

# ENGINEERED FOR QUALITY, BUILT TO LAST



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No.3 Eunos Ave 8A, Singapore 409458 Tel: (65) **6745 1277** Fax: (65) **6748 9634** E-mail: she@she.com.sg Web: www.she.com.sg

**Seng Heng Engineering Pte Ltd** 

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FLUOROCARBON COATING



## STATUS-COAT

STATUS-COAT is jointly developed by Seng Heng and a Material Research Organisation in a collaborative R&D effort to produce a better protective coating for steel that enhanced its service life in harsh environments. It is particularly useful to industrial plants operating in hot humid tropical and marine atmospheres where high corrosion rates occur.

### STATUS-COAT



STATUS-COAT is unique non-stick and highly durable fluorocarbon polymer-based coating which offers superior resistance to chemicals, corrosion and abrasion. It has the following quality characteristics:

- Inert to a wide range of chemicals and solvents commonly used in industries.
- · Superior coating adhesion throughout its service life.
- Low coefficient of friction.
- Can withstand severe temperature extremes, from -45°C to 232°C, without significantly affecting its properties.
- Non-wetting property which facilitates cleaning-up and making maintenance easier.
- Good resistance to chipping.
- Excellent weather resistance.

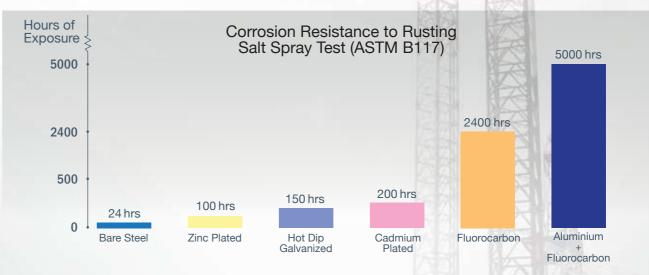
### **APPLICATIONS:**

STATUS-COAT is ideal for bolts and nuts, washers and other fasteners related products made of steel or aluminium. Seng Heng specializes in manufacturing these products.

STATUS-COAT fasteners are widely used in the petrochemical plants, building structures, bridges, oil rigs, ship buildings and all types of industrial plants.

#### TYPICAL PROPERTIES OF STATUS-COAT FLUOROCARBON POLYMER

Physical Properties	
Tensile strength at 25°C	220-920 kg/cm <sup>2</sup>
Elongation at 25°C	1-9%
Abrasion at 25°C (Bell Abrasion Tester)	30-50g abrasive / mil 12-20g abrasive / micron
Hardness	9-18 Knoops
Static coefficient of friction	0.12
Dielectric strength 4 mil film 100 micron film	500-2500 volts / mil 20-100 volts / micron
Volume resistivity 50% relative humidity	10 <sup>11</sup> - 10 <sup>13</sup> ohm-cm
Surface resistivity 50% relative humidity Water absorption	10 <sup>8</sup> - 10 <sup>13</sup> ohms Less than 4%
Operating temperature	-45°C to +232°C

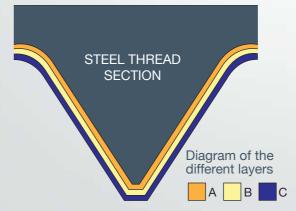


STATUS-COAT exhibits superior corrosion resistance performance as compared to other conventional metallic protective coatings.

### STATUS-COAT Layers

The steel substrate is first thoroughly cleaned and chemically treated (A) to ensure good bonding.

It is then coated with primer (B) before the final coat of fluorocarbon polymer (C).





#### **Outstanding Features**

- 1. Rust and Corrosion Prevention
- Outstanding corrosion protection owing to unique coating system.
  Superior durability in corrosive chemical plants and marine
- Excellent performance in outdoor hot and humid tropical environment.
- 2. Chemical Resistance
- Unaffected by solvents, acids and a whole wide range of common industrial chemicals.
- 3. Heat Resistance
- Applicable over wide temperature range from -45°C to 232 °C.

- 4. Wear Resistance
- Tough scratch and abrasion resistant fluorocarbon polymer.
- 5. Weather Resistance
- Good resistance to action of sunlight, rain and seawater spray.
- 6. Electrical Resistance
- High dielectric strength and very high surface resistivity.
- 7. High Lubricity
- Low friction

Chemical Resistance		
Solvents (aliphatic and aromatic)	Excellent	
Petroleum (gasoline, naphtha etc)	Excellent	
Oils (animal and vegetable)	Excellent	
Acids (HCI, H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , organic acids)	Good	
Soaps, Detergents, Diluted Alkalis	Good	
Other Chemicals	Generally Unaffected	
Seawater	Unaffected	