NANO SHINE

EXPO
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FEEDING THE PLANET
ENERGY FOR LIFE

NEW GENERATION GLASS COATING

SYSTEM BRAIN CO.,LTD.

What is Glass Coating for Automotive ?

Glass coating is a method of automotive protection with thin glass film by fused quartz. It is said to be the best car coating existing now because the characteristics of fused quartz is the best material compare with the other coating materials.

Features of Fused Quartz

High Transparency When display fused quartz and maintain light though inside, the light can be seen more than 60 miles ahead.	**High Purity** Fused Quartz is made from SiO2 only It is 100% purity silica glass.
High Heat Residence Heat resistance is up to 1300℃ (about 2300 Fahrenheit)	**Excellent Chemically Inertness** Fused Quartz is extremely chemically stable and it has excellent chemical resistance.

The Advantages of Glass Coating

Glass coating is made by 100% silica, this means it is mineral matter. Other coating materials usually contain organic matters like oil. Mineral matter have many advantages compared to organic matter in car body protection.

- Strength against oil based dirt like exhaust gas or soot
- It never deteriorates because of high heat resistance and durability against UV and acid rain
- Hardness of glass coated surface is 6H so it will protect against scratching
- Normal dirt is removed simply with water or naturally with heavy rain because the surface is very smooth.
- It is hydrophilic. Water repellent coatings make water spots on surfaces and cause damage to the car body because of the exert lens effect.
- Eco-friendly As it is composed of 100% mineral matter, it does not contain any hazardous substances like VOC(Volatile Organic Compounds).

Disadvantages of Glass Coating

Amongst car enthusiasts glass coating is considered the best on the market but there are some drawbacks.

- Normally it takes 2 days to finish.
- Need special techniques from a superior craftsperson.
- A large facility is needed, such as a painting booth
- It is Expensive

Because of those problems, glass coating is hard to handle in car dealerships.

What is Nanoshine ?

We believe that Nanoshine overcomes the disadvantages of other glass coating products. The coating is 100% purity silica glass like normal glass coatings but it is much easier to do. Simply sprinkle Nanoshine with water using our unique device.

No Chemical used at all !

Only with Water !

Strong Glass Shield is generated !

Features of Nanoshine

Nanoshine is a New Technology of Glass shield, which does not use chemicals.

- Coating effect is the same as normal glass coating, which is the best.
- It only takes 3 to 5 hours to complete.
- Workers don’t need any special skills. (Only 1 week training)
- It doesn’t need large facilities like a painting booth. Needs only water and power supply.
- 5 years guarantee
- Coating is not only for the car body, but also for windows, wheels, head lights, plastic parts, carbon parts, and metal car grilles
- Perfect environmental performance. Nanoshine has passed water quality environment tests in Japan so there are no issues with water spillage

Comparison of Nanoshine with Other Coatings

	Nanoshine	Glass Coating	Glass Fiber	Fluorine	Polymer	Wax
Main Component	Fused Quartz	Fused Quartz	Glass Fiber Main	Fluorine Main	Silicon, Acryl, etc.	Wax
Film Duration	Semipermanent	5 years	3 years	Less than 2 years	Less than 1 year	1 month
Surface Condition	Hydrophilic	Hydrophilic	Water-repellent	Water-repellent	Water-repellent	Water-repellent
Surface Hardness (Scratch Resistance)	6H	9H	6H～9H	3H～7H	2H～3H	1H～2H
Required time	3 to 5 hours	2 Days	5 Hours to 2 Days	5 Hours to 2 Days	5 Hours to 2 Days	1 to 3 hours
Heat Resistance	1300℃	1300℃	500℃～1000℃	200℃～300℃	100℃～300℃	40℃～80℃
Oxidation Resistance	◎	◎	○	○	△	×
Ultraviolet Resistance	◎	◎	○	○	×	×
Acid Dirt Resistance	◎	◎	○	△	△	×
Oil Dirt Resistance	◎	◎	○	○	○	×
Resistance for Color Fading and Stain	○	○	○	○	△	×
Environment	◎	○	×	×	×	×
Surface Glossy	Natural Brightness	Natural Brightness	Natural Brightness	Glossy	Very Glossy	Very Glossy

※ Using general examples as a reference

The Work Progress of Nanoshine for Cars

Wash the car carefully in the minutest detail

Remove the ion powders carefully with clay

Compound the body carefully with a special polisher and abrasives

Sprinkle the Nanoshine water

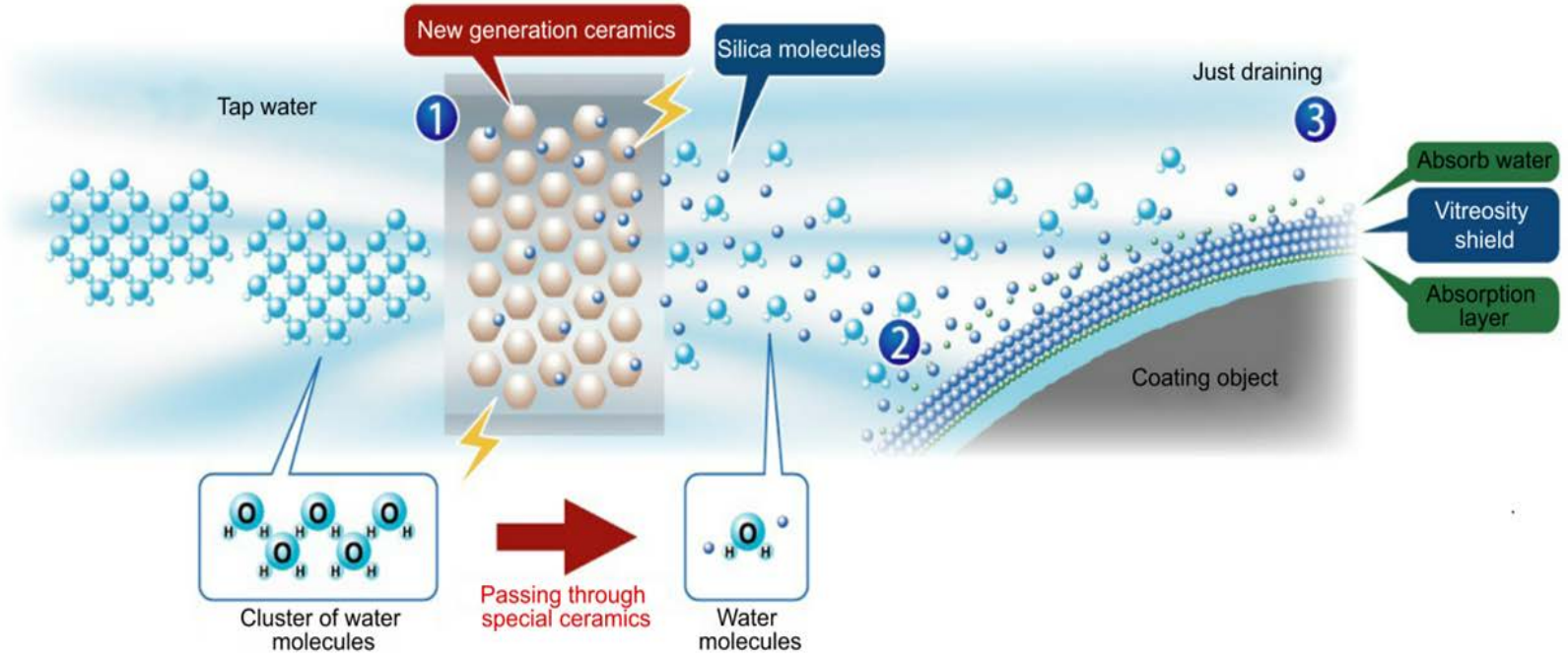
Wipe off water and finish

Basic Mechanism for Nanoshine

Nanoshine is innovative coating technology, and it is processed by passing water through a special device including Natural Ore(Special Ceramic) to create ceramic ionized water into which molecule of high purity quartz glass dissolves by NANO-level, and it makes it possible to form strong glass film.

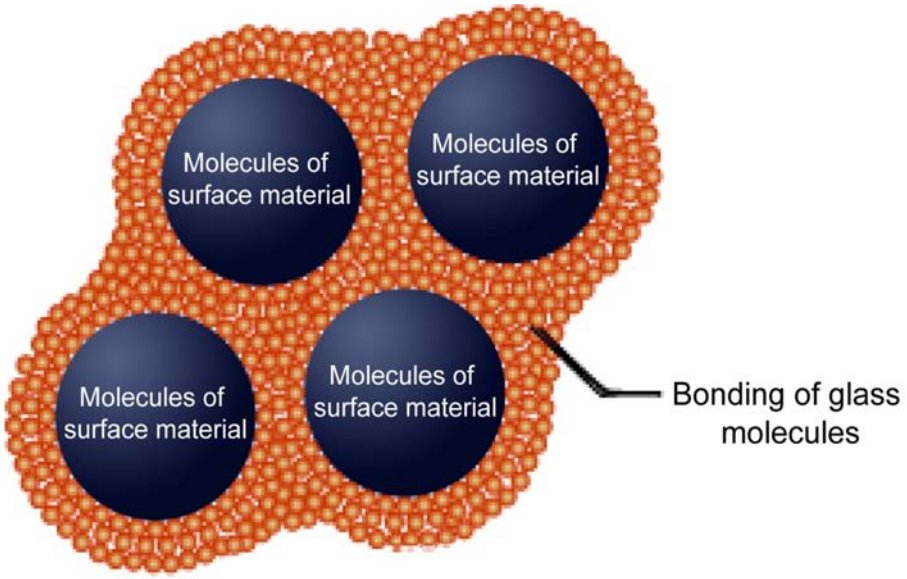
Thanks to "ERP Technology" which forms mineral film, via electrochemical reaction, and molecule of glass in Nano-level, reacts and combines to other molecules of surface and bring glass characteristics.

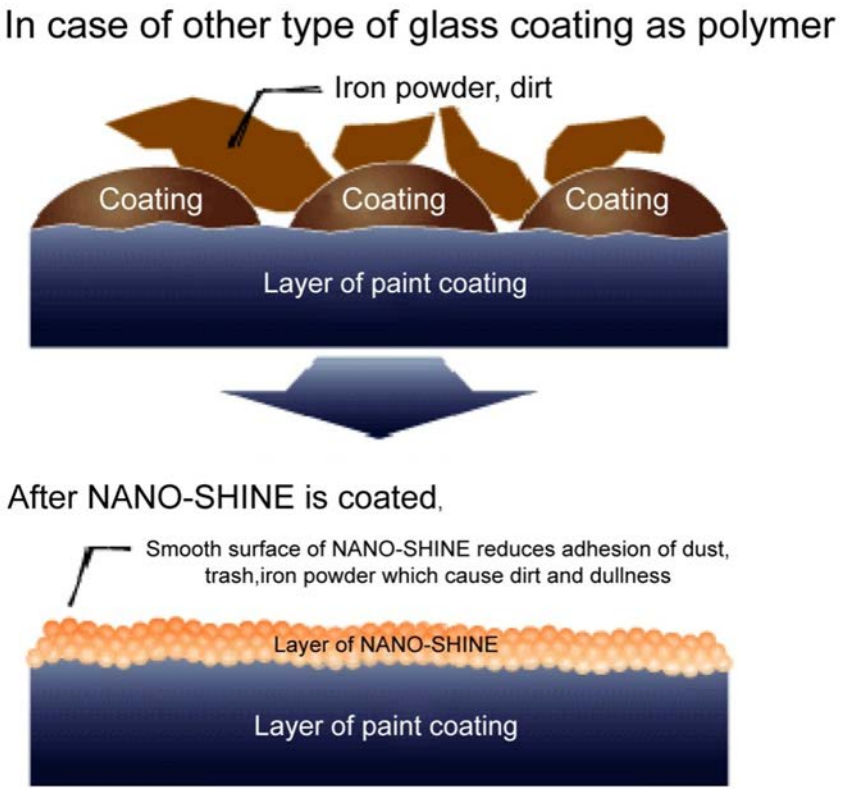
1)The inside layer adheres well to painted surfaces
2)The central layer forms a glass shield
3)The outer side laver absorbs water and forms film.



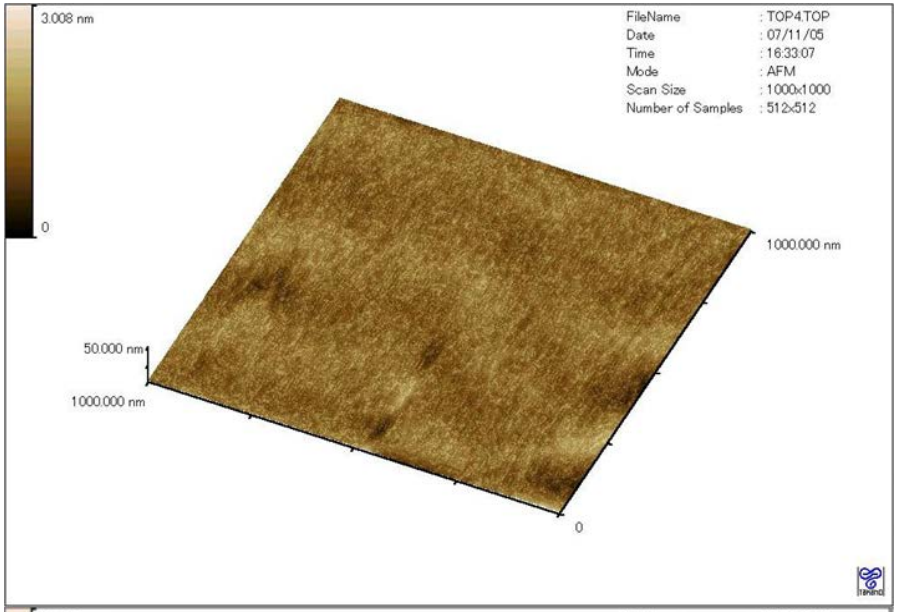
Mechanism for Nanoshine Fixing on Object

Nanoshine water includes dissolved molecules of inorganic glass material which becomes part of the film, at NANO-level. If this water touches a painted surface, it forms film by surrounding molecules on the surface material, under the principle of electro-plating. If the surface is surrounded by molecules of Nanoshine, it continues to be bright, luster and hard.

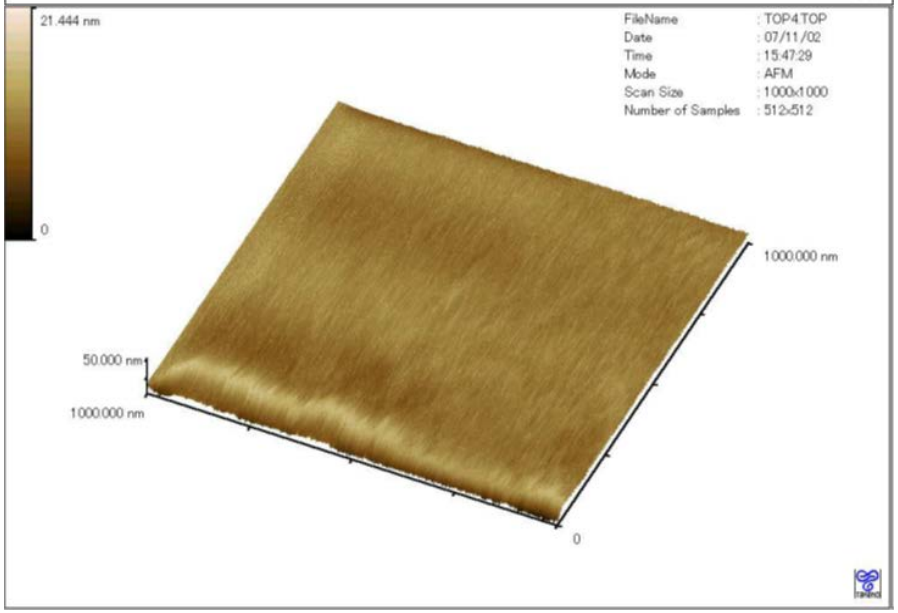




The Measurement of Surface Roughness by AFM



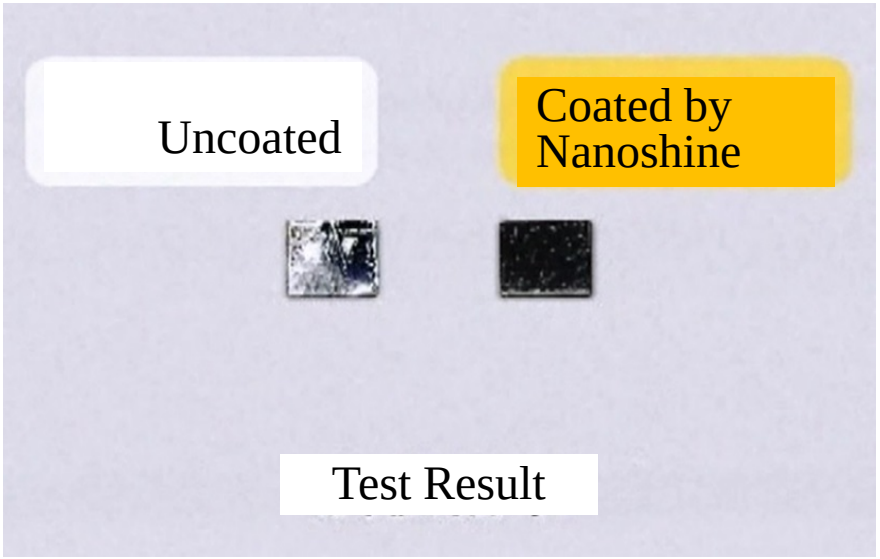
Before Coating



After Coating by Nanoshine

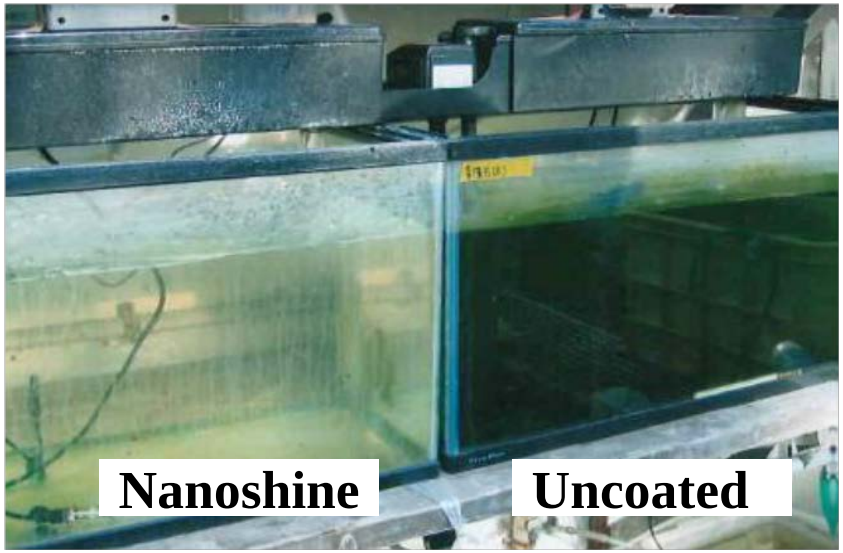
Quality Test of Nanoshine

Exposure Test Result After 1 Month



High Pressure Washing Test
with Aluminum Plate

Quality Test of Nanoshine

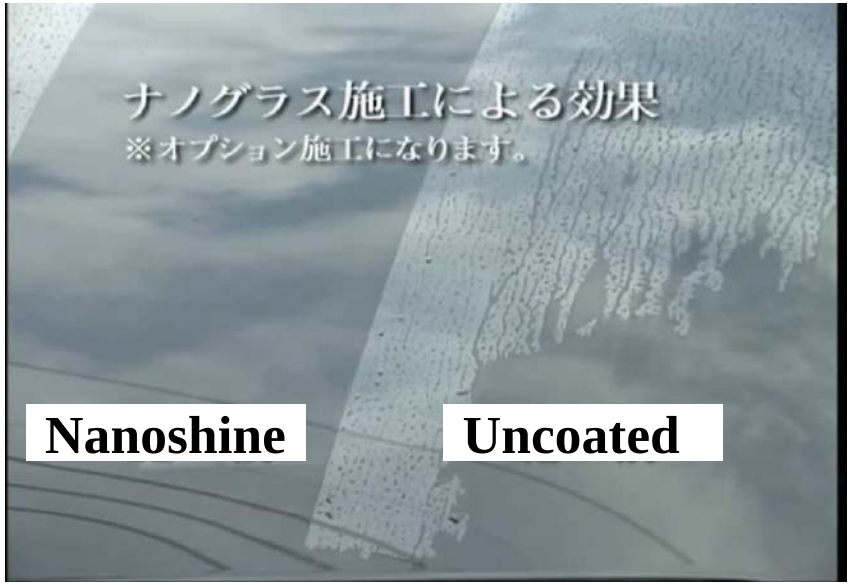


Exposure Test Result after 3 months with a Water Tank

Exposure Test Result after 3 months with a Gravestone

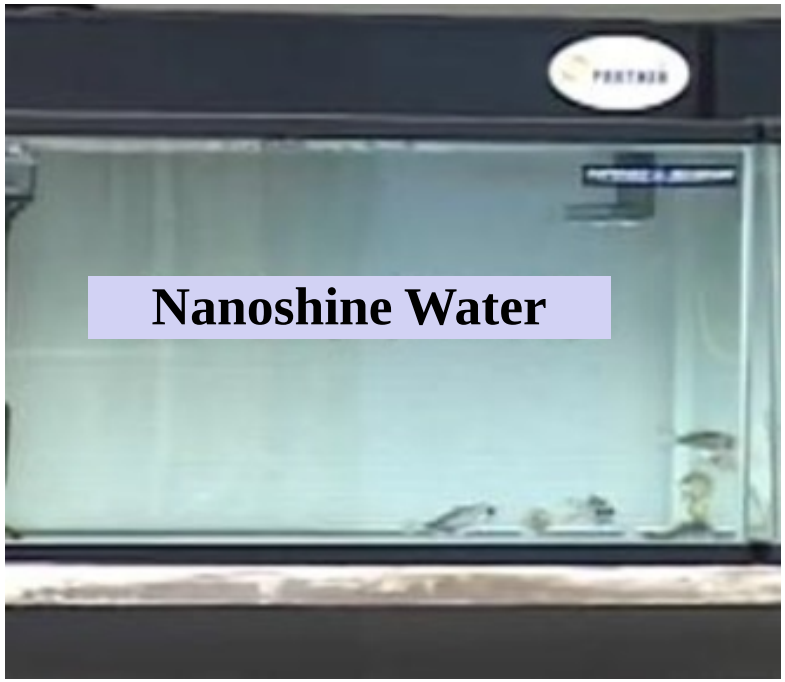
Quality Test of Nanoshine

Comparison Between Hydrophilic and Repellency on a Car Body



Comparison Between Coated Nanoshine and Uncoated with Windowpane on a car body

Environmental Safety Test of Nanoshine



It is no problem to keep fish in Nanoshine Water

水質検査成績書

Nanoshine water passed water quality standard test from the Tokyo Government and it is even drinkable

Achievements of Nanoshine

Nanoshine was developed with Hokkaido University 9 years ago. Started with car dealers in Japan and it has now been adopted by many market.

Automotive : About 200 dealers in 19 countries

Japan

German

Romania

Thailand

China

Taiwan

Achievements of Nanoshine

Automotive

Philippines

Malaysia

Myanmar

India

Singapore

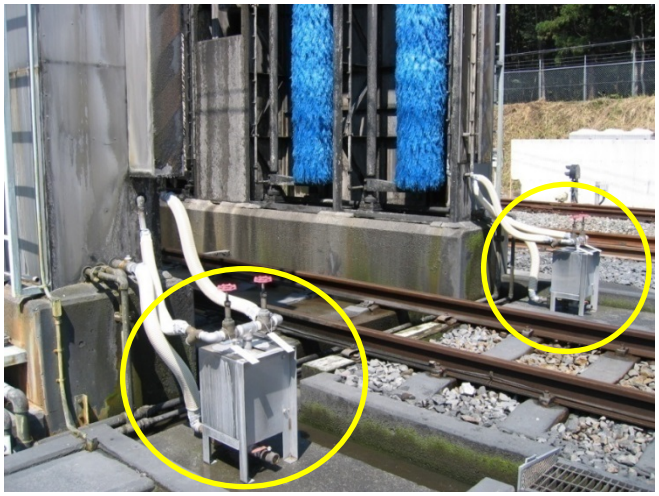
Dubai

Achievements of Nanoshine

Railroad Companies

Nanoshine Cleaning

Installment even to glass of train



A Japanese Railway Company appreciates for less cost for labor and water/chemical which was used to, and continue to coat Nanoshine 2,700 trains per month, in average. This movement spreads over as this is inevitable to company to protect environment.

Achievements of Nanoshine

Railroad Companies

The Japanese Emperor and Empress visited Kawagoe-city with the King of Sweden. They travelled in a VIP train on that used Nanoshine.

Achievements of Nanoshine

Other Samples

Airplane

Ship

Vending Machine

Interior Materials for Kitchen, Bathroom, Toilet, Window

Achievements of Nanoshine

Building Maintenance

Floor

Escalator

As a chemical wax coating for buildings , which have zinc pollution and disposal problems for removing agent.

Concrete

Wood

Achievements of Nanoshine

The inventor of Nanoshine received the Higashi Kuninomiya Memorial Award and Higashi-Kuninomiya International Prize. These are highly prestigious, given by the Japanese Imperial Family to small and medium‐sized enterprises who develop revolutionary technologies which positively influence the domestic and international market.

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Nanoshine is currently exhibiting at the United Nations Pavilion in EXPO Milano 2015, with the official approval of the Japanese government.

Nanoshine Sales Method

A sales person will introduce our car coating options to the customers when they purchase their car

Coating will be done by our professional employee at the dealership (electricity, water and work space will be provided by dealer)

We will manage after sales customer service and issue a warrantee

Brochures and banners will be prepared by us

After the sale the dealer does not need to be involved, with no risk and no facility investment.

Price of Nanoshine

Price List of Nanoshne for Dealers (Mercedes Benz)

Size of Car		Type of Cars	Price
Small Size Vehicle	Length : Under 158″		$400
Middle Size Vehicle	Length : 158″ to 184″ Height : Under 63″	CLA Coupe, C-Class Sedan, AMG-GTS, GLA-SUV, SLK Roadster, SL Roadster, B-Class Electric Drive	$600
Large Size Vehicle	Length : 185″ to 204″ Height : 63″ to 66″	AMG C63, E-Class Sedan, E-Class Coupe, E-Class Wagon, CLS Coupe, S-Class Coupe, GLK-SUV, E-Class Cabriolet	$680
Extra Large Size Vehicle	Length : 205″ to 236″ Height : 67″ to 90″	S-Class Sedan, M-Class SUV, GLE Coupe, GL SUV, G-Class SUV	$800

※ The price includes body, wheel, bumper, and exterior lamp covers. Windows are not included.

Thank you!

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http://www.systembrain.cc

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