

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 needed 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.



Rolls for textile refinement



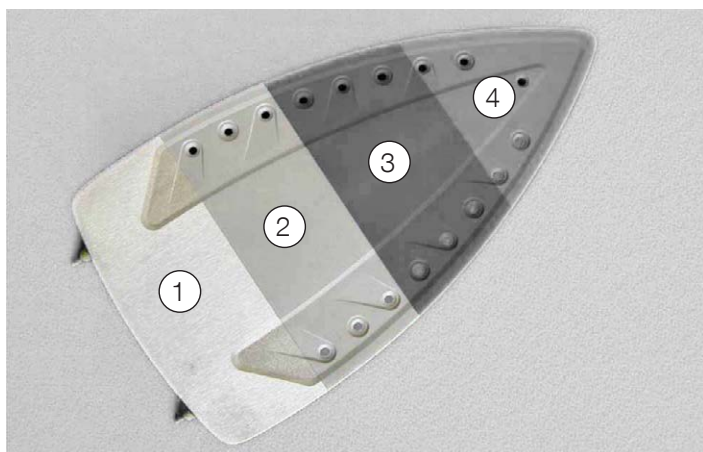
Microscope tables



Heating Plates for laboratory and industrial use

Metco PLUS Coating Overview

Coating type	Properties and attributes	Application examples
Metco PLUS 10	Wear-resistant, non-stick coating Wear resistant ceramic with an abrasion-resistant PTFE non-stick coating	<ul style="list-style-type: none"> ■ Mixers, scrapers ■ Baking and cooking utensils ■ Forming plates for plastics mats
Metco PLUS 20	Non-wetting surfaces Thermal spray coating post-treated with silicone	<ul style="list-style-type: none"> ■ 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	<ul style="list-style-type: none"> ■ Guides for conveyor and packing equipment ■ Guide plate in printing presses
Metco PLUS 40	High frictional coefficient	<ul style="list-style-type: none"> ■ 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	<ul style="list-style-type: none"> ■ Microscope tables ■ Textile machinery parts ■ Laboratory heating plates
Metco PLUS 60	Electrical isolation Increases the dielectric strength of ceramic coatings, particularly for applications in humid conditions	<ul style="list-style-type: none"> ■ Gas fittings ■ Corona rollers
Metco PLUS 70	Electrically conductive ceramic coatings Prevent electrostatic build up on ceramic-coated surfaces	<ul style="list-style-type: none"> ■ 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



Information is subject to change without prior notice.