

Promoting Use and Advancing Quality of Epoxy-Coated Reinforcing Steel.

**Come Visit Our Newly Designed Website...**

[www.epoxyinterestgroup.org](http://www.epoxyinterestgroup.org)



## Welcome

Every year, approximately 2500 bridges are being built in the USA with epoxy-coated reinforcing steel. Epoxy-coated reinforcing steel continue to be delivered, ensuring that contractors are able to continue with the job of building our bridges. These bars provide high corrosion performance and

have been recently been shown to have low initial and life-cycle costs.

In a recent study by the American Society of Engineers (ASCE) it was stated that *“failing to invest in transportation infrastructure will cause job loss, shrink household incomes.”* By 2020, they report that families will have a lower standard of living with an impact of over \$1000 per year. ASCE recommends an investment of \$94B per year to save nearly 2 billion hours in travel time, \$1000 per family and add \$2500 in GDP for every person in the US. Along with other Associations and Institutes, the Epoxy Interest Group has been working with its members to encourage dialog with elected officials on these important issues and to ensure that we continue to have a well funded transportation system.

## Projects Using Epoxy-Coated Reinforcing Steel Wanted

EIG wants to feature your project in upcoming editions of Anti-Corrosion Times and our Project Gallery. All project types are welcome.

Please send basic information on the project and information on how to access photography (construction and/or finished, all photo credits) to [info@epoxy.crsi.org](mailto:info@epoxy.crsi.org).



## Projects

### Brownsville Bridge, Mon-Fayette Expressway Unionville, PA

In 2006, construction began on a 17-mile (27 km) “Uniontown-to-Brownsville Project”. Due to limited funding, construction on this section was split into two phases. The first phase involved construction of an 8-mile (13 km) section of expressway running parallel to a hazardous stretch of U.S. Route 40 between Brownsville and Uniontown and this road was opened on October 23, 2008 at a cost of \$380 million. The project was selected for the Outstanding Highway Engineering Project Award, Category B, by the American Society of Highway Engineers - Pittsburgh Section.



## IN THIS ISSUE

### ARTICLES

- New Publication from the Epoxy Interest group
- New FACEBOOK Page
- Questions from the field

### PROJECTS

- Brownsville Bridge, Mon-Fayette Expressway
- Route 52 Causeway Bridges
- St. Louis Bay Bridge

### CERTIFIED PLANTS

### NEW EIG PUBLICATIONS

### FOR INSPIRATION

*“ In dwelling, live close to the ground. In thinking, keep to the simple. In conflict, be fair and generous. In governing, don't try to control. In work, do what you enjoy. In family life, be completely present.”*

— Lao Tzu,  
Chinese philosopher

## Route 52 Causeway Bridges

Somers Point and Ocean City, NJ

In 2006, the New Jersey Department of Transportation started work on replacement of Route 52 Causeway bridges between Somers Point and Ocean City. This route is a critical emergency evacuation route for Ocean City. The new bridge consists of two parallel bridges with high fixed spans over Ship Channel and Beach Thorofare (Intracoastal Waterway). The roadway section will have two 12-foot lanes and 8-foot minimum outside shoulders in each direction separated by a concrete median barrier. The project also includes a visitor's center for Ocean City and four fishing piers, built off the main structure.



 MORE



## St. Louis Bay Bridge

(Henderson Point and Bay) St. Louis, MS

In 2005, Hurricane Katrina destroyed the St. Louis Bay Bridge in Mississippi, on U.S. 90. Within 6 months, MDOT had proceeded with the state's first ever "design/build" contract, which was awarded to a Joint Venture of Archer Western Contractors and Granite Construction Company. The 2.1 mile long replacement bridge was built with a mid-span height of 85 ft, some 55 ft higher than the damaged structure, eliminating the need for a draw span. The bridges contain epoxy-coated rebar to withstand exposure to saltwater.

 MORE

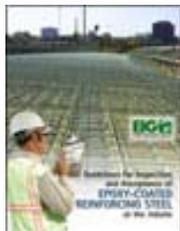
## New Publication from the Epoxy Interest Group

The following document may be downloaded from [www.epoxyinterestgroup.org](http://www.epoxyinterestgroup.org) or if you wish hard copies, please contact us at [info@epoxyinterestgroup.org](mailto:info@epoxyinterestgroup.org)



### Epoxy-coated Reinforcing Steel in Parking Garages

This 6-page document provides guidance on the use of epoxy-coated reinforcing steel to protect concrete parking garages. Over \$600 million is spent yearly to repair parking decks and structures without epoxy-coated reinforcing steel may show deterioration within 10 to 15 years.



## Guidelines for Inspection and Acceptance of Epoxy-Coated Reinforcing Steel at the Jobsite

This 8-page brochure provides guidance to procedures for inspection of epoxy-coated reinforcing steel during construction and prior to concrete placement. It describes steel identification, transport and handling, bar placement, bar damage and repair and inspection prior to concrete placement. This document is valuable to anyone involved in the placing and inspection of concrete containing epoxy-coated bars.

## Epoxy Interest Group now on Facebook

Become a fan of the Epoxy Interest Group on Facebook and stay updated as we find new research and projects.



[Visit EIG on Facebook](#)

## Questions from the Field

**Question:** Do epoxy coatings need to be perfect for the product to work? What about jobsite damage?

**Answer:** While damage to the coating reduces the corrosion performance of a bar, the product will still have high corrosion resistance. Almost all laboratory tests on epoxy-coated reinforcing steel test bars with damage to the coating typically formed using a drill or mill. These tests have shown that even when damaged, epoxy-coated reinforcing steel may reduce corrosion rates by up to 98 percent compared with tests conducted using uncoated reinforcing steel. It is recommended that while all visible damage is repaired, we also realize that some damage will be present on the bars once placed into concrete. This damage, and the expensive and time consuming repair, can be minimized by carefully storing and lifting the bars into place. Additional details may be found in our publication titled "Guidelines for Inspection and Acceptance of Epoxy-Coated Reinforcing Steel at the Jobsite" found at <http://www.epoxyinterestgroup.org/index.cfm/publications/index#>.

### Editors Note:

We hope that you find information on this website useful and please [contact us](#) if additional information is required.