NEW GENERATION OF HIGHLY EFFECTIVE ZINC-FREE ANTI-CORROSIVES FOR COIL- AND THIN-FILM-APPLICATIONS

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Coil Coating

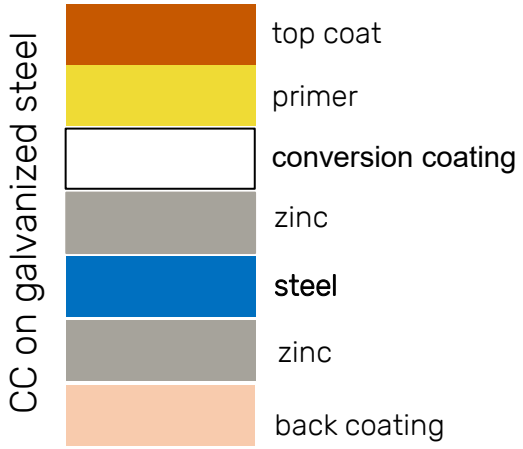
- The coil coating process describes the continuous application of organic thin film coating or foil on a rolled metal (steel and aluminum)

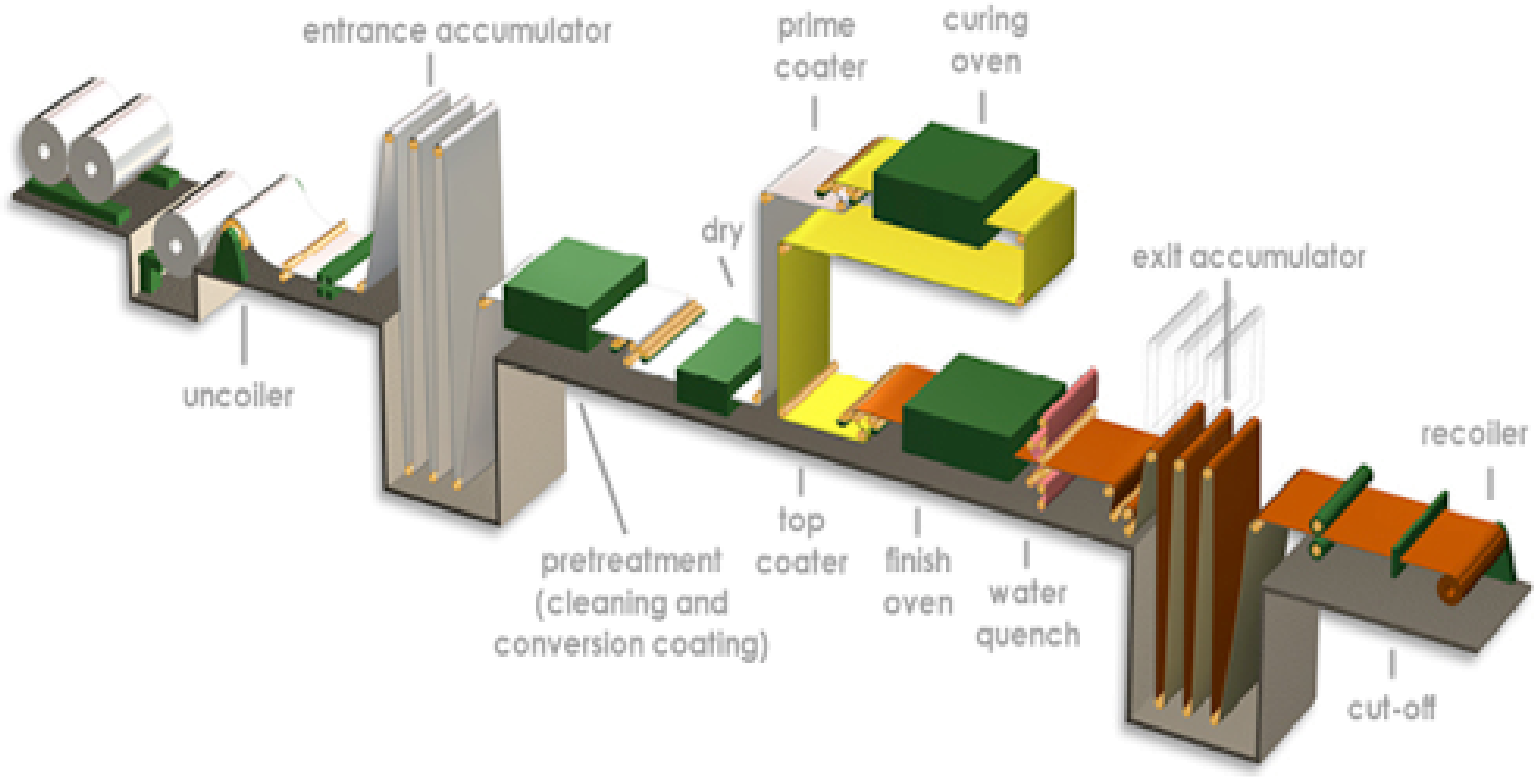
- The pre-coated metal is a composite material consisting of a metallic substrate and an organic coating systems

    - Metals
        - galvanized steel
        - cold rolled steel
        - aluminum or aluminum alloys

    - Organic coating: in addition to decorative appearance, it provides technical, formable and anticorrosive properties

Classical Coil Coating Process



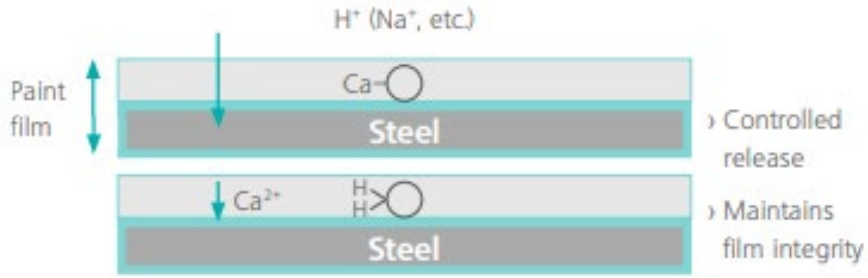


- At the upper side of the coil primer and topcoat is applied
- At the back side of the coil a specific back coating or foils are applied
- Each coating layer contributes to the performance of the coil coating system, whereas the primer is usually pigmented with active anticorrosive pigments

https://knowledge.ulprospector.com/2862/pc-coil-coating-explained/

HEUCOSIL™ CSA and CSM

Corrosion protection with modified silica gel:
- Formation of a passive layer (barrier)
- Adsorption of corrosion stimulators



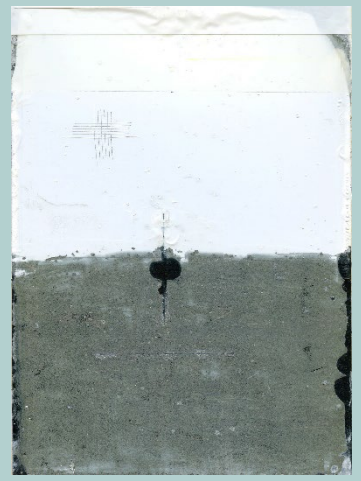
Accelerated Weathering

1008 h Salt Spray (ASTM B117-19)
EN ISO 9227:2022

- High molecular polyester, high gloss top coat HMMM cured
- DFT: Primer 6-8 microns / top coat 20-24 microns
- Substrate: Hot dipped galvanised steel pre-treated with Gardobond X 4744


Control


Competitor


HEUCOSIL™ CSA


HEUCOSIL™ CSM

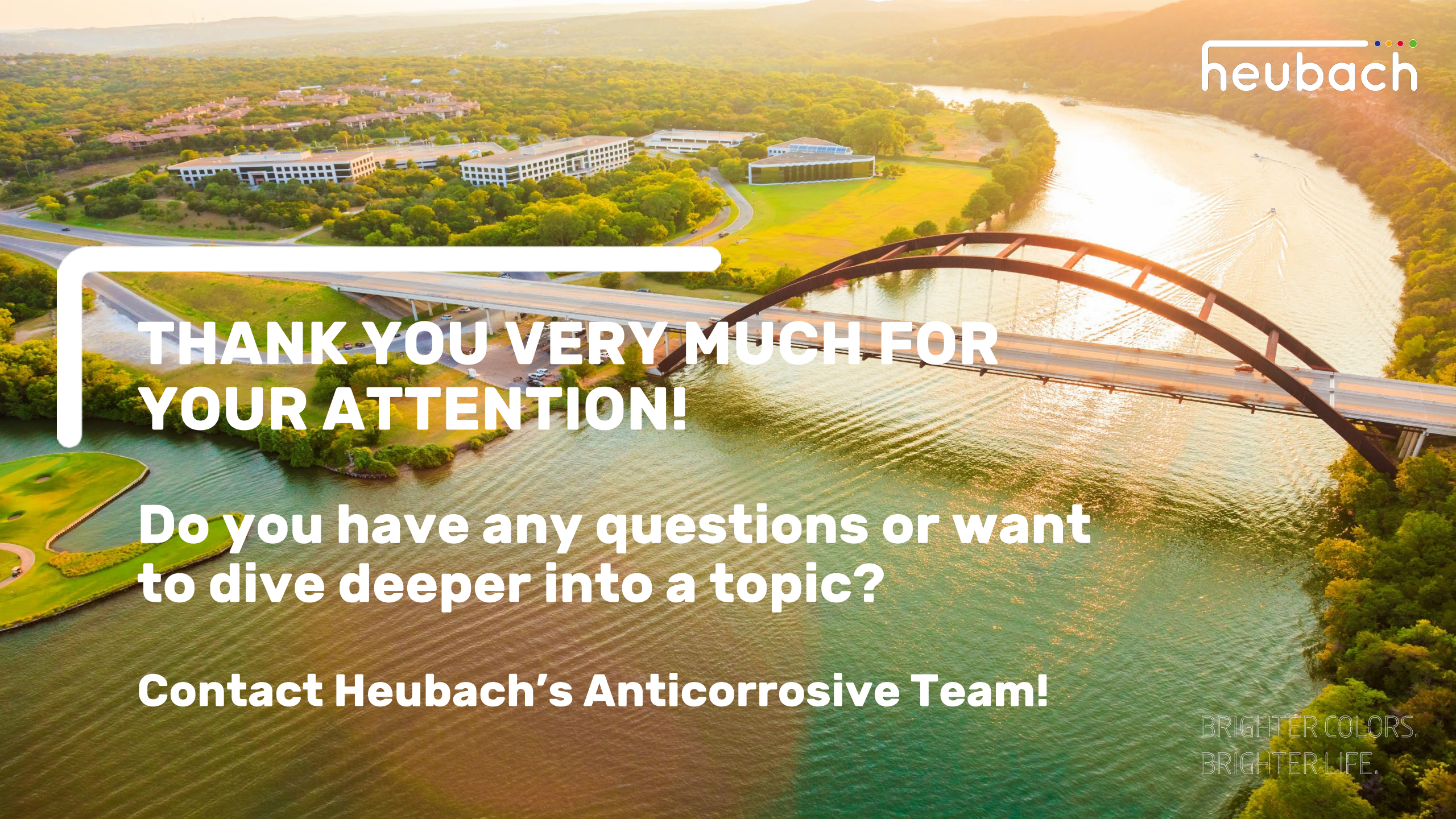
Application Guide

Solvent-based Coatings	HEUCOSIL™ CSA HEUCOSIL™ CSM
Short and medium oil alkyds	
Long oil alkyds	
High solids alkyds	
2K Epoxies	++
Epoxy esters	
High solid epoxies	++
2K Polyurethanes	++
High solids polyurethanes	++
Moisture cured polyurethanes	
Silicone resins	

+++ Excelent choice ++ good choice

Water-based Coatings	HEUCOSIL™ CSA HEUCOSIL™ CSM
Alkyd emulsions	
2K Epoxies	
1K polyurethanes	
2K polyurethanes	++
Silicone resins	
Acrylics and modified acrylics	
Butadienes	

Specialty Coatings	HEUCOSIL™ CSA HEUCOSIL™ CSM
Coil coatings	+++
Aircraft primers	+
Wash and shop primers	
Direct to metal	
UV cured systems	++
Powder coatings	++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THANK YOU VERY MUCH FOR YOUR ATTENTION!
Do you have any questions or want to dive deeper into a topic?
Contact Heubach's Anticorrosive Team!
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