

Fast-drying systems for Czech rail and road bridges

When supplying coatings for bridges, especially maintenance and reconstruction, durability and speed are two key considerations. Bridges have an expected lifetime of many decades and the coating system needs to be durable enough to withstand weather, pollution and abrasion over the long term. In addition, bridge construction and maintenance often require the closure of roads or rail lines. To avoid long disruption, the coating systems must be very easy to apply and quick drying, so paint crews can get the job completed in the shortest possible time.

For the Czech steel producer and constructor OK-BE, the solution is coating systems based on our Avantguard activated zinc primers. Avantguard primers are highly durable, which ensures the coating system will have an extremely long lifetime. They are also fast and easy to apply. This means OK-BE can increase productivity during in-shop application and reduce application time onsite.

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Avantguard delivers speed and durability for OK-BE

The challenge

Established in 1993, Czech company OK-BE specialises in the production, surface protection and assembly of steel structures, with particular focus on rail, road and foot bridges. We have collaborated with OK-BE for over 15 years, providing paint systems for a wide range of structures, including the Horin Road Bridge near Lovosice and the Negrelli Viaduct in Prague.

For OK-BE, it is essential that the systems meet relevant approval requirements, including local Czech standards, and are very durable and fast drying.

The solution

For both the Horin Road Bridge and the Negrelli Viaduct, we specified a system based on our advanced Avantguard zinc epoxy primers. Incorporating activated zinc technology, Avantguard primers deliver anticorrosion protection that is as good as or better than equivalent conventional zinc epoxies and zinc silicates, ensuring little maintenance is required over the entire system lifetime.

Unlike conventional zinc-rich coatings, however, Avantguard primers remain easy to apply using airless spray, brush or roller – even in high temperatures and humidity. They can tolerate up to 25 per cent higher dry film thicknesses without cracking, and ensure excellent coating stability, edge retention and film formation. For OK-BE, this lowers the risk of incorrect application, reducing the chance of quality issues further down the line.

Avantguard primers also offer best-in-class overcoating intervals – just 45 minutes at 20°C, up to four times faster than traditional zinc coatings. When used in combination with other quick drying coatings, this enables OK-BE to coat more section in one shift, for higher productivity and faster project completion.





At a glance	
Customer	OK-BE, a leading Czech producer and constructor of steel structures, specialising in bridges
Project	Horin Road Bridge and Negrelli Viaduct, Czech Republic
Coating system	Primer: Avantguard 750 Mid-coat: Hempadur Fast Dry 17410 Topcoat: Hempathane HS 55610

The Hempel Group Head Office