



# Premium Zinc Coating

Corrosion protection at all times

# The premium zinc coating of Vossloh



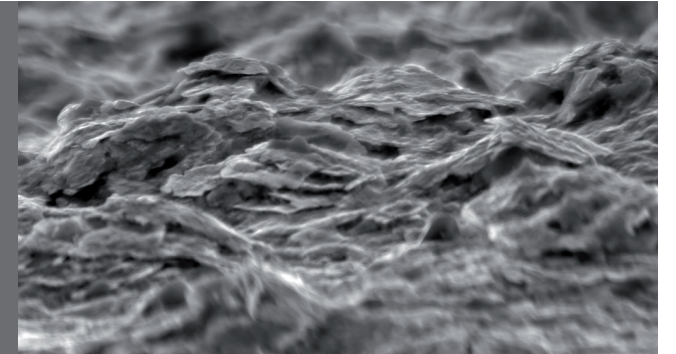
Premium zinc coating features	Benefits
The coating is resistant to a wide variety of chemicals ...	... and thus ensures long-lasting corrosion protection even under extreme conditions, e. g. in industrial areas and an aggressive atmosphere.
The coating is temperature-resistant ...	... and withstands extreme climatic conditions such as high temperature fluctuations. The coating can therefore be applied anywhere in the world.
The cathodic corrosion protection is resilient ...	... and even survives damage. This reduces the life-cycle costs of steel parts.
The modular system consisting of a base and (optional) topcoat ...	... can create an individual shade, increases chemical resistance and also achieves optimum coefficient of friction for screws.
No hydrogen is formed during the coating process ...	... so there is no danger of hydrogen embrittlement, not even with particularly high-strength steels such as our tension clamps.

# Resilient. Dynamic. Durable.

Minimum layer thickness for maximum corrosion protection.

The exceptionally thin nature of the zinc flakes plays a central role in the high resistance of the components:

With a total layer thickness of 10 µm on average, the Vossloh premium zinc coating is finer than a human hair. Multiple flakes overlap, much like fish scales, and react dynamically when the tension clamps move.



## Coating process

### Pre-treatment

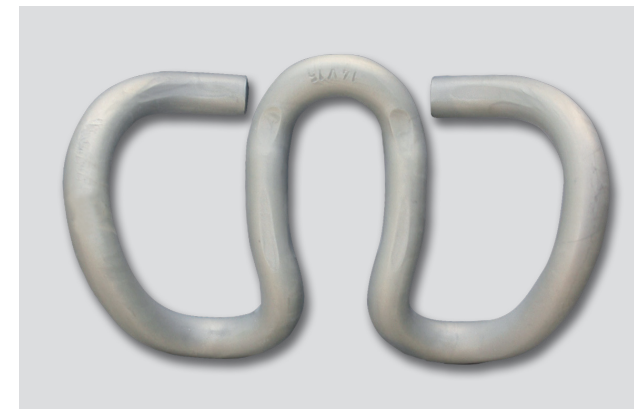
- If necessary, oils and grease residues are removed in an alkaline solution.
- Scale and other impurities are removed from the components by means of blast cleaning in order to create a suitable surface for optimum coating results.

### Coating

- The coating is applied by means of dip-spinning or spraying and then baked.

## Salt spray test

The new premium zinc coating passes the salt spray test with flying colours. No signs of corrosion are visible even after 1440 h of continuous load.



After 1440 h in the salt spray test according to ISO 9227 NSS.



After 1440 h in the salt spray test according to ISO 9227 NSS with intentional layer damage to demonstrate the cathodic corrosion protection.

# Flexible. Resistant. Environmentally-friendly.

## Technical advantages of the Vossloh premium zinc coating.

The new premium zinc coating is „green“!

### The premium zinc coating is environmentally-friendly because ...

- ... the steel parts last longer.
- ... no environmentally-harmful chemicals such as chromium compounds are used.
- ... resources are used efficiently due to the thin layer thickness.

### Technical features at a glance:

Coating type	Premium zinc coating	Conventional corrosion protection systems
Suitable for	Tension clamps and T-head bolts	Either tension clamps or screws
Corrosivity category in accordance with ISO 12944	C5-H (1440 h rust-free)	C5-K (480h rust-free), possible with tension clamps only
Long-range cathodic effect	✓	✗
Reworking for metric thread	Not required	Required for screws that are not made to measure
The coefficient of friction for screws	Adjustable according to application, thus, facilitates an even tension in the track	Not adjustable or coating of screws not possible to begin with
Resistance to UV light	Unlimited resistance of basecoat	With UV stabiliser, time-limited resistance
Stone-impact resistance	Good	Average
Resistance to acids and alkalis	Good resistance with topcoat	Non-resistant in some instances
Resistance to oils and greases	✓	✓
Resistance to fuels	✓	✓
Colour	Adjustable with topcoat	Can only be adjusted with powder coating, otherwise black or grey

### Note

The content, images and technical data included in this brochure illustrate, through examples, the benefits of the fastening system. However, these always also depend on external factors and influences. Please contact us so that we can work with you to create a solution tailored to your project and your needs. The information contained here corresponds to the highest technical standards at the time of printing; adjustments may have been made to the product in the meantime as a result of the continuous research and development programme at Vossloh.

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