

Fluorocarbon Coating (PTFE, Xylan, Teflon, Emralon)

Fluorocarbon Coating is an organic coating consisting of solid lubricant dispersed in an organic binder and dissolved in a specially formulated mixture of solvents. It is also corrosion-resistant due to the use of a thermally, cured thermosetting synthetic binding material. When applied to the substrates resists galling, seizure and fretting and offers corrosion resistance.



Features

Fluorocarbon Coating has the following characteristics:

- ① It is a lustrous coating.
- ① It has excellent adhesion.
- ① The effective optimum film thickness is 15-25 microns.
- ① Load bearing capacity: 1000 bar
- ① Corrosion resistance: Between 100 to 400 hours salt spray (depending upon the thickness) as per ASTM B117
- ① Working range: 200°C (continuous), 250°C short bursts

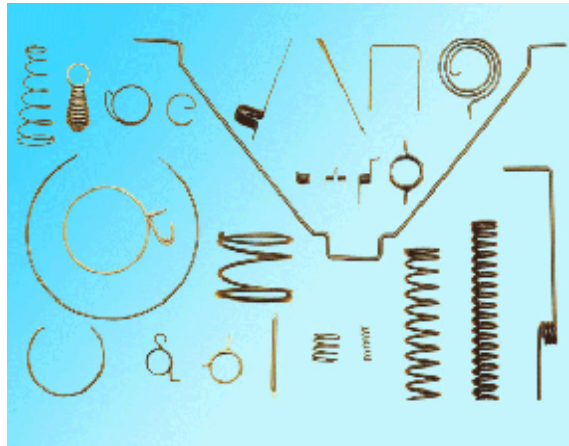


Fluorocarbon Coating may be applied by dip, spray or any one of the conventional painting methods. Prior surface preparation has a marked bearing upon the quality of Fluorocarbon Coating. Fluorocarbon Coating can be given on any metal or alloy surface, which can be suitably pretreated, by phosphating, blasting, anodizing or Soft Nitriding/Nitrocarburising.

Advantages

Fluorocarbon Coating performs well under a number of extreme environmental conditions. Its lubricating ability from room temperature up to 200°C in air and even higher temperatures in non-oxidizing atmospheres makes it attractive for aerospace applications. Fluorocarbon Coating is administered in machine parts exposed to corrosion and where lubrication is needed. For example,

- Parts working in corrosive atmosphere
- Where operating pressure exceeds the load bearing capacity of ordinary oils and greases
- Where clean operation is desired - such as textile or pharmaceutical industries.
- Where easy release is desired such as in nuts, screws, etc. (as dust and debris do not adhere to the coated surface of PTFE as in the case of oil and grease)



Applications

- Sliding surfaces like cams, gears, bushes, wire ropes, chains, cutting tools, roller bearings
- Agricultural implements like mowers and door hinges.