies them in form of ten-year volume and value forecasts. These forecasts include breakouts by type of technology, materials, and components used. And while the current focus of smart structures is on large prestige buildings, this report also discusses how current technology trends will bring the benefits of smart structures down to smaller buildings and residential construction.

The forecasts in this report are also segmented by the geographical location of the building in which the smart structures are used – all construction is local and the forecasting models used here are designed to map smart building activities in specific countries and regions into our projections. For example, we have specifically taken account of activity in the Middle East in this report, because so many smart buildings are being constructed in this region at the present time with smart structures inside.

The analysis in this report ranges over the complete value chain and covers materials, components and final products. Our intent is to provide a technological roadmap for smart structures in the construction, showing how they can create value by enhancing the safety, energy efficiency, aesthetics, and lifetimes of buildings. This roadmap analyzes the revenue generation potential for smart structures in buildings ranging from existing products such as smart windows and SHM systems, through the latest self-cleaning walls to future smart skins using the most advanced smart materials.

Finally, this report examines the product market strategies of leading suppliers active in this space. This analysis includes both the largest firms playing at the international level and interesting new startups. We also examine where the funding for these companies is coming including a look at important government funding for smart structure deployment in the construction industry.

This study is part of n-tech’s ongoing and expanding program of analysis of smart materials markets. Previous reports have covered self-healing materials, self-cleaning materials, color-shifting materials, smart coatings, smart surfaces, smart composites, smart windows, etc. The goal of n-tech smart materials program is to identify where the money will be made in smart materials and to set out realistic product market strategies for smart materials that make sense in today’s economy.

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