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The Global Market for Abrasion and Wear Resistant Nanocoatings

https://marketpublishers.com/r/G517FB34D3FEN.html
Date: September 2017
Pages: 125
Price: US$ 600.00 (Single User License)
ID: G517FB34D3FEN

Abstracts

The surface hardness and the wear resistance of materials can be significantly improved through the use of nanocoatings. The incorporation of nanomaterials improves wear resistance and toughness properties and offers comprehensive corrosion inhibition, as well as meeting stringent regulatory and safety requirements.

There are already numerous commercial applications in mechanical structures and in the machining of materials. The emphasis is on metal treatment, but also promising results have been shown for non-metallic materials. Applications include:

Automotive: Vehicle and protective environments; Scratch-resistant varnishes for automobile paint.

Light metals and various kinds of steel, such as technical parts for cars and aircrafts as well as engine parts.

Food processing

Interior and exterior protection: Mar and scratch resistant coatings for furniture and parquet; Scratch resistant high gloss lacquers on wood and barrier coatings on plastics.

Electronics: Protective layers for semiconductor chips; Transparent plastics such as acrylic glass (PMMA), SAN and polycarbonate, e.g. for plastic walls or displays of mobile phones.

Scratch proof coatings for optical components.

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Report contents include:

Market revenues for abrasion and wear resistant nanocoatings.

Detailed analysis of the benefits of using abrasion and wear resistant nanocoatings.

Current products.

53 producer profiles.

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