



Coating Functions

Ceramic Oxide Coatings

Tungsten Carbide Coatings

Chromium Carbide and other Coatings

Iron, Nickel and Cobalt-based Coatings

Dimensional Restoration

(Part salvage, area buildup)

Chemical Corrosion Resistance

Adhesive Wear:

- Soft & Hard Bearing Coatings

Abrasive Wear:

- Coatings Resistant to Abrasive Grains (Low & High temperature)
- Coatings Resistant to Hard surfaces (Low & High temperature)
- Coatings Resistant to Fiber and Thread
- Coatings Resistant to Hard Surfaces (High temperature)

Surface Fatigue Wear:

- Coatings Resistant to Cavitation
- Coatings Resistant to Fretting (Intended motion)↓
- Coatings Resistant to Fretting (No Intended motion-Low & High temperature)

Erosive Wear:

- Coatings Resistant to Particle Erosion (Low & High temperature)
- Heat and Oxidation Resistance

High Temperature Processes:

- Coatings Resistant to Oxidizing Atmospheres
- Coatings Resistant to Corrosive Gases
- Coatings Resistant to Erosion Above 1550F
- Coatings for Thermal Barriers

Molten Metal Handling:

- Coatings Resistant to Molten Zinc
- Coatings Resistant to Molten Aluminum
- Coatings Resistant to Molten Iron and Steel
- Coatings Resistant to Molten Copper
- Atmosphere and Immersion Corrosion Resistance

Atmospheric Corrosion:

- Coatings Resistant to Industrial Atmospheres
- Coatings Resistant to Salt Atmospheres
- Coatings Resistant to Rural Atmospheres

Immersion Corrosion:

- Coatings Resistant to Potable Fresh Water
- Coatings Resistant to Non-Potable Fresh Water
- Coatings Resistant to Hot Fresh Water
- Coatings Resistant to Salt Water
- Coatings Resistant to Corrosion in Chemical & Food Processing

Electrical Conductivity or Resistance

Abrasive Coatings – rough surface

Coatings for Radio Frequency Shielding

Ferrous Substrates:

- Coatings for Machinable Carbon Steels
- Coatings for Grindable Carbon Steels
- Coatings for Machinable Corrosion-Resistant Steels
- Coatings for Grindable Corrosion-Resistant Steels

Non Ferrous Substrates:

- Coatings for Nickel and Nickel Alloys
- Coatings for Cobalt and Cobalt Alloys
- Coatings for Copper and Copper Alloys
- Coatings for Aluminum and Magnesium and their Alloys
- Abradable Coatings