



Smart Nano NCI Coating Solutions

Marine & Offshore Asset Protection & Enhancement

Specialists in Lifeboats, Cranes, Shipping & Offshore Containers, Pipelines, Valves & More

About Us

At Smart Ship Solutions Pte Ltd, we deliver sustainable, high-performance surface protection for the marine and offshore sectors. Whether you're operating lifeboats, cranes, containers, pipelines, valves, or deck structures, our advanced nano-coating technologies are designed to extend asset life, reduce operational costs, and improve environmental performance.

Where Smart Nano NCI Works Best

Smart Nano NCI is ideal for both new coatings and highly oxidized surfaces.

Compatible With:

- 2K Epoxies
- 2K Polyurethanes
- Powder Coatings
- Polyesters & Gel Coats
- E-Coats (Electrocoats)
- Latex Paints
- Fiberglass
- Anodized Aluminum

Especially effective in preventing filiform corrosion, Smart Nano NCI is trusted in marine and offshore environments where salt, UV, and chemicals rapidly degrade untreated surfaces.

Why Choose Smart Nano - Clear Coating?



- ✓ 10+ Years of Service Life
- ✓ 99% Gloss Retention (Xenon WOM Tested)
- ✓ Fast Drying (4 hr handle, 24 hr service)
- ✓ Reduces Maintenance & Environmental Waste
- ✓ 4000-Hour Salt Spray Protection
- ✓ Abrasion & Chemical Resistance
- ✓ Low-VOC, 1K Application

Technical Performance Highlights

Property	Result
Gloss Retention	99% (after 4000 hrs, Xenon WOM)
Salt Spray Resistance	4000 hrs (ASTM B117)
Abrasion Resistance	8.4 mg loss (Taber CS-17)
Pencil Hardness (Scratch)	4H
Scratch Hardness	2500g
Pencil Hardness (Gouge)	5H
Flexibility	Pass 1mm Mandrel Bend
Chemical Resistance	No effect (acids, alkalis, solvents)
Operating Temp	-40°C to 120°C
Pot Life	1K, 200 cps, Easy Spray or Wipe

OUR SUSTAINABILITY COMMITMENT

Smart Ship Solutions is proud to support global sustainability goals by minimizing environmental impact through long-life coatings and eco-responsible solutions.

How We Promote Sustainability:

- Reduced repaint cycles = less waste
- 1K low-VOC coating system = lower emissions
- Longer asset lifespan = less material turnover
- Improved corrosion resistance = fewer failures and disposals

Our coatings help you meet ESG goals while preserving critical marine infrastructure.

Our mission:

Protect . Preserve . Perform

Smart Ship Solutions Pte Ltd

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Structural Components

- ✓ Walkways, Railings & Ladders
- ✓ Handrails & Staircases

- Corrosion protection
- Gloss retention and long-term colour stability



Mechanical Equipment

- ✓ Cranes & Davits
- ✓ Winches & Towing Gear
- ✓ Anchor Handling Equipment

- Resistant to sea air, oil, abrasion, and salt spray

Support Equipment

- ✓ Lifeboats & Rescue Boats
- ✓ Offshore Containers

- UV, saltwater, and impact protection
- Full internal/external corrosion resistance



Pipeline Systems

- ✓ Above-Deck Pipework & Valves
- ✓ Flanges, Joints & Fittings

- High resistance to chemicals, hydrocarbons, and salt
- Maintains seal integrity and prevents rust



Utilities & Electrical Housings

- ✓ Junction Boxes
- ✓ Cable Trays

- Prevent moisture ingress and oxidation
- Rust protection in high-humidity marine environments



Safety Gear & Fixtures

- ✓ Firefighting Equipment Frames
- ✓ Escape Hatches & Door Frames

- High durability
- Minimal maintenance requirements



Why Specify Smart Nano-Clear?

- ✓ Extends asset life by 10+ years
- ✓ Reduces repainting and maintenance cycles
- ✓ High resistance to UV, chemicals, and abrasion
- ✓ Fast turnaround – dry-to-handle in just 4 hours