clearcover®



UPGRADE YOUR STEEL SURFACE

clearcover® – THE CHROMIUM-FREE PASSIVATION ON ELECTRO GALVANIZED STEEL STRIP

Do you need a sustainable, temporary passivation with weldability and good processing properties? That's clearcover®.

clearcover® is the sustainable and environmentally friendly passivation system without any chromium compounds and is free of heavy metals such as molybdenum, manganese, lead and cobalt.

The highly innovative chromium-free passivation is a thin and transparent layer which, in combination with a zinc phosphate layer, provides good storage and transport corrosion protection. It is also supplied in combination with an oil coating. The functional surface on electro galvanized (EG) steel meets the highest standards of quality and uniform surface reactivity. clearcover® in combination with zinc phosphating provides a high level of corrosion protection.

TYPICAL APPLICATIONS

- Processing industry
- House industry
- Construction industry

- Reliable corrosion protection during transport
- Good resistance to emulsions
- **Corrosion protection during storage**
- Sustainable and environmentally compatible passivation
- Excellent weldability
- Direct coatability

PROCESSING PROPERTIES

clearcover® surfaces are ideally suitable for sheet metal working processes such as cutting, slitting and profiling. The chromium-free passivation exhibits excellent joining properties in spot welding, adhesive bonding and foam adhesion and shows good compatibility with forming emulsions. clearcover® can be removed with alkaline cleaning agents as required.

SUSTAINABILITY AND ENVIRONMENTAL PROTECTION

The sustainable and environmentally friendly surface is free of any chromium compounds and toxic heavy metals. The possible elimination of energy and resource-intensive process steps such as oiling, degreasing and rinsing/drying at the processing company reduces its ecological footprint.

CORROSION PROTECTION

clearcover® surfaces continue to resist white rust after more than 50 test cycles (1 cycle = 24 hours of corrosion exposure) in a condensation atmosphere with alternating humidity pursuant to DIN EN ISO 6270-2 (AHT).

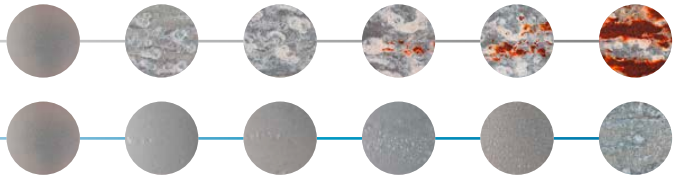
Condensing humidity testing
Test in condensation atmosphere with alternating humidity pursuant to DIN EN ISO 6270-2 (AHT)

EG ZE25/25 2.5 µm

EG ZE25/25 2.5 µm phosphated + clearcover® passivated

*No white rust after 50 cycles of testing in a condensation atmosphere with alternating humidity

Corrosion images after testing



0 cycles | 7 cycles | 14 cycles | 21 cycles | 35 cycles | *50 cycles

DIRECT COATABILITY

clearcover® passivation can be painted directly as a powder coating or cathodic dip coating, even when cleaning processes have been omitted. This eliminates degreasing or other pre-treatment processes and energy-intensive drying steps at the customer. The result is a high level of environmental compatibility with constant or improved performance in terms of paint adhesion and corrosion protection.

MULTIPLE CERTIFICATIONS

Certifications are naturally a minimum requirement at voestalpine in our effort to provide additional functional surfaces. In many applications, actual properties go far beyond the standard minimum requirements.

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To find out more about functional surfaces, please visit us at voestalpine.com/functional-surfaces

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