

UniPrep® AC

Weld and laser cutting scale removal solutions



General Metal Finishing

Paint support technology

atotech.com



Sustainable and safe weld and laser cutting scale removal solutions

Near neutral pH alternative to mechanical and strong acid descaling methods

Weld and laser cut areas are often the first point of failure for painted components. The oxide scale formed during the welding and laser cutting process impedes the pretreatment and paint systems from properly adhering to the substrate surface, resulting in premature paint loss and corrosion. Scale removal is traditionally achieved through mechanical and strong acid methods, which are unsustainable and pose a safety hazard to employees operating such applications.

UniPrep® AC, MKS' Atotech line of weld and laser scale removal products is the ideal alternative to conventional descaling methods, including grinding, media blasting and strong acids. Designed to operate at mild to near neutral pH, UniPrep® AC offers a safe work environment. The process minimizes the burden on wastewater treatment with sustainable formulations, and is also free of substances of concern satisfying many customer and regulatory requirements. UniPrep® AC improves the paint adhesion on welds and laser cuts, eliminating these areas as the first point of corrosion.

Superior paint quality achieved through improved scale removal for multi-metal applications



Image 1:
Seam weld with excellent paint coverage achieved with UniPrep® AC
Image 2:
Laser cut area with excellent paint coverage achieved with UniPrep® AC
Image 3:
Descaling with UniPrep® AC (right) completely removes laser scale, which cannot be achieved in normal cleaning operation (left)

UniPrep® AC product range

UniPrep® AC offers applicators a safer and more sustainable solution for weld and laser scale removal, minimizing risks such as bodily injury, hearing loss and exposure to more dangerous chemicals.

All products of the UniPrep® AC family are free of phosphorous, fluorides, boron and APEs. Their unique formulations support both organic and inorganic soil removal. When paired with MKS' Atotech complete pretreatment system, including UniPrep® alkaline cleaners and Interlox® conversion coatings, UniPrep® AC products offer applicators the peak in process performance resulting in excellent paint adhesion and corrosion resistance.

UniPrep® ACS 100

is a near neutral pH descaler for spray multi-metal applications

UniPrep® ACD 105

is a near neutral pH descaler for immersion multi-metal applications

UniPrep® ACM 308

is a more acidic descaler for more challenging scales and can be applied via spray or immersion

Features and benefits

- Efficiently removes weld and laser scale, even in recessed areas of complex geometry parts, supporting improved paint adhesion and corrosion resistance
- Offers safe work environment, eliminating many hazards associated with mechanical and strong acid methods
- Can operate at near neutral pH resulting in less substrate etching, which leads to process savings through longer solution life and lower wastewater treatment costs
- Versatile solutions suitable for both spray and immersion applications
- Improved coverage and paint performance (adhesion and corrosion resistance) for e-coat
- Free of APEs, P, F, B as well as hydrochloric and nitric acid

