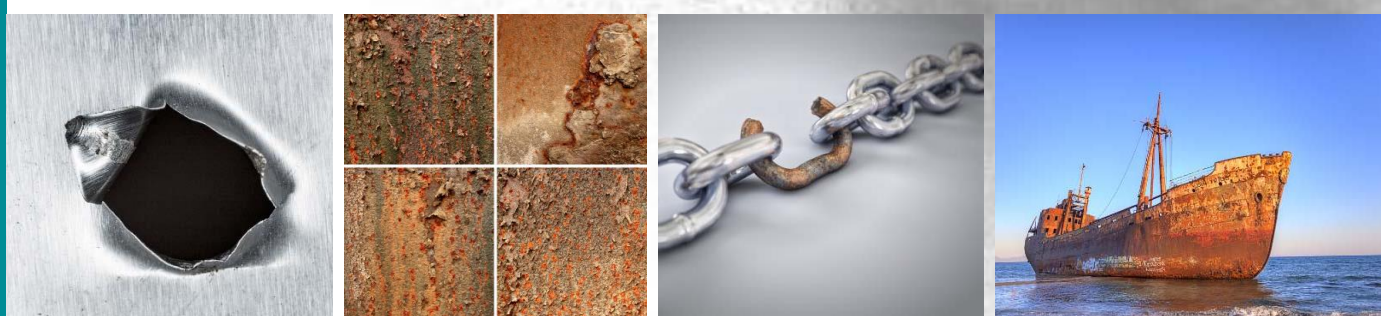


EZ – series
EY

ANTICORROSIIVE PRIMER.

Zinc-rich primer **EZ** series and anticorrosive primer **EY** series: outstanding protection against the corrosion of ferrous alloys surfaces.



OUTSTANDING PROTECTION AGAINST THE CORROSION OF FERROUS ALLOYS SURFACES.

Taking advantage of the well known "sacrificial" properties of the metallic zinc (the main component of this primer), **ST Powder Coatings zinc-rich primer EZ series** can create a strong protective barrier against the natural and chemical corrosive actions.

Even in highly aggressive environments, the zinc-rich primer EZ series will ensure a long life of the coated objects.

This powder coating performs more effectively with an appropriate pretreatment cycle of the surface to be coated (zinc phosphating or sandblasting).

For a better aesthetic quality of the coated object, the zinc-rich primer EZ series can be overcoated with a polyester or an epoxy-polyester.

The following tables show the results of salt spray test for some specimens coated with the zinc-rich primer EZ series and overcoated with a white polyester.

| PRIMER | 1000 HOURS | 2000 HOURS | 3000 HOURS | 4000 HOURS | 5000 HOURS |
|------------------|------------------------------------|------------|------------|------------|------------|
| Zinc-rich primer | No blistering. No film detachment. | | | | |

Table 1: zinc-rich primer EZ series' corrosion resistance on zinc phosphated steel panels overcoated with white polyester.

| PRIMER | 500 HOURS | 1000 HOURS | 2000 HOURS |
|------------------|------------------------------------|------------|--|
| Zinc-rich primer | No blistering. No film detachment. | | No blistering. Film detachment near the crosscut (1-8 mm). |

Tabella 2: zinc-rich primer EZ series' corrosion resistance on iron phosphated steel panels overcoated with white polyester



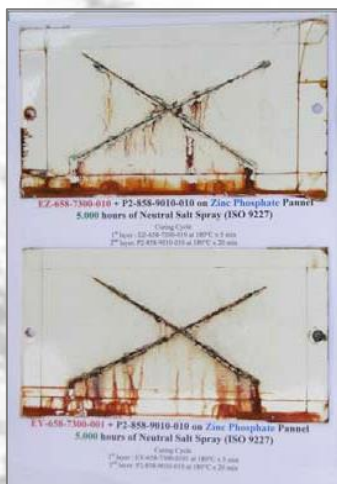
An anti-corrosive powder coatings may experience some problems in intercoat adhesion under certain conditions of polymerization. For this reason, in order to ensure good interfacial adhesion between the primer and the finishing, sometimes it is not convenient to cure completely the primer, but it is recommended to perform only a fusion by heating, for example 180°C for only 5 minutes or 120°C for 20 minutes. The primer is then completely cured in the subsequent stage, after the application of the second layer. The zinc-rich primer series EZ is **also available in a version to reduce problems of interfacial adhesion related to the cure cycle of the primer**. Interfacial adhesion tests performed in laboratory gave optimal results, also after a cure cycle of the primer at 180°C for 20 minutes. Even the neutral salt spray test (ISO 9227) has given satisfactory results, with test duration of 2.000 hours.



The zinc-rich primer has very good anticorrosive properties, but it is subject to a minor drawback: the sacrificial filler contained in it, which provides an excellent protection against the corrosion, influences negatively the toxicological profile. The zinc-rich primer EZ series, in fact, according to the laws governing the labelling and the transport of dangerous substances, is considered dangerous for the environment and the transportation is regulated by ADR.

For this reason, ST Powder Coatings research & development department has created a **new anticorrosive primer not subject to labelling requirements**.

The properties of the new anticorrosive primer **EY series**, are due to a new innovative filler which performs its anticorrosion action not through a sacrificial process, as in the case of EZ series, rather through an efficient **"barrier effect"**.



The salt-spray results of the EY series in comparison with the EZ series are essentially the same, both on zinc phosphated steel panels and on iron phosphate ones, as it is shown on the pictures on the left.

CONTACT US.

For any questions relating to powder coatings, our team is at your side to help and advise you.



+39 0444 165400



info@stpodercoatings.com



P o w d e r C o a t i n g s

MORE THAN COLOUR

