Organically Coated Steels

PRE-COATED & SPECIALIST METALLIC PRODUCTS

Magnelis®

AN INNOVATIVE METALLIC COATING THAT OFFERS PROTECTION IN THE HARSHEST ENVIRONMENTS

YOUR SUPPLY CHAIN PARTNER

Trademark of ArcelorMittal Flat Carbon Europe SA
Magnelis®

THE HARSHEST ENVIRONMENTS NEED THE TOUGHEST SKIN PROTECTION

Magnelis® is an exceptional, new metallic steel coating providing surface protection in a variety of applications against long-term wear and tear.

Magnelis® is produced on a classic industrial hot dip galvanising line, but dipped in a molten bath with a unique metallic chemical composition of zinc with 3.5% aluminium and 3% magnesium. The 3% magnesium is crucial as it creates a stable and durable layer across the entire surface and gives a far more effective corrosion protection than coatings with a lower magnesium content. As such, ArcelorMittal's Magnelis® offers significantly superior performance than alternative European products.

The best corrosion resistance performance; up to 3 times better than galvanised steel

Corrosion protection to withstand some of the harshest environments

The most cost-effective alternative to the post-galvanised process

Corrosion resistance in cyclic test for different Zn, Al, Mg compositions

Source: ArcelorMittal R&D

Self-repairing protection on cut edges

In addition to being fortified by a cathodic protection equivalent to zinc coating, Magnelis® protects exposed cut edges with a thin zinc-based protective film with magnesium, which prevents corrosive reactions. The nature of this film varies depending on the environment and the properties according to the aluminium and magnesium content.
**BETTER PROTECTION AGAINST CORROSION**

**Magnelis®** provides superior corrosion resistance than standard hot dip galvanised steel.

The destruction of coating that occurs in an ammonia environment is up to seven times less with Magnelis® than with a standard zinc coating.

In addition, Magnelis® demonstrates a longer-lasting, active coating protection over time.

Over an eight-month period, a range of metallic coated products were submitted to salt spray tests.

The results clearly highlighted the superior corrosion resistance performance of Magnelis® over other metallic coatings. No red rust was observed on the Magnelis® sample.

In highly alkaline environments (pH between 10 and 13), Magnelis® demonstrates superior corrosion resistance compared to other metallic coatings.

Due to its chemical composition, the product has better quality characteristics in terms of barrier protection against corrosion in an ammonia environment.

**Key Benefits:**
- Corrosion resistance
- RoHS compliance
- Excellent cut-edge protection
- Uses less Zinc than Galvanised Steel (more environmentally friendly)

**Applications:**
- Rainwater systems
- Heating & Ventilation
- Agricultural buildings
- Safety barriers
- Industrial / Garage Doors
- Electrical Enclosures
- Switchgear & Instrumentation
- Marine applications

"Nothing offers better protection than Magnelis® in chloride or ammonia environments"

Magnelis® has a natural dark grey, spangle-free smooth aesthetic aspect. Magnelis® is available with a standard environmentally friendly E-Passivation® (translucent CrVI-free temporary protection) or can be oiled on request.

Photography courtesy of:
* Philippe Vandenameele  ** Didier Bridoux  *** Tubosider
Kloeckner Metals UK

Contact us on:
01562 821 400

e: ocs@kloeckner.com
f: 01562 865 396

Organically Coated Steels
Edwin Avenue
Hoo Farm Industrial Estate
Kidderminster
DY11 7RA

ArcelorMittal
In partnership with

Kloeckner Metals UK - Head Office
Valley Farm Road, Stourton, Leeds LS10 1SD
t: 0113 254 0711 f: 0113 272 1689
e: enquiries@kloeckner.com

www.kloecknermetalsuk.com