



## CORTEN STEEL

### Properties

Corten steel has a rusty surface, which makes the product virtually maintenance-free.

Corten steel is steel that is alloyed with copper, chromium, nickel and phosphorus. The alloy causes Corten steel, when exposed to alternating moisture and drying out, to form a rust layer, which then acts as a barrier to oxygen, moisture and chemical influences. Therefore, the rust layer protects it from further rust. During the process, Corten steel changes colour from a light rust red to a darker reddish brown. The process is completed after 2-3 years.

The lifespan of Corten steel depends on the thickness of the steel and the possibility of drying out. In ideal conditions the lifespan is 50 years or more. Corten steel with ground contact (e.g plant boxes) does not dry out regularly, and the lifespan will be 5-7 years per millimetre of steel.

### Operation and maintenance

#### *Contamination*

- Upon first use: A new Corten steel product will release rust, which will fall off in flakes or run off with rainwater. There may be contamination to the substrate and other contact surfaces. To avoid contamination, it is recommended that the Corten steel product be subjected to corrosion (rain) in a suitable place for up to three months before being placed in the permanent location.
- Ground contact: Continued contamination can occur from Corten steel products that are in contact with soil (e.g plant boxes) and therefore do not dry out regularly.

#### **Cleaning**

- Clean the product with a stiff broom or brush
- For a more thorough cleaning, the product can be pressure washed

#### **Maintenance**

- Make sure that there is no water in depressions or joints on the product

#### *End of Life Guide*

- Ask your local waste management authority or disposal service for correct recycling or disposal of corten steel



## HOT-DIP GALVANISED STEEL

### Properties

Hot-dip galvanised steel has a light grey, metallic surface, which may have markings. The surface is glossy right after treatment and gradually becomes matt.

During hot-dip galvanising, steel parts are dipped in liquid zinc. The treatment converts the outer layer of the steel into an iron-zinc alloy. The zinc layer is resistant to corrosion to a degree, so hot-dip galvanised parts have an estimated lifespan of 50 years in ideal conditions.

Chemical effects that pose a risk to hot-dip galvanised steel include road salt, urea, sea air, industrial air, snow and ice. Therefore, regular cleaning is necessary. The zinc layer can be mechanically damaged by, for example, a collision. For more information about galvanising, we refer to the industry association Nordic Galvanisers.

Our products are hot-dip galvanised according to the DS/ISO 1461 standard.

### Operation and maintenance

#### Cleaning

- Wash hot-dip galvanised parts with a cloth or soft brush and a mild, acid-free cleaner
- Clean every 6 months - more often or less often depending on the environment and surroundings

#### Maintenance

- The products should be checked regularly for damage
- In the case of minor damage, the zinc layer can often repair itself, while damage over Ø8 mm should be assessed along with a professional
- In the event of a major fracture, it is recommended that the damage be repaired by one of the following methods, depending on the nature of the damage: metal spraying with zinc, application of zinc-rich paint or application of low-melting solder zinc

#### White Rust

*Prolonged moisture from rain or condensation can cause hot-dip galvanised surfaces to form white rust.*

*White rust is a white, floury coating that is harmless.*

- *Remove white rust with a nylon brush and warm water or by gentle brushing with a stainless steel brush*

#### End of Life Guide

- Ask your local waste management authority or disposal service for correct recycling or disposal of hot-dip galvanised steel



## POWDER COATING

### Properties

The powder coating not only gives the product a nice colour, it also makes it easy to maintain and resistant to wind and weather. Our powder-coated parts are made of aluminium, cast iron, stainless steel or hot-dip galvanised steel. Therefore, the powder coating acts as an additional protection of a surface that is already very durable with minimal maintenance.

The sun's UV rays will cause a bleaching of the colour. Chemical influences that pose a risk to powder-coated surfaces include road salt, urea, sea air, industrial air, snow and ice. Therefore, regular cleaning is necessary. The powder coating can also be damaged by collisions, blows and the like. Regular inspection of damage can prevent peeling and extend the life of the product.

### Operation and maintenance

#### *Cleaning*

- Wash powder coated parts with a cloth or soft brush
- If necessary, use a PH-neutral cleaning solution without abrasion and without solvents
- After washing, wipe the product with a cloth to avoid stains
- Cleaning should be done every 3-12 months depending on the environment and surroundings

#### *Damage*

Repair of damage will be visible, however, with a more uniform appearance than without repair.

- Sand carefully (without damaging any zinc coating on hot-dip galvanised items)
- Remove sawdust and shavings
- Paint with repair paint, for example car paint in the same RAL colour

#### *Graffiti*

- Remove graffiti with cleaned petroleum or turpentine
- Then give the surface a wax treatment

#### *End of Life Guide*

- Ask your local waste management authority or disposal service for correct recycling or disposal of powder coated items