

Innovative Coating Materials That Overturns Conventional Wisdom

NANOTECT®-A

Abrasion-resistant coating

Outstanding mechanical properties in all characteristic tests
Abrasion resistance 10 times higher than conventional resin coatings

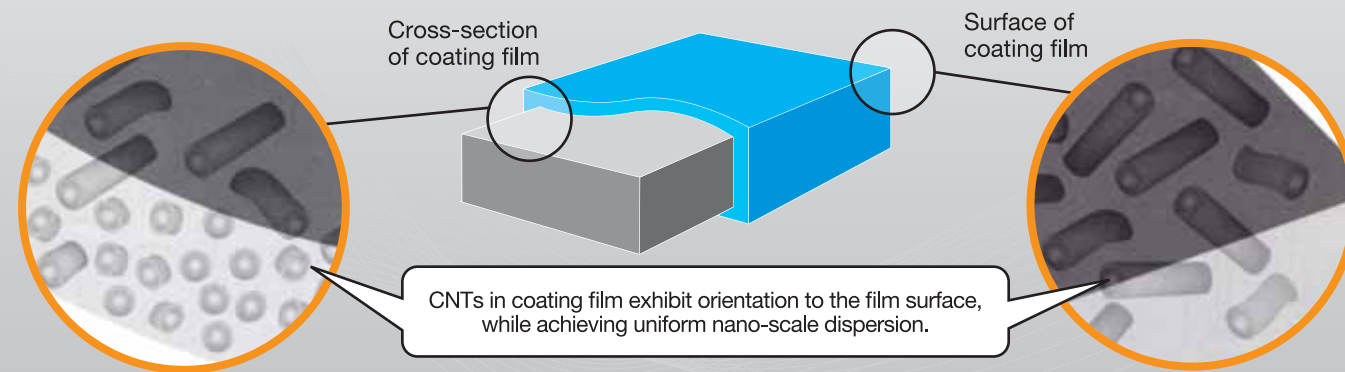
NANOTECT®-C

Corrosion-resistant coating

Superb mechanical strength and chemical resistance
World's first composite coating with CNT to exhibit 3,000-hour resistance in salt spray tests

Succeeds in Uniform Dispersion of Carbon Nanotubes in Composite Resin Coating

Dispersion and orientation structure of CNTs in coating film



CNT dispersion in solution

CSCNT¹ chemically treated using our proprietary grafting technique enables uniform CNT dispersion in resin polymers.

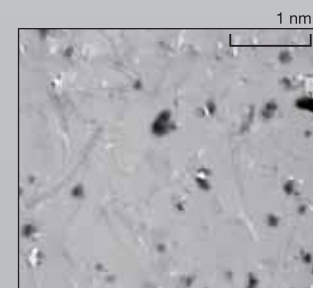


Grafted CNTs

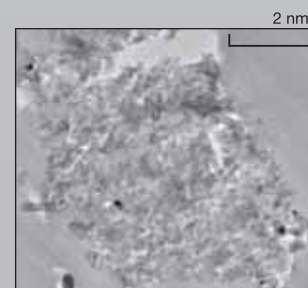


Non-grafted CNTs

CNT dispersion in resin coating



Grafted CNTs



Non-grafted CNTs
(CNTs dispersed in aggregates)

Unlimited Potential for Wide Array of Applications

Our high performance coating materials protect product surfaces from scratches, rust, corrosion, burns and other damage, offering great promise for a wide range of applications including airplane parts, construction materials and automotive and other transport vehicle parts.



▲ Large structures/bridges, subways, buildings, offshore plants



▲ Nuclear power plants



▲ Chemical plants/complexes



▲ Passenger/cargo aircraft

NANOTECT®

series holds great promise in various application fields

NANOTECT®

1. Nanotect® is a registered trademark of Takenaka Seisakusho Co., Ltd.
2. Patents applied in Japan, Europe, the U.S. and Taiwan jointly by Prof. Emeritus Inagaki of Institute for Chemical Research, Kyoto University; and GSI Creos Corporation (under the guidance of Prof. Emeritus Fukuda, Institute for Chemical Research, Kyoto University).



株式会社 竹中製作所 TAKENAKA SEISAKUSHO Co.,Ltd.

● Head Office

6-4-35 Hishie, Higashi-Osaka City, Osaka
578-0984, Japan
Tel. +81-6-6789-1555 Fax. +81-6-6782-2053
URL: <http://www.takenaka-mfg.co.jp>

● Surface Preparation Division

Tel. +81-6-6782-2054 Fax. +81-6-6789-3270

TAKENAKA SEISAKUSHO Co.,Ltd.

World's First Composite Technology That Combines Carbon Nanotubes (CNTs) with Resin Coating

Super-hard CNT-resin composite coating

NANOTECT®

Nanotect®: The first organic resin paint hybridized with carbonnanotube (CNT)

Recipient of a merit award and special award for technology management in the 2009 small and medium-size enterprise outstanding new technology and product award program

Selected as an R&D project commissioned by the Ministry of Economy, Trade and Industry under the 1st strategic core technology sophistication assistance program in 2006-2008

TAKENAKA SEISAKUSHO Co.,Ltd.

