

ECO-FRIENDLY
NanoMate®

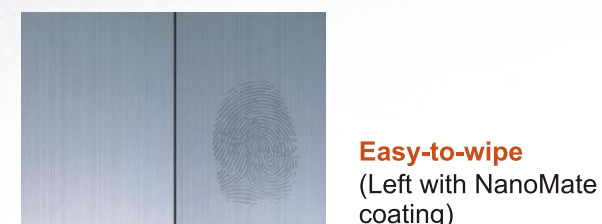
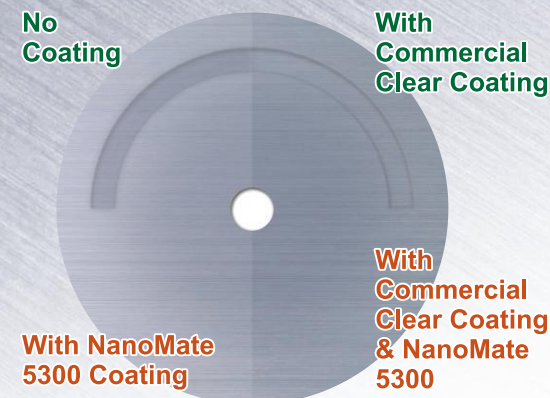
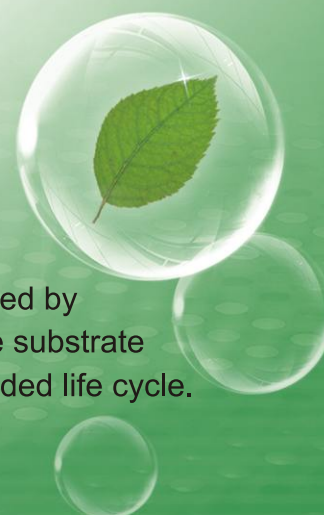
NanoMate's nano organic ceramic coating can replace metal surface pretreatment as well as eliminate or decrease primer usage.



NanoMate® features

- **High Hardness**
- **Easy Cleaning**
- **Simple Process**
- **Hydrophobicity**
- **Excellent Adhesion**
- **Anti-Corrosion**
- **Metallic Luster**

Metallic luster and hardness offered by NanoMate® clear coating give the substrate the glossy appearance and extended life cycle.

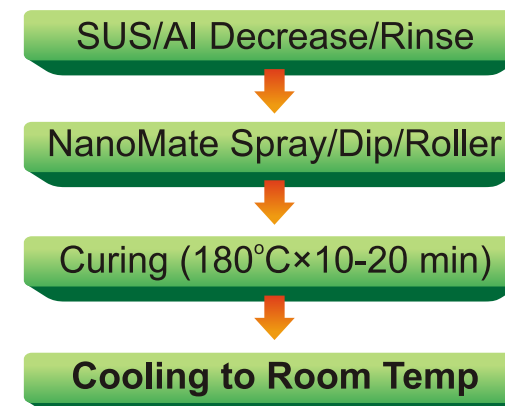


The chemical composition of the coatings can be tailored to enhance many different properties such as adhesion, corrosion-resistance, wear-resistance, hydrophobicity, or easy-to-wipe features.

By modifying the compositions, this process has been applied to many different metals and alloys, for examples Al, Cu, Ti, Zn, steel, stainless and Mg.

These nano-ceramic hybrid coatings form strong chemical bonds with both metal surfaces and organic adhesives or paints. Typically there is a much stronger mechanical interlock than is realized between traditional anodized surfaces and topcoats.

NanoMate Coating Process



Specification of NanoMate® Treated Stainless Steel

Material	SUS 304	SUS 430	Reference to standards and specifications
Salt Spray Test	> 1000 hrs	> 1000 hrs	CNS8886
Pencil Hardness	9H	9H	CNS10757 ASTM-D3363(kgf:1kg)
Boiling Water Test, 2hrs	pass	pass	CNS10757
Anti-Acid, 25°C 5% H ₂ SO ₄ (w/v)	> 120 min	> 120 min	CNS10757/ No discoloring & film delamination
Anti-Alkaline, 25°C NaOH, pH13	> 120 min	> 120 min	GMW14665/ No discoloring & film delamination
Stain Resistance Tea/Coffee/Soy Sauce/ Crayon/Lipstick/Gasoline	> 18 hrs	> 18 hrs	CNS10757
Cross-Hatch Test (Adhesion)	pass	pass	CNS10757
Taber Test (film loss, gram)	No obvious loss of weight	No obvious loss of weight	JIS-K5400 Weight loss after 500g, 100 cycles

