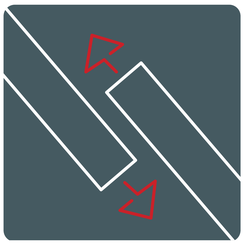
TECHNICOAT
Functional Coatings

COATING PROPERTIES

Our coatings combine the following outstanding properties:

NON-STICK

Coatings have extremely low surface energy in the solid-state providing excellent anti-stick surfaces. Very few solid substances will permanently adhere to coatings. Although tacky materials may show some adhesion, almost all substances release easily.



LOW FRICTION

Fluoropolymers have the lowest coefficients of friction of any solid materials, generally ranging from 0.05 to 0.2, depending on load, sliding speed and the type of coating applied.

NON-WETTING (WATER-RESISTANT)

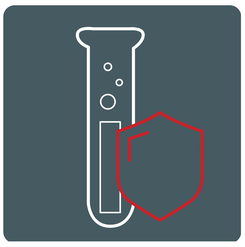
Surface coatings applied are extremely oleophobic and hydrophobic. Therefore cleanup is easier and more thorough. In many cases, surfaces are self-cleaning.

ELECTRICAL PROPERTIES

Applied coatings have unique electrical properties: low dielectric constant, low loss factors, and extremely high surface resistance. Fluoropolymers surpass most materials in their resistance to dielectric breakdown and electric arc over a broad range of environmental conditions. By special techniques, they can even be made electroconductive enough to be used as anti-static coatings.

CRYOGENIC STABILITY

Many coatings withstand severe temperatures up to – 270°C/- 454°F without wear of their physical properties. They remain solid, stable and fully operational.



CHEMICAL RESISTANCE

Coatings are resistant to the most aggressive organic and inorganic chemicals and solvents over a broad temperature range.

HEAT RESISTANT

Coatings have remarkable resistance to high temperatures and flames because of very high melting points and auto-ignition temperatures, as well as exceptional thermal degradation thresholds. Flame propagation characteristics, such as rate of heat release and smoke generation, are very low. Fluoropolymers retain their properties after exposure to temperatures beyond the limit of almost all other thermoplastics and elastomers. Depending on a type of coating, they can operate at temperatures up to 290°C/ 554°F and can be used for intermittent service up to 315°C/ 600 °F.