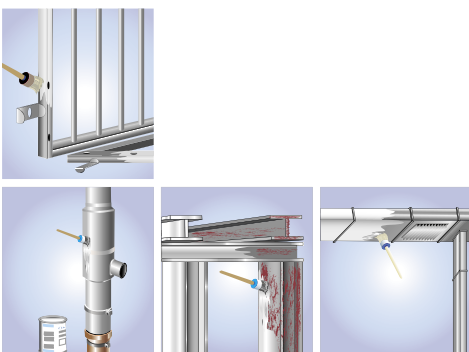




Metal Pigment Coatings

- permanent
- abrasion proof
- weather resistant



Metal Pigment Coatings

Metal pigment coatings are used as a means for protecting metallic surfaces against corrosion.

In addition, zinc, aluminium and stainless steel pigments provide an individual colour shade with which frames, gates, doors, railings, masts, posts and other constructions or machine parts can be effectively touched up or coated.

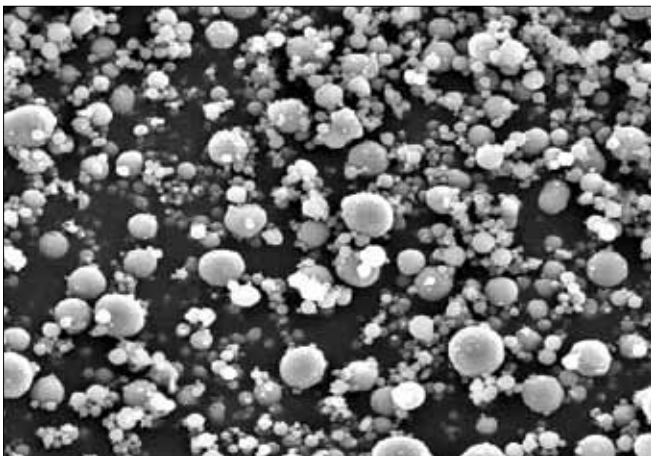
In contrast to emulsion paints or varnishes where the colour is the most important selection criterion, with metal pigment coatings the most important factor is corrosion protection.

With WEICON Metal Pigment Coatings, both aspects are covered: Effective protection against corrosion and metallic surfaces with a great look.



WEICON Metal Pigment Coatings achieve the outstanding protection against corrosion using two different technologies.

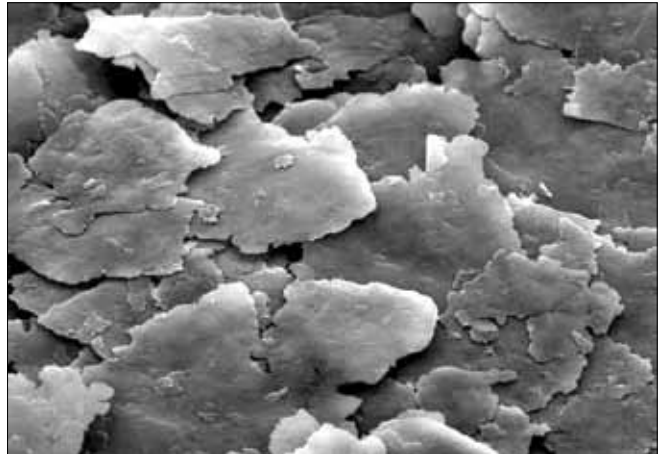
WEICON Brushable Liquid Zinc Paint uses high concentration and pure spherical (round) metal pigments. The high amount of zinc in the coating ensures efficient cathodic corrosion protection.



If the surface is damaged, the zinc molecules react with the humidity of the air and form zinc oxide molecules which protect the base material against corrosion.

In the case of WEICON Brushable Zinc Coating and Aluminium and Stainless Steel Paint, flaky metal pigments (flakes) settle parallel to the surface in several, spatially displaced layers on the substrate (shingle effect).

Through this, the surface is protected from penetrating humidity for much longer (see illustration). Together with the electrochemical effect, which occurs at the same time, optimum protection against corrosion is achieved.



WEICON Metal Pigment Coatings take effect through a mixture of different pigments, additives, binders and solvents which are exactly coordinated with each other.

The individual blending of these substances does not just determine the level of corrosion resistance or the optical appearance of the surface, but also characteristics such as flexibility or the hardness of the coating.

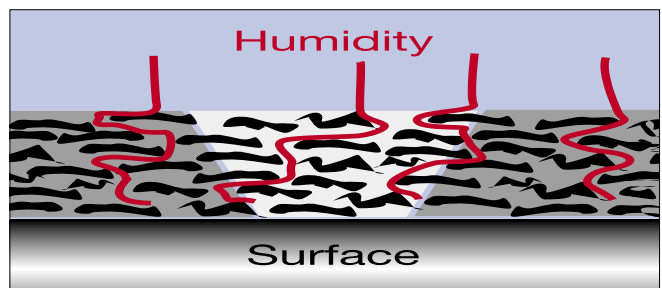


Illustration: Long diffusion paths

The key characteristics of WEICON Metal Pigment Coatings:

- highly effective protection against corrosion even with thin layers
- excellent adhesion and great internal strength
- smooth surface structure and good recoatability. Before recoating (e.g. with Brushable Liquid Zinc Paint), it is often possible to dispense with use of fillers
- limited porosity and/or permeability (resistance to condensation)
- brilliant looks with all flake-based coatings

Brushable Liquid Zinc Paint

Colour shade: Zinc-grey

WEICON Brushable Liquid Zinc Paint paint is a coating with which metallic substrates are actively protected against corrosion.

WEICON Brushable Liquid Zinc Paint paint uses high concentration and pure spherical (round) metal pigments. The high amount of zinc in the coating ensures efficient cathodic corrosion protection.

If the surface is damaged, the zinc molecules react with the humidity of the air and form zinc oxide molecules which protect the base material against corrosion.



Fields of application

- as a quick-drying anti-rust primer (approx. 30 minutes)
- for coating welded joints and borehole sites
- as a conductive intermediate layer when spot welding
- wherever metal and particularly hazardous areas of parts, e.g. welded joints, threads, edges, screws and nuts etc. need to be protected against corrosion
- to touch up galvanized surfaces



Brushable Liquid Zinc Coating

Colour shade: Galvanized

WEICON Brushable Liquid Zinc Coating provides active protection against corrosion for all metallic surfaces and is available in a colour shade matched to the galvanization.

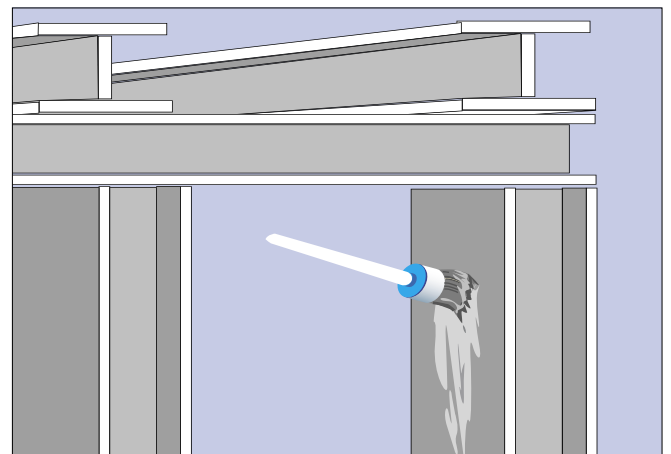
In the case of WEICON Brushable Liquid Zinc Coating, flaky metal pigments (flakes) settle parallel to the surface in several, spatially displaced layers on the substrate (shingle effect).

Through this, the surface is protected from penetrating humidity for much longer. Together with the electrochemical effect, which occurs at the same time, optimum protection against corrosion is achieved.



Fields of application

- as a flexible primer against rust in the case of thin layers
- for coating welded joints and borehole sites
- as a conductive intermediate layer when spot welding
- wherever metal and particularly hazardous areas of parts, e.g. welded joints, threads, edges, screws and nuts etc. need to be protected against corrosion
- as a touch up for galvanized surfaces (in a matched colour shade)





Aluminium Paint

New

WEICON Aluminium Paint can be used universally on all metallic surfaces. It offers good protection against corrosion and is also used to touch up components.

Upon contact with moisture, aluminium pigments form a dense, almost impermeable oxide layer on the surface.

This passivating layer can be up to 0.05 µm thick and it also hinders the further penetration of moisture into the coating. This way, the surface of the component is effectively protected against corrosion.

A high level of resistance against abrasion and a guarantee of a long lasting colour shade is achieved through the use of so-called 'non-leaving' pigments.

After application, these pigments disperse equally right across the coating. As such, after hardening, WEICON Aluminium Paint is protected against abrasion and chemical influences.



Fields of application

- effective protection against corrosion
- coating of grilles, railings, gates, fences, etc
- decorative painting
- Coating of industrial components
- upgrading worn-out components
- for improving the looks of all non-metallic surfaces, e.g. wood, glass, ceramics etc.

Stainless Steel Paint

New

WEICON Stainless Steel Paint contains stainless steel pigments of the highest purity and is used to protect against corrosion and improve the looks of metallic and non-metallic components.

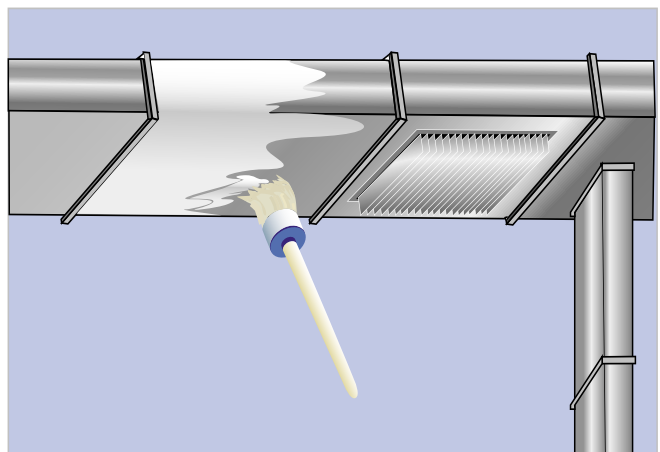
The protective effect is achieved through the 'flake' arrangement of the stainless steel pigments and their particular hardness.

As a result of the 'shingle effect', a barrier effect is attained with WEICON Stainless Steel Paint. This provides effective protection against moisture and corrosion.



Fields of application

- for touching up damaged stainless steel parts, e.g. on truck superstructures, silos and pipelines
- creating fine surfaces
- coating of industrial components
- upgrading worn-out components
- for coating welded joints and borehole sites
- as a conductive intermediate layer when spot welding
- for improving the looks of all non-metallic surfaces, e.g. wood, glass, ceramics etc.



Technical data

	Brushable Liquid Zinc Paint	Brushable Liquid Zinc Coating	Aluminium Paint	Stainless Steel Paint
Colour shade / Level of brilliance:	Zinc-grey / matt	Galvanized / metallic shine	Aluminium / metallic shine	Steel-grey / metallic shine
Binding agents:	Epoxy resin ester	Alkyd resin	Alkyd combination	Acrylic resin
Pigment:	Zinc pigments (D50 4 µm)	Zinc and aluminium pigments (D50 25 µm)	Aluminium pigments (D50 16 µm)	Stainless steel pigments (D50 30 µm - 16% Cr, 12% Ni, 2% Mn)
Pigment purity:	approx. 98.5 %	approx. Al 99.5% and Zn 99.9%	approx. 99.5 %	VA alloy approx. 98.5 %
Specific weight:	1.96 g/cm ³	1.25 g/cm ³	1.00 g/cm ³	1.00 g/cm ³
Percentage of metal in the dry film:	approx. 60.5 %	approx. 58.5 %	approx. 32.0 %	approx. 15.0 %
Viscosity* (DIN EN ISO 2431) / Consistency:	approx. 70 s 4 mm / stretchable	approx. 70 s 4 mm / stretchable	approx. 120 s 4 mm / stretchable	approx. 90 s 4 mm / stretchable
Processing temperature:	+18°C to +30°C (+64,4°F to +86°F)			
Consumption:	approx. 120 ml/m ²		approx. 150 ml/m ²	approx. 120 ml/m ²
Spray consistency:	10 - 20 % universal thinning			
Drying time (dust dry):	30 minutes	60 minutes	60 minutes	60 minutes
Hardened*:	12 hours			
Recoatable / can be reprimed*:	12 hours			
Final hardness*:	48 hours			
Minimum layer thickness:	50 µm	30 µm	20 µm	20 µm
Cross-cut test (DIN 53151):	Characteristic value GT 0 to GT 1			
Salt spray test (DIN 50021, DIN EN ISO 9227)	400 hours	200 hours	100 hours	100 hours
Mandrel bending test, mandrel 5 mm (DIN EN ISO 1519):	No formation of hairline cracks			
Temperature resistance after reaching the final hardness:	approx. +400°C (+752°F)	approx. +240°C (+464°F)	approx. +300°C (+572°F) (from +100°C (+212°F), slight discolourations are possible)	approx. +180°C (+356°F)
Primer:	not necessary		WEICON Brushable Zinc Paint / Brushable Zinc Coating	
Shelf life**:	12 - 18 months			
Available in:	375 ml and 750 ml size can			
Classification in accordance with Directive 2004/42 EC category 'A/I' single component special paints:	< 500 g/l VOC			

* +20°C (+68°F) can / surface temperature and 50% relative humidity.

** With a constant room temperature of +20°C (+68°F) and storage in a dry place. This applies to closed original containers which are not exposed to direct and/or indirect sunlight.

Pre-treatment:

Clean the material surfaces and degrease with Cleaner Spray S. In the case of sensitive, non-metallic materials, use WEICON Surface Cleaner.

WEICON Metal Pigment Coatings should at the latest be applied one hour after pre-treatment by e.g. sand blasting, sanding, cleaning or degreasing. Temperature differences between the surface and the air should be kept as small as possible, as otherwise, there is a risk that condensation may form (dew point +7°C/+44,6°F).

Processing and hardening:

Allow the container to reach room temperature (+20°C/+68°F) and stir the sediment at the bottom of the container well. Apply WEICON Metal Pigment Coatings evenly with a brush or roller. Whilst processing, stir at regular intervals so that the active agent stays homogenous.

High processing temperatures up to +30°C (+86°F) (max.) and low levels of air humidity help to create an even application and an optimum surface structure.

WEICON Metal Pigment Coatings can also be applied on surfaces with temperatures up to -10°C (+14°F). In the case of temperatures below zero, the structure of the surface is somewhat worse. On account of the solvent which only evaporates over a long period and the slow hardening, the paint has a tendency to form 'tears' on vertical surfaces.

Metal Pigment Coatings

- permanent
- abrasion proof
- weather resistant

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All data and recommendations contained in this brochure are to be viewed as such, and do not assure characteristics. They are based on results from our research and experience. Having said this, they are not binding as we cannot be held responsible for adherence to the processing conditions. In addition, the specific application conditions of the user are not known to us. We can only offer a warranty for the consistent high quality of our products. We recommend that you carry out a sufficient number of trials yourself to see whether the stated product produces the characteristics you require. If this is not the case, we cannot accept any claims. The user assumes sole responsibility if the product is used incorrectly or for purposes for which it was not intended.

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