



Avantguard[®] performs in the harshest industrial conditions

A globally important steel producer, ArcelorMittal Kryvyi Rih is Ukraine's largest integrated steel company. When the company built a new building for pulverised coal handling at one of its blast furnaces, it asked Hempel to help protect the structural steelwork against corrosion.

The protection system needed to have excellent anti-corrosion properties and mechanical strength to protect the steel from the tough C4 corrosive conditions inside the plant. In addition, it needed to be fast and easy to apply in order to ensure a fast and efficient construction process.

We provided a three-coat system based on Hempadur Avantguard, which ensures a high degree of protection and durability in the aggressive industrial atmosphere.

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At a glance	
Customer	ArcelorMittal Kryvyi Rih
About	ArcelorMittal Kryvyi Rih is Ukraine's largest integrated steel company. It is one of the most important businesses in the country and a globally important steel producer.
Coating system	Hempadur Avantguard 550 Hempadur Fast Dry 15560 Hempathane Topcoat 55213
Total litres	10,000+
Application	Airless spray



The challenge

The interior of ArcelorMittal Kryvyi Rih's new pulverised coal handling building is classified as a C4 corrosive environment. As a result, the structural steel needed a highly reliable coating system with good mechanical strength that could protect it from the harsh industrial atmosphere inside the plant. In addition, ArcelorMittal Kryvyi Rih's wanted a coating system that was easy to apply to ensure a fast and efficient construction process.

The solution

We delivered a three-coat system based on our Hempadur Avantguard 550 activated zinc primer that met all the company's requirements.

Unlike traditional zinc primers, Avantguard technology activates all of the zinc in the coating to increase galvanic protection. Avantguard is fast drying with best-in-class overcoating intervals¹ improving the application process. The products are easy to apply, even in high temperatures and humidity as shown in exposure tests. This means there is less rework due to cracking, as the coating is more tolerant, even with high DFTs.

The system is finished with Hempadur Fast Dry 15560 and Hempathane topcoat 55213 to ensure a high degree of protection and durability in the aggressive industrial atmosphere.



¹ Avantguard's overcoating interval is a minimum of 33% faster than competitor zinc-rich epoxies when comparing product data sheets.

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