

The Global Market for Anti-Corrosion Nanocoatings 2020

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Abstracts

The incorporation of nanomaterials into thin films, coatings and surfaces leads to new functionalities, completely innovative characteristics and the possibility to achieve multi-functional coatings and smart coatings. The use of nanomaterials also results in performance enhancements in wear, corrosion-wear, fatigue and corrosion resistant coatings. Nanocoatings demonstrate significant enhancement in outdoor durability and vastly improved hardness and flexibility compared to traditional coatings.

Advantages of nanocoatings include:

Lower cost for a number of applications.

Improved functionalities over traditional coatings (transparency, improved barrier capabilities, resistant to erosion, spectral control (UV, IR).

Low energy used to produce coatings.

Superior coating characteristics.

Thin and lightweight: Reduces packing, transport and storage costs.

Nontoxic: Environmentally friendly product.

Surface compatibility.

Improved durability/resistance.

Extreme environment corrosion protection.

Cost effectiveness.

Reduced prep, application time/number of coats.

Extended life.

Optimized processing.

The use of nanocoatings allows for improved barrier properties to water and corrosive ion permeation. These protective coating has numerous uses for automotive, aerospace, marine, and industrial applications. There is a market need for a cost-effective non-epoxy-based corrosion resistant coating operable in environments of temperature swings, strong acid, water, and/or road salt. Nanoparticle materials have a very high surface area. When this surface is functionalized, it can deliver high loadings of organic corrosion inhibitors. Thus, tailored nanoparticles are the ideal carrier for delivery of the needed level of active corrosion inhibitors.

Report contents include:

Size in value for the anti-corrosion nanocoatings market, and growth rate during the forecast period, 2019-2030. Historical figures are also provided, from 2010.

Size in value for the End-user industries for anti-corrosion nanocoatings and growth during the forecast period.

Market drivers, trends and challenges, by end user markets.

In-depth market assessment of opportunities for anti-corrosion nanocoatings, by type and markets.

The latest trends in anti-corrosion nanostructured surface treatments and coatings.

Benefits of anti-corrosion nanocoatings, by markets and applications

Estimated market revenues for anti-corrosion nanocoatings to 2030.

60 anti-corrosion nanocoatings company profiles including products and target markets.

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