

# Protectosil® for a Sustainable Infrastructure

**Effect: Increase in Service Life | Megatrend: Sustainability**

## PROTECTING BRIDGES TO REDUCE EXPENSES

In Germany alone, almost 6,000 of the nearly 40,000 highway bridges are threatened by deterioration and in urgent need of repair. Closing these bridges for repair can cost millions in losses, due to traffic jams, speed and load restrictions. They also cause traffic diversions which adversely affect the local economy and logistics sector. Protectosil® products can prevent potential damage and extend the service life of these important traffic arteries.



## PROTECTOSIL® CORROSION CONTROL

Protectosil® protects steel reinforced concrete structures from the ingress of water and water-soluble contaminants, which can cause corrosion as well as other deleterious processes. Protectosil® CIT can effectively disrupt the corrosion mechanism and reduce further deterioration, even in bridges with high levels of chlorides. Protectosil® DRY CIT and Protectosil® WA CIT are admixtures, used for corrosion control in new cement-based applications, thus, allowing builders to protect structures immediately from the time they are built. Protectosil® products can also provide protection against the damaging effects of freeze/thaw cycles as well as mitigate ASR.

## SAFETY AND LONG SERVICE LIFE

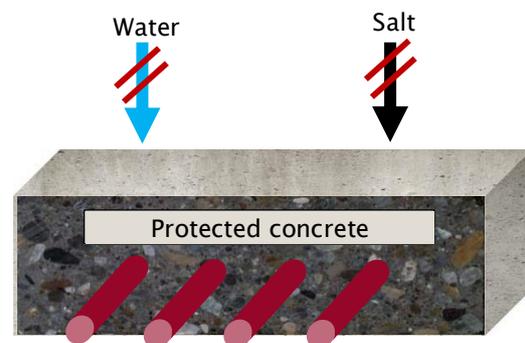
Silane based bridge protection ensures a safe and efficient road infrastructure. Protectosil® has been utilized in numerous infrastructure projects across the world. The investment of protective measures, such as corrosion control products, can represent only a small part of repair/maintenance cycle, yet provide significant cost savings over life of the bridge. Truck traffic and goods transport are a significant factor in the global economy. A sustainable and safe infrastructure of bridges keeps the traffic flowing. Protectosil® can greatly help bridges that are particularly large or that are frequently traveled, by reducing the rate of repairs necessary.

## LESS MAINTENANCE COSTS

Bridges in a state of disrepair are extremely expensive to replace. Utilizing an effective preventative maintenance plan, can significantly reduce maintenance and repair costs. These bridges can also have a high negative impact on the local economy. Protectosil® protects concrete structures preemptively from deterioration caused by the ingress of water, road salt, pollutants, dirt, oil or exhaust particles. This protection can last for decades.

Longevity ↑ Safety ↑ Maintenance ↓

Concrete protected by Protectosil®



Protectosil® protects the reinforcing steel from corrosion. Chloride ions cannot penetrate the substrate.