



Proficiency in Surfaces: Optimal Function Superior Protection

Surface technology Global Engineering Services

www.basf.com

Customized, Innovative, and Reliable Our Know-How – Your Success!

The position of BASF as one of the world's leading chemical company opens up unique possibilities for you – also with respect to coating: as the Technical Center for Polymer and Surface Technology, we are part of the Technical Expertise within Global Engineering Services with more than 2,500 employees. Our coatings prove themselves every day during operation at BASF sites.



This makes us one of the few providers of coating technology globally that applies its coating systems in its own production plants. As a customer, you, too, profit from this practical experience. The Center for Polymer and Surface Technology continuously advances these solutions in close collaboration with other BASF technical centers, such as BASF's renowned Materials Engineering Department. As a result you get innovative and safe solutions for coating technology that meet the highest quality standards while offering you the greatest possible safety.

The close collaboration between chemists and engineers in the development of complex processes – the interplay of science and technology – became the foundation of constant success of BASF.

Surfaces in Perfection

Rely on an Experienced Partner

We ask the right questions -

to master all challenges.

Specifically when it comes to coating sophisticated components, there are rarely standards that guarantee sustained safety and reliability. For this reason we give you a solution that is precisely adjusted to your requirements – from the choice of the optimum coating material, to the complete process chain, and all the way to the final coated component that meets all of BASF's quality criteria.

Our focus is on corrosion and wear protection in contact with chemical products as well as non-stick properties.

You get coating material that is optimally suited to your operating conditions (media, temperature, mechanical stress, diffusion properties, etc.).

And thanks to the optimal choice of coating, you have durable quality, can use more affordable types of steel, and reduce your cleaning cycles.



- The right questions
- Functional finishes
- Customized solutions
- Sustained quality







New all-round talent The electrically dissipative PFA coating

Our newly developed PFA coating – excellent media resistance combined with electrically dissipative properties.



With the unique patent-pending product and process, BASF has the possibility of reproducibly providing metal components of the most complex geometries with an electrically dissipative PFA coating.

We apply this coating in a wide range of applications at BASF's facilities. From the smallest sensor to the compressor housing shown. Our new electrically dissipative PFA coating can be applied in thicknesses of up to 1,000 micrometers. This brings reliability and durability to the protected functional components.

The electrically dissipative PFA coating of a discharge tube reliably avoids corrosion of the steel body, it reduces the electrostatic charge from flammable media flowing past, and it has another highly desirable side effect: product deposits are prevented on this fluoropolymer surface.

Maximum protection from chemical media

Uniform layer thicknesses

even with complex geometry



Constant high electrical conductivity to avoid electrostatic charge

Our Quality – Your Safety We Are the Partner You Can Trust

Availability and safety of your equipment are crucial factors for you. We give you tested BASF quality you can rely on.



Every component that leaves our factory is visually inspected by one of our experts after the corrosion protection coating has been applied, and then subjected to high-voltage spark testing to make sure the material is pore-free. We master this even when dealing with electrically conductive fluoropolymer coatings.

When it comes to corrosion protection, we walk the extra mile. That's why our layer thicknesses are between 500 μ m and 1,000 μ m – even when working with such delicate components as level sensors and hose couplings. As a result, their coating is considerably more durable than you typically find on the market – while having the same adhesiveness.

We deliver to you only products that meet our extremely strict quality criteria – because our know-how makes the difference here.

Our Portfolio Premium Quality – Customized Manufacturing

Our coating systems and application technologies are

specifically geared toward corrosion protection and the improvement of non-stick properties of components for chemical production equipment:

Powder coating (EPS method)

- Corrosion protection and optimization of non-stick properties with fluoropolymers (e.g., ETFE, E-CTFE, FEP, MFA, PFA, PTFE) on pipes, vessels, machines, agitators, measurement and control fittings; electrostatically conductive versions in explosive environments also available
- Corrosion protection and non-sticking layers for inspection glasses (E-CTFE, PFA)

Fluidized bed coatings

- Corrosion protection with polyethylene (PE) on pipes for river water and wastewater applications and atmospheric corrosion protection for mesh trays, mountings, and assembly elements
- Splinter protection with polyethylene (transparent PE) for glass components and apparatuses

Spray coatings

- Fluoropolymer-based (FEP, MFA, PFA) non-stick coatings, e.g., mechanical metal components, impellers, filters, metal mesh
- Baked enameling for tube bundle heat exchangers (phenolic epoxy resin systems)

Thermosetting coatings with two-component systems applied by brushing, rolling, or spreading (can be performed on site in production facilities)

- Corrosion protection for vessels, columns, fan blades, etc.
- Wear-protection coatings
- Repair of surface defects on pumps, impellers, bearing seats, etc. as well as leak sealing





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