



KOPOS

SMART SURFACE PROTECTION OF CABLE SUPPORTING SYSTEMS

ZN

AL

MG



WHAT ARE THE PRODUCTS MADE OF?

The products are made of sheet metal with a protective treatment composed of zinc, magnesium and aluminium. Protective layer is applied to the cold-rolled sheet in a continuous hot-dip galvanizing process. Compared to conventional galvanizing, the molten zinc bath is supplemented with magnesium and aluminium and this composition causes an exceptional surface treatment. The material used for the products is with a protective thickness of layer of 18-31 μm (ZM310 according to EN 10346). This layer, according to all tests and experience demonstrates higher protection of the material even than the products subsequently hot-dip galvanized with a thickness of 85 μm zinc.



SUITABLE FOR?

Products with ZM surface treatment can be used in environments with corrosion aggressiveness C1-C4. According to the standard ISO 12944-2, the treatment meets the requirements for use in C5 environments. Excellent use of the products is for cable routing around solar installations, where this material is already widely used for the structural elements of the solar systems.

The advantages of the surface treatment have long been used for e.g. the production of metal roofs, and road safety barriers. Thanks to its excellent resistance in high chloride environments and ammonia, the treatment has found its use in agriculture, e.g. for vine columns, greenhouses, silos or structures in animal houses...



WHAT ABOUT THE CUTS AND HOLES?

The surface treatment has the so-called self-repairing ability, where apart from the usual cathodic protection against corrosion, also magnesium and zinc create a protective film on the cutting edge. Duration of the protection is influenced by the external environment, red rust may appear on the cutting edge, but the protection process has been activated and the cutting point will be coated with a protective layer over time, the protective treatment will be applied and any red rust will gradually disappear.



FOR THOSE WHO THINK ABOUT OUR PLANET

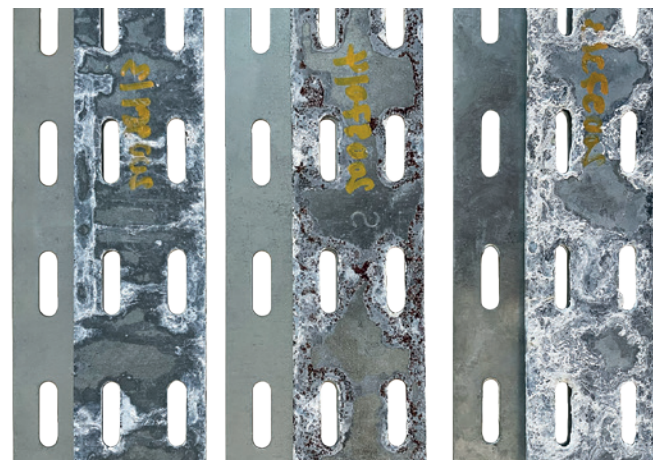
Compared to products subsequently hot-dip galvanised, ZM surface treatment is more environmentally friendly. The production process is free from transporting the product to and from the hot-dip galvanizing plant, because the products are made of the sheet metal with a finished surface treatment. And another environmental advantage is less, slower loss of the protective layer, compared to the thicker layer on products subsequently hot-dip galvanised, thus reducing the leakage of zinc into the soil.

WHO DO NOT BELIEVE, CAN CHECK IT OUT

The finish has already been through a lot of tests in corrosion chambers or long-term exposure to various weathering conditions, everywhere it has demonstrated incredible durability compared to other metallic coatings. Nevertheless, we have made our products with different bends, cuts and perforations, we had them tested in a salt chamber with the NSS neutral salt spray test according to EN ISO 9227:2023.

After 720 hours with no sign of surface change, we terminated the test, the material is really durable and can be used to replace products subsequently hot-dip galvanized. For products subsequently hot-dip galvanized, corrosion occurs between 300-600 hours for the same type of test.

product samples before the test and during the salt spray test



ZM - Continuous galvanizing with magnesium and aluminum admixture **S** - Pre-Galvanized **F** - Hot Dip Galvanized



ASSORTMENT OVERVIEW

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CABLE TRAY COVER

V 50_ZM
V 100_ZM
V 200_ZM
V 300_ZM
V 400_ZM
V 500_ZM

LOW ELBOW 90° COVER

VKO 90X60X50_ZM
VKO 90X60X100_ZM
VKO 90X60X200_ZM
VKO 90X60X300_ZM

RISING ELBOW 90°

SO 90X60X50_ZM
SO 90X60X100_ZM
SO 90X60X200_ZM
SO 90X60X300_ZM

RISING ELBOW 90° COVER

VSO 90X50_ZM
VSO 90X100_ZM
VSO 90X200_ZM
VSO 90X300_ZM

HORIZONTAL BRANCH COVER

VOH 50_ZM
VOH 100_ZM
VOH 200_ZM
VOH 300_ZM

CABLE TRAY WITH INTEGRATED COUPLING

KZI 60X50X0.75_ZM
KZI 60X100X0.75_ZM
KZI 60X200X0.75_ZM
KZI 60X300X0.75_ZM
KZI 60X400X1.00_ZM
KZI 60X500X1.00_ZM

ELBOW 90°

O 90X60X50_ZM
O 90X60X100_ZM
O 90X60X200_ZM
O 90X60X300_ZM
O 90X60X400_ZM

CABLE TRAY WITH INTEGRATED COUPLING - NON-PERFORATED

KZIN 60X50X0.75_ZM
KZIN 60X100X0.75_ZM
KZIN 60X200X0.75_ZM
KZIN 60X300X0.75_ZM
KZIN 60X400X1.00_ZM
KZIN 60X500X1.00_ZM

COUPLING

S 60X200_ZM
S 110X200_ZM

ELBOW COVER 90°

VO 90X50_ZM
VO 90X100_ZM
VO 90X200_ZM
VO 90X300_ZM
VO 90X400_ZM

REDUCTION PIECE

SU 60_ZM

LOW ELBOW 90°

KO 90X60X50_ZM
KO 90X60X100_ZM
KO 90X60X200_ZM
KO 90X60X300_ZM

ANGLE COUPLING

SSU 60_ZM
SSU 110_ZM

HINGED JOINT

SK 60_ZM
SK 110_ZM

HORIZONTAL SIDE COUPLING

BSKH 60 D_ZM
BSKH 60 K_ZM
BSKH 110 D_ZM
BSKH 110 K_ZM

CABLE LADDER

KL 60X200_ZM
KL 60X300_ZM
KL 60X400_ZM
KL 60X500_ZM
KL 60X600_ZM

KL 110X200_ZM
KL 110X300_ZM
KL 110X400_ZM
KL 110X500_ZM
KL 110X600_ZM



MORE INFORMATION
AND THE WHOLE RANGE



PERFECTLY
HIDDEN ENERGY

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