

Optimum corrosion protection inside and out: ZM EcoProtect from thyssenkrupp sets new standards for automotive coatings

With ZM EcoProtect, thyssenkrupp is the first steel producer in the world to offer its customers highly effective zinc-magnesium-based corrosion protection solutions. These solutions meet not only high surface requirements for exposed body panels, they also permit a 30 percent reduction in coating thickness compared with pure zinc coatings: an eco-friendly saving of two kilograms of zinc per vehicle.

Significantly improved corrosion protection

The improved corrosion protection applies not only to flat surfaces, but above all to cut edges and creep around scratches. As a result, the new zinc-magnesium coatings are ideal for components exposed to particularly high corrosion risks. The enhanced processing properties of sheets with the thin zinc-magnesium coatings are a further advantage. Thanks to the hard surface, there is less abrasion in the die, which means more parts can be produced on the press between cleaning intervals. The thinner coating also makes body parts easier to weld. As a result, OEMs benefit from optimized production processes. Moreover, the auto industry can switch to these new corrosion protection solutions without difficulty. Parts with ZM EcoProtect coatings offer the same surface finish as high-quality hot-dip galvanized parts. So it is no problem to start by just producing a few parts with the new coating and fitting them in the body. Car buyers will see no difference in the paintwork.

BMW has been won over by the advantages of the new product and is using ZM EcoProtect in its cult car the MINI – in the roof of the “MINI Hatch” and the fenders of the “MINI Clubman”. There are also clear signs of a trend towards zinc-magnesium coatings among other manufacturers. Many of them are currently considering their introduction.