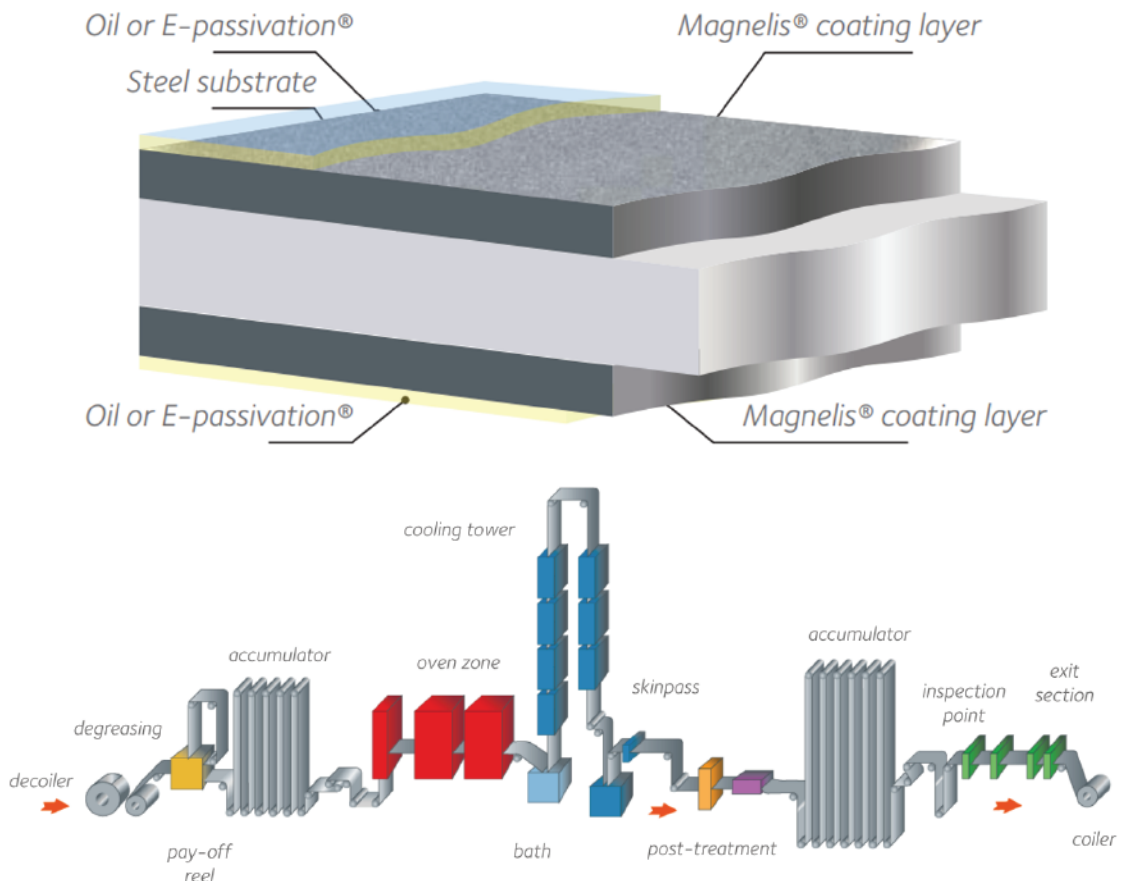


## Magnelis® Cable Containment

Armorduct has partnered with Arcelor Mittal to be able to offer our main containment products in Magnelis®, allowing us to take full advantage of the inherent benefits with this exceptional coating.

Magnelis® is a metallic coating that is applied continuously to steel passing through a molten bath of zinc, 3.5%, Aluminium and 3% Magnesium on a traditional hot dip galvanising line.



Magnelis® is included in BS EN 10346, although while similar in application and appearance to standard pre-galvanised coatings, it's performance is better than traditional pre-galvanised coatings and even post galvanised product. Magnelis® also complies with European directives:

- ROHS, Restriction of Hazardous Substances (2011/65/EU)
- REACH, Registration, Evaluation, Authorisation and Restriction of Chemicals (1907/2006)
- WEEE Waste Electrical and Electronic Equipment (2012/19/EU)

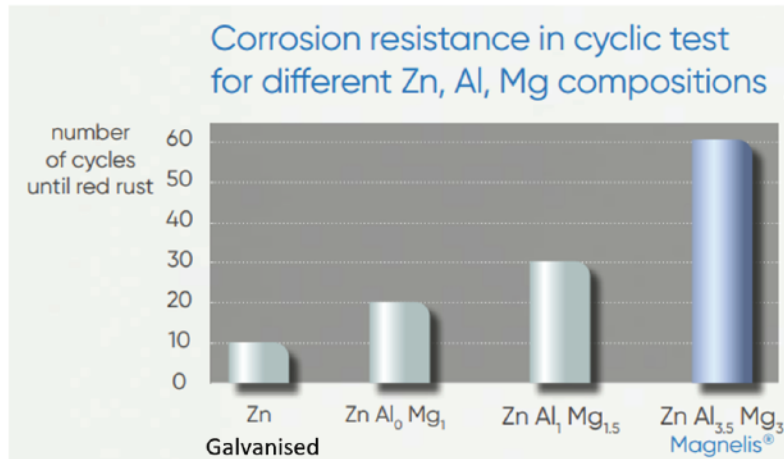
The unique composition of Magnelis® provides the following benefits:

- Enhanced corrosion protection
- Self-healing effect
- Increased cost effectiveness and reduced environmental impact
- Improved aesthetics and finish

## Magnelis® - Enhanced Corrosion Protection

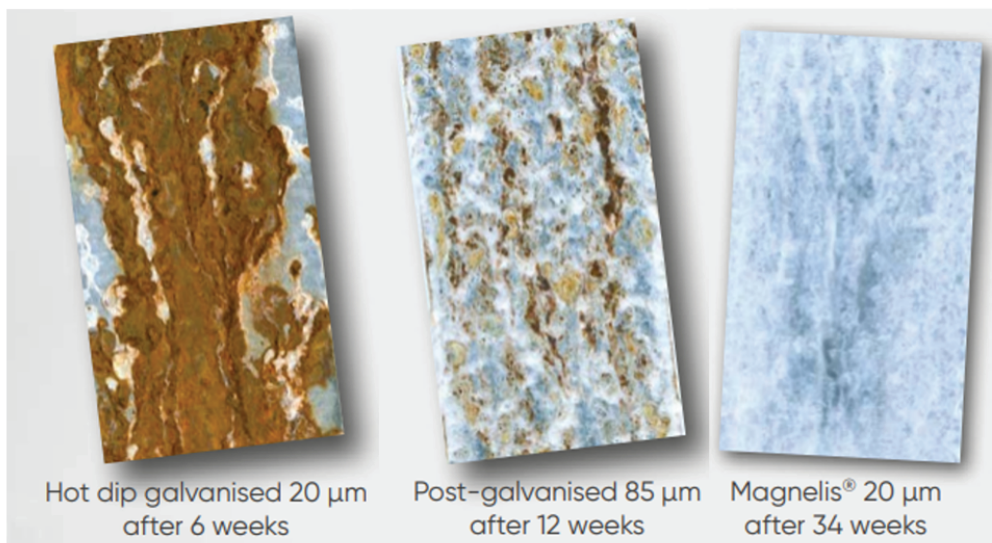
The specific composition of Magnelis® is crucial as it leads to a stable and durable layer across the entire surface and edges of the steel.

Magnelis® resists corrosion for longer than standard galvanised products and it outperforms similar coatings that contain less aluminium and magnesium.



Magnelis® also offers superior corrosion protection compared to post-galvanised products. No red rust was observed on steel with 20µm of Magnelis® after 34 weeks of salt spray testing.

## Magnelis versus Galvanised Coatings (Salt Spray Test)



**Magnelis® is the only metallic coating that has been certified for use in C5 environments.**

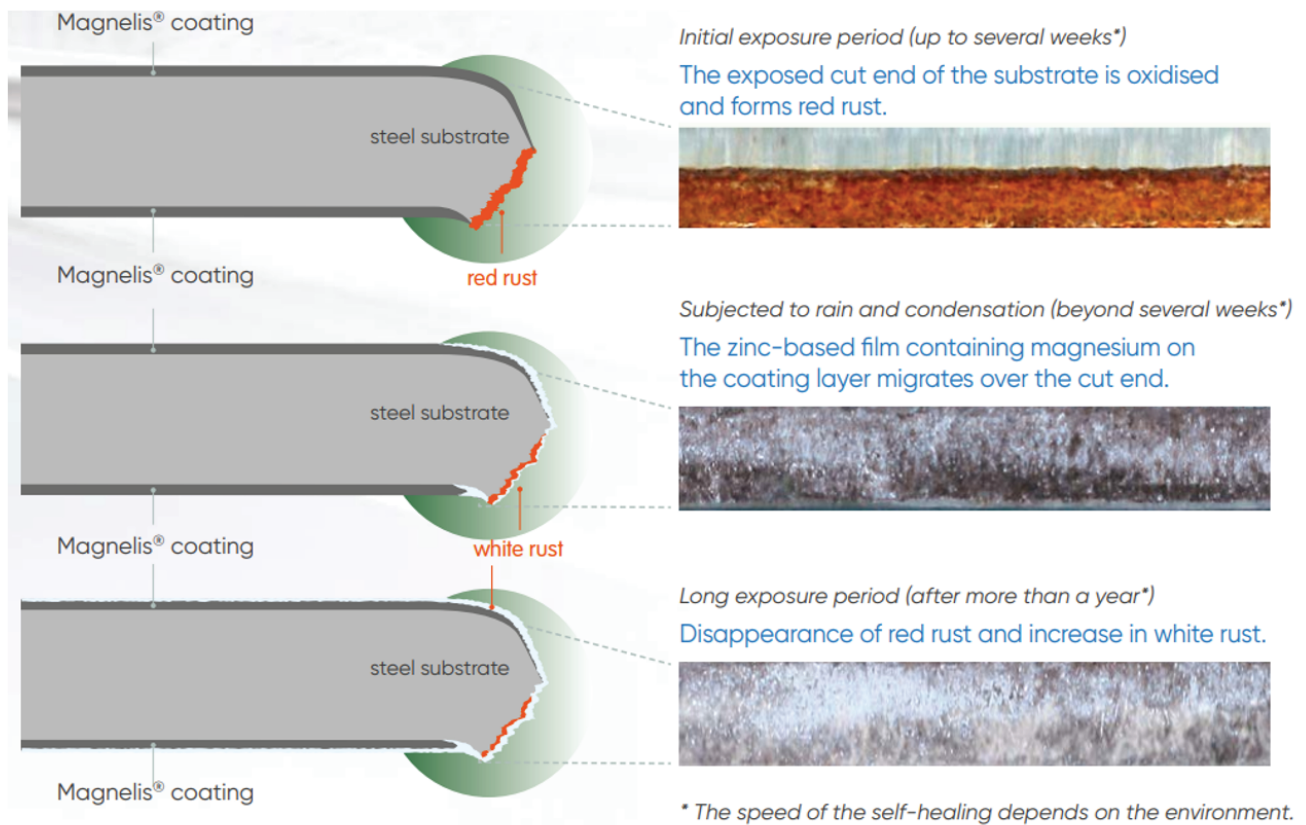
More than a thousand samples have been exposed to various environments around the world in outdoor tests. After 6 years of testing, Magnelis® behaves on average 3 times better than regular galvanised steel. Based on these outdoor tests it has been determined that a design life of 50 years is achievable in some environments.

Corrosion Category	Magnelis® Life Expectancy (LE)
C2	LE ≥ 50
C3	30 ≤ LE < 50
C4	15 ≤ LE < 30
C5	8 ≤ LE < 15

**SELF-HEALING EFFECT**

When exposed to the environment, Magnelis® forms a very dense protective film, unlike traditional galvanised coatings where the film is porous. It is almost impossible for the environment to penetrate this film.

This unique film is also formed on edges, welds, perforations and scratches. In some cases red rust does form on these uncoated areas, but over time the Magnelis® film self-heals over the edge. The result is that Magnelis® provides perfect protection of the whole structure, even on uncoated edges, scratches and perforations.



## COST EFFECTIVENESS AND REDUCED ENVIRONMENTAL IMPACT

Magnelis® provides a cost effective solution that also helps reduce the impact on the environment by:

- The same level of corrosion protection can be obtained by Magnelis® coating (depending on installation environment) while using significantly less zinc than pure zinc coatings which helps reduce the cost and helps ensure the preservation of natural resources.
- Due to the elimination of any additional post-galvanising process, the logistics chain is shortened, therefore reducing the amount of transportation, handling, and manpower.
- Magnelis® increases the lifetime of structures by a factor of three compared to hot dip galvanised coatings and reduces the need for ongoing maintenance.
- Magnelis® is 100% recyclable and does not contain any harmful elements.

## IMPROVED AESTHETICS

Due to the normal solidification of the coating the surface of Magnelis® has a smooth uniform metallic appearance which may appear slightly matt to bright. Products will exhibit a natural darkening over time.

