Coating Service Solutions
Metco PLUS

Coating solutions that make a difference. New surface properties are achieved combining a thermal spray coating PLUS an organic dispersion

Thermal spray coatings are a proven and successful measure against wear in various industrial applications. Often, however, additional properties are need to optimize the surface for the application.

In response, Oerlikon Metco has developed the combined coating system, Metco™ PLUS, which offers the following enhanced surface properties:
- Improved sliding behavior
- Soil repellent surface
- Process substances to not adhere to the surface
- Emergency dry running conditions
- Antistatic surface for ceramic coatings
- High dielectric strength
- Protection against substrate corrosion
- Superior traction

Metco PLUS coatings are thermally sprayed, wear resistant coatings that are additionally treated with innovative organic dispersions, such as silicones, fluoropolymers or resins.

The optimized properties of Metco PLUS coatings are normally achieved by heat treatment, which cross-links the polymers and hardens resins, followed by a surface post treatment specifically adapted to the desired functional characteristics.
# Metco PLUS Coating Overview

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<th>Coating type</th>
<th>Properties and attributes</th>
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| Metco PLUS 10 | Wear-resistant, non-stick coating  
Wear resistant ceramic with an abrasion-resistant PTFE non-stick coating | Mixers, scrapers  
Baking and cooking utensils  
Forming plates for plastics mats |
| Metco PLUS 20 | Non-wetting surfaces  
Thermal spray coating post-treated with silicone | Rollers used in adhesive tapes and film production  
Rollers used in printers and copiers |
| Metco PLUS 30 | Lubricious coatings  
Wear resistant ceramic with superior sliding properties | Guides for conveyor and packing equipment  
Guide plate in printing presses |
| Metco PLUS 40 | High frictional coefficient | Grippers  
Traction rollers |
| Metco PLUS 50 | Sealed, corrosion-resistant coatings  
Ceramic coatings post-treated with a deep penetrating sealer that prevents corrosion of the substrate | Microscope tables  
Textile machinery parts  
Laboratory heating plates |
| Metco PLUS 60 | Electrical isolation  
Increase the dielectric strength of ceramic coatings, particularly for applications in humid conditions | Gas fittings  
Corona rollers |
| Metco PLUS 70 | Electrically conductive ceramic coatings  
Prevent electrostatic build up on ceramic-coated surfaces | Printing rollers  
Transport rollers |

**Layer succession of a Metco PLUS surface solution**
1. Substrate material  
2. Grit-blasted substrate material  
3. Wear-resistant coating  
4. Organic top coat

**Cross-linking of polymer via post-coat heat treatment**