

# UniCoat®

## Zirconium cleaner coaters



General Metal Finishing

Paint support technology

atotech.com



## Single-step zirconium cleaner coaters

Traditionally, phosphate-based pretreatments have been used by applicators for treating parts prior to paint. In some cases, they have even been utilized for cleaning and coating in one step, especially iron phosphates for low performance requirement applications. However, the cleaning performance is not optimized, which can compromise the paint adhesion or corrosion performance. For some applications, the varying type and size of parts to be processed can necessitate selecting a process that is applied manually in a spray-to-drain application. For others, fitting a modern pretreatment process into an existing 2 to 4 stage washer can be challenging.

Atotech UniCoat® products are designed to overcome the drawbacks associated with conventional pretreatment processes for spray-to-drain and short cycle washers. Based on the same technology as modern zirconium pretreatments, UniCoat® products incorporate a robust cleaning package to achieve optimal cleaning and coating in a single step. The result is a highly sustainable cleaner coater process that offers improved cleaning, enhanced paint performance, reduced operating cost, and less burden for wastewater treatment operations. UniCoat® is the ideal solution for job shops, custom coaters and captive production applicators.

P-free

APE-free

# UniCoat® – the right way to clean and coat in a single step



**Image 1:**  
Custom coater applying paint to production part after UniCoat® CTR application

**Image 2:**  
Certain parts are too large for traditional washer systems, making UniCoat® ZR 1 an ideal solution in such applications

**Image 3:**  
Automated painting after UniCoat® CTR application

## UniCoat® product range

### UniCoat® CTR – A two-component zirconium-based cleaner coater for recirculating washer systems

UniCoat® CTR offers applicators the highest level of versatility with its two-component system. Possessing a zirconium coating additive along with a robust cleaner package, UniCoat® CTR can handle some of the most difficult cleaning challenges while providing paint and corrosion characteristics similar to a modern 5+ stage pretreatment process. Additionally, within the production process or during line stoppages, parts pretreated with UniCoat® CTR are less prone to flash rusting.

### UniCoat® ZR 1 – A single-step zirconium-based cleaner coater for spray-to-drain applications

UniCoat® ZR 1 is a single-component cleaner coater optimized for spray-to-drain applications. For large production parts that do not fit in a traditional pretreatment washer system, efficient treatment with a sustainable process is easily achieved with UniCoat® ZR 1, providing enhanced performance compared to phosphate-based cleaner coaters.

## Features and benefits

- Phosphorus-free formula results in elimination of scale and sludge formation, reducing maintenance and wastewater treatment burden
- Alkylphenol ethoxylate (APE)-free formula offers an environmentally sustainable process
- Suitable for multi-metal applications
- Enhanced cleaning performance compared to conventional iron phosphate cleaner coaters
- Improved pH and process stability
- Excellent paint adhesion and corrosion resistance

