

sisteven

Magnelis®

An ArcelorMittal product



C5

Corrosion resistant

ISO 12944



Ventilation units with exceptional resistance to corrosion



Corrosion resistant
(C5 according to
ISO 12944)



Complete
protection against
corrosion plus
self-healing
capability



A coating that is
three times more
resistant and
longer-lasting



Reduced
maintenance
costs



An
environmentally-
friendly coating



SISTEVEN, S.L.U. is engaged in the manufacture of fans and ventilation systems. Endorsed by ISO 9001 quality certification and approvals in accordance with the EN 12101-3 standard, SISTEVEN is mainly recognised for the manufacture of low-pressure centrifugal fans.



SISTEVEN has invested in a plant with a surface area of over 12,000 m², thereby providing it with increased manufacturing capacity and allowing it to expand markets and consolidate the brand.

SISTEVEN is constantly working to develop new products in order to satisfy the demand from the most exacting global markets.

Magnelis® is a metal coating that is three times more resistant than galvanised steel, thereby offering exceptional anti-corrosion protection, even in the most aggressive environments

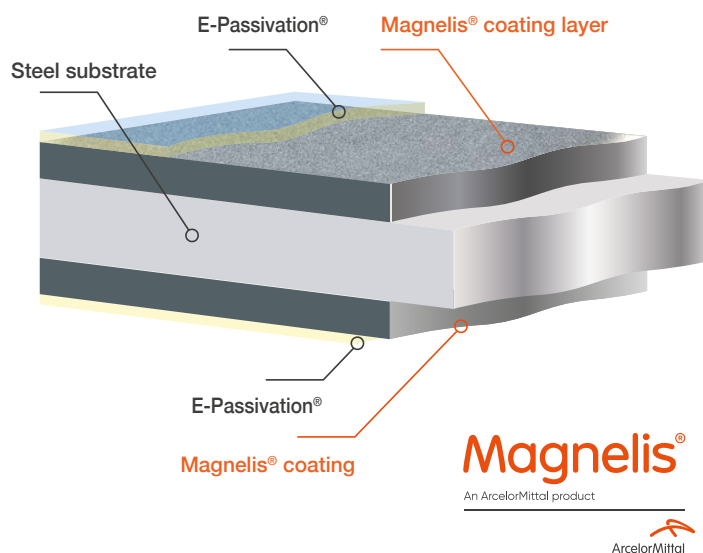
Manufactured on a classic hot-dip galvanisation line, Magnelis® uses a bath of zinc with 3.5% aluminium and 3% magnesium. This chemical composition creates a stable and long-lasting layer that provides great corrosion protection on the housing of SISTEVEN equipment, thereby ensuring the ideal protection for a broad range of applications thanks to its long-term resistance to wear and its effective protection of the surface and edges.



An environmentally-friendly coating



Magnelis® is 100% recyclable and contains no harmful elements



Magnelis® has a natural, dark grey look. It is offered with ecological passivation (E-Passivation®).

An environmentally-friendly coating

The application of Magnelis® contributes to preserving natural resources and respecting the environment, given that it uses less zinc than galvanised coatings. Magnelis® is 100% recyclable, it contains no harmful elements and it complies with the REACH regulation, whose

main objective is to protect human health and the environment against the risk that could be involved with the manufacturing, marketing and use of chemical substances and mixtures.

Moreover, it contains an Environmental Product Declaration (EPD), a report that provides detailed information about the environmental impact of a product throughout its life cycle.



**Corrosion resistant
(C5 according to
ISO 12944)**

Galvanised



Magnetis®



This resistance to corrosion makes Magnetis® the perfect coating for SISTEVEN fans.

After 1,440 hours of salt spray testing on a Magnetis® coating layer, no red oxide is observed, while the galvanised coating layer appears completely corroded.

Superior and long-lasting anti-corrosion protection, even in the most extreme environments, thanks to its innovative composition, which surpasses standard galvanisation

Magnetis® offers great and long-lasting anti-corrosion protection on the housings of SISTEVEN equipment in comparison with the standard galvanised finish that has been used to date, thanks to its special composition of 3% magnesium and 3.5% aluminium. Magnetis® also provides exceptional protection along cut edges, something not achieved by other metal coatings, consequently providing the same protection as on the surface of a metal.

The result is very effective protection against corrosion, even in the most aggressive environments, such as chemical or marine atmospheres, where SISTEVEN fans are often installed.

Magnetis® also provides exceptional protection along cut edges, something not achieved by other metal coatings, consequently providing the same protection as on flat areas. This has been demonstrated in numerous salt spray tests.



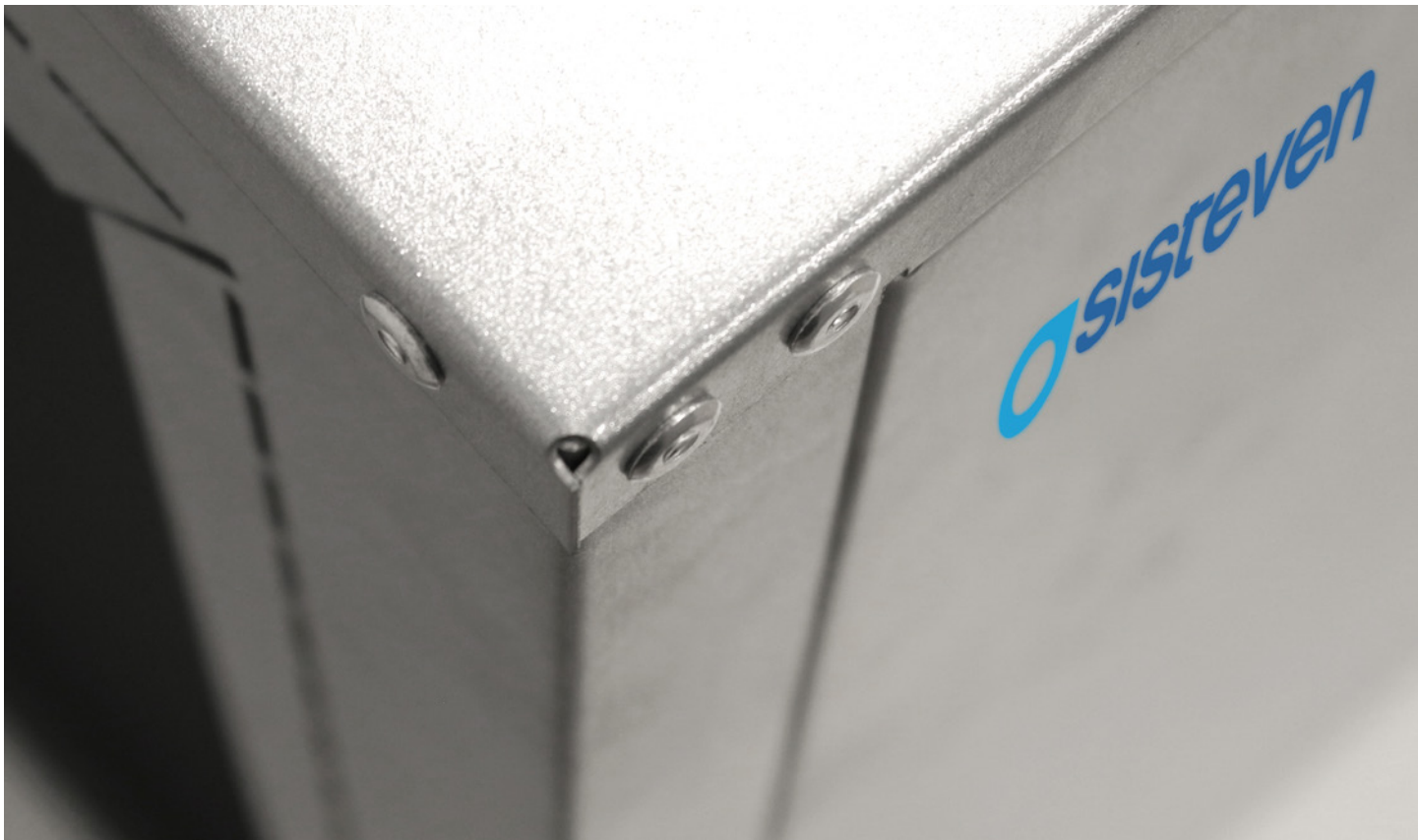
Edge protection
with a self-healing
effect

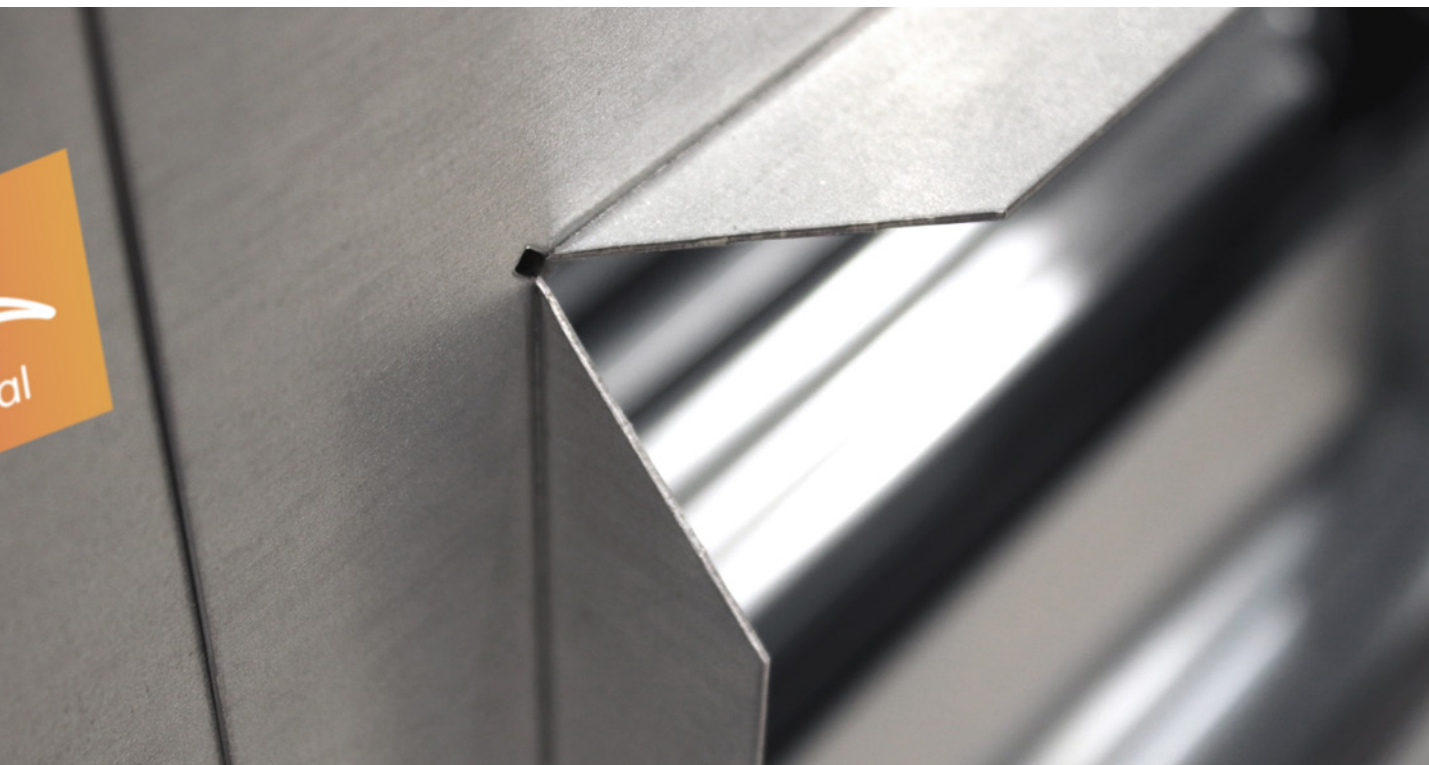


Nearly impenetrable protection that, with the coating's patina of zinc, aluminium and magnesium, ensures maximum durability and makes it nearly 4 times lighter

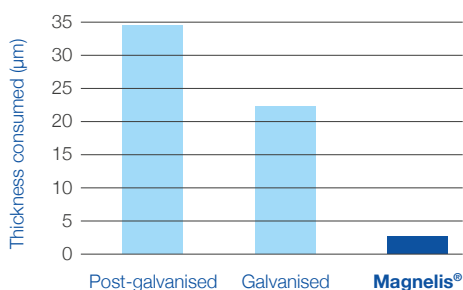
Under environmental exposure conditions, the zinc component of Magnelis® forms a dense and resistant patina, unlike conventional galvanising. This protective patina also forms on edges, welds, perforations and scratches, thereby covering any zone where rust could appear.

The protection by Magnelis® is nearly impenetrable by the atmosphere, thereby ensuring complete protection for a structure. In addition to the protection provided by zinc, Magnelis® includes magnesium to create a fine film that prevents corrosion along cut edges.





Accelerated corrosion testing. Verified results



Results of a 3CT (VDA 621-415) cyclic corrosion test.
Source: ArcelorMittal Global R&D.

Results of an accelerated corrosion test: loss of coating after 6 weeks.

The definitive protection that multiplies the durability of SISTEVEN fans by ensuring superior resistance to corrosion in the most extreme conditions

The results of salt spray and corrosion testing, after having taken over 1,000 samples, clearly show the better behaviour of Magnelis® in comparison with other metal coatings.

Magnelis® is the perfect coating for applications where SISTEVEN fans are exposed because it increases their corrosion resistance. This means that SISTEVEN fans last longer.

Using Magnelis® eliminates the need to paint equipment, which saves in costs and improves productivity

The greater durability of this coating significantly reduces maintenance costs, thereby making Magnelis® more cost-effective than the galvanised and post-galvanised solutions that have been used up to now.



Reduced maintenance costs



Standards and Certifications

Magnelis® sets the benchmark for excellence in the industry with its impressive range of international certifications, which provide customers with the assurance of its superior quality, sustainability and performance standards

Magnelis® is the only metal coating certified for working under corrosion classification C5 for corrosion resistance according to the ISO 12944 standard, which is the international standard for the protection of steel structures against corrosion through the use of coating systems. This standard classifies atmospheres into various categories of corrosivity, from C1 (very low) to C5 (very high).

Basic corrosivity categories according to ISO 12944

C1	Very low	C5I	Very high (Industrial)
C2	Low	C5M	Very high (Marine)
C3	Medium		
C4	High		



C5I Industrial

Industrial areas with high humidity and an aggressive atmosphere.

Buildings and areas with nearly constant condensation and high pollution.



C5M Marine

Onshore and offshore areas with high salinity.

Buildings and areas with nearly constant condensation and high pollution.



Pol. Ind. Miralcampo
Calle Aluminio, 12
19200 Azuqueca de Henares
SPAIN

Tel. +34 91 889 76 13
comercial@sisteven.com
www.sisteven.com