

Stainless Steel Technical Data Overview

Fine Guard 3 Coating





A fingerprint was placed in the middle of each sample, then wiped once with damp cloth and once with dry cloth.

Product Description

Fine Guard 3 (FG3) is an anti-fingerprint coating developed by Tsukiboshi Art Company, a subsidiary of Nisshin Steel in Japan. This coating is available on all of Tsukiboshi's substrate stainless steel finishes, including Starlight, Hairline and Vibration, as well as on colorized versions of the Tsukiboshi's line of finishes. However, please note that FG3 is not provided on mirror finishes.

How it Works

The FG3 coating is an SiO₂ solution which forms a hydrophilic layer that is then hardened by heat-treatment: For example hardness over 6H at pencil hardness. This layer is very thin (about 1.2µm) so that the appearance is similar to clear paint. However, a high gloss substrate finish will exhibit less reflection if treated with FG3.

Fabrication

Keep dry in transportation, stocking, processing and after processing when TPF (temporary protective film) is on the sheet. (If moisture is trapped between the film and the material surface, damage may occur). Cooling oil and water for V-cut processing must be wiped clean with a cloth as soon as possible after processing.

After installation, keep dry and/or clean and dry immediately if material becomes wet while TPF is still adhered to the surface. Clean as soon as possible with water and dry if any acid and alkali substances come in contact with the material surface. Laser cutting process may leave a white powdery residue along the edge of the cut.

Table I	SUBSTRATE FINISHES & COLOR COMBINATIONS				
	COLOR				
SUBSTRATE	Black	Blue	Bronze	Gold	Green
InvariMatte [®]	•				
InvariLux [®]	•				
InvariTone	•				
#4 Satin	•				
Linen	•	•	•	•	
InvariWisp	•	•	•	•	•
InvariBlend [®]	•	•	•	•	•
#8 Mirror	•	•	•	•	

Sheets can be supplied 48" wide however only 46" of continuous width is fully coated. (One side of the sheet is held with clamps for processing and the coating does not extend under the area covered by the clamps). The coating will bend at 90° adequately without noticeable cracking of the FG3 surface.





Maintenance

Clean as soon as possible with water and dry if any acid and alkali substances come in contact with the material surface.

For General Cleaning (detergents should not be necessary):

- 1. Carefully brush off larger dirt particles on the surface with a soft cloth to avoid scratching.
- 2. Wipe off the surface lightly without making scratches with a wet cloth.
- 3. After cleaning, wipe with dry cloth carefully and dry the surface.

For Stains:

- 1. Clean with neutral detergent in the event water alone proves insufficient, then rinse and dry.
- 2. Organic solvents like acetone and toluene may be used for more stubborn deposits. It is necessary to wash the sheet with neutral detergent, rinse and dry immediately afterward.
- 3. Avoid cleaning with peroxide, alkaline and acid solutions. These may decrease the performance of FG3 treatment.

Warranty

For warranty information, please contact a representative.

