

Tech Talk Q&A

**You can add the “non-slip”
before or after you dip!**

By Professor Zinc

**Q: "Is there an appropriate/
recommended methodology to obtain an
acceptable non-slip surface for a
galvanized steel plate deck, either during
the galvanizing process or after?"**

A. Yes, there are actually both pre-galvanizing and post-galvanizing options. One of the most effective and reliable methods of creating a non-slip galvanized surface is to apply a thermal metallizing spray to the steel before galvanizing.

In this process, the non-slip surface is produced by applying molten or semi-molten particles of metal onto the steel plate. This creates a permanent, rough random matrix on the steel for increased traction. The bond strength of the metal particles to the steel plate is 5,000 psi or more.

The steel should be blasted to SSPC Surface Preparation Specification 10 and be clean and free of oils and grease before it is metallized.

Hot Dip News Spring 2018

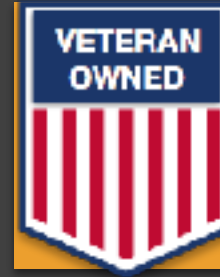
After application, the metallized steel is hot-dip galvanized in accordance with ASTM A 123, providing decades of rust free, slip-resistant service.

Another option is the application of a special non-slip paint or epoxy after galvanizing. This may be a less expensive approach initially, but could require maintenance or reapplication later, increasing life-cycle cost.

Thanks for the great question! We hope you find the answer helpful.

**Do you have a question for the Professor?
Submit it online at www.galvan-ize.com.**

Contact Galvan Industries, Inc.
www.galvan-ize.com
Toll Free: 1.800.277.5678
Fax: 704.455.5215
E-mail: sales@galvan-ize.com



Galvan Industries, Inc.
Hot Dip News

Inside:

- Galvan extends life of new 85-385 Gateway project
- Meet Ben Kelly
- KettleTags® are it!



GALVAN BRINGS LIFETIME CORROSION PROTECTION TO LIFESAVING BIOTHERAPEUTICS

The Spanish biotherapeutics company, Grifols, is building two new plants with a combined investment value of \$210 million in Clayton, NC, and Galvan Industries has been chosen to provide hot dip galvanizing corrosion protection for the steel in the plants.

The first plant is a new plasma fractionation facility that will be used to extract proteins with therapeutic uses. The facility is scheduled to start production in 2022. The second facility will be a purification plant for intravenous immunoglobulin. It is scheduled to begin operating in late 2021.

Galvan is proud to have been chosen as the galvanizer for this large, high-profile project. **If quality and capacity are critical in your next industrial project, contact Ben Kelly at Galvan today .**



Galvan Extends Life Of Massive 85-385 Interchange

Galvan Industries, Inc. has been chosen to provide corrosion protection for reinforcing steel used in a major highway project that will transform the intersection of Interstates 85 and 385 in Greenville County, South Carolina, helping alleviate traffic congestion through the area for years to come.

The 85-385 GATEWAY Project's scope involves creating a new interchange within the general footprint of the current interchange. It is a project that will include a total of ten new bridge structures, two of which will be flyovers, rehabilitation of two existing bridge structures, and modifications to the substructure of one existing bridge.

Galvan will provide hot-dip galvanizing rust prevention for the reinforcing steel in the bridge decks. Construction on the project is ongoing will continue until 2020.

The Right Rust-Proofing Matters

Corrosion of reinforcing steel is a destructive force in concrete structures. The corrosion products of steel have over three times the volume of the original steel

and exert tremendous tensile stress on the surrounding concrete. The result is spalling, or cracking, which damages the structure, shortening its life.

Epoxy coated rebar is not a cost effective corrosion protection system for bridge decking. In fact, the Virginia Transport Research Council in January 1997 stated "For 95% of bridge decks the epoxy coating will debond from the steel ...and therefore provides no additional service life."

Superior Protection, Lower Life Cycle Cost

Unlike painting and epoxy which are solely barrier-type coatings, galvanizing provides both barrier and sacrificial protection to the underlying steel. Galvanized zinc coatings form an impervious metallic zinc barrier around the steel to isolate the steel surface from the surrounding concrete, preventing damage from rust.

When the costs and consequences of corrosion damage to a reinforced concrete structure are analyzed, the cost of galvanizing is a very small investment with a large return in project life.



Galvan Introduces KettleTags® ID System

Tagging before galvanizing is important for many of our customers, helping them to identify finished materials at the job site, but paper tags can disappear and metal tags can become unreadable. We've solved this problem for our customers with KettleTags®, a tagging system that stays with the material through all the steps in the process, including the acid dip and the molten zinc bath. KettleTags increase efficiency, eliminate unsafe handling and provide greater traceability with fewer errors. KettleTags are easier to use and more cost effective than other types of tagging, too. To find out more, contact Ben Kelly at Galvan today.

EMPLOYEE SPOTLIGHT: BEN KELLY, HOT DIP SALES MANAGER

Ben Kelly joined Galvan Industries, Inc. as Galvanizing Sales Manager in 2014 to further support and develop the company's growing list of customers in the steel fabrication, construction and manufacturing industries.

Ben came to the job with extensive experience, having spent more than 10 years in top sales positions in the steel industry. Most recently, he served as sales manager for Harris Rebar.

Previously, he was Contract Sales Representative at Gerdau Ameristeel. He also has experience in steel and concrete construction as a structural engineer.



Ben joined Galvan at a time of great growth opportunities in new markets such as solar energy and natural gas driven electric power generation, in addition to the strong continuing demand for company's corrosion protection services for steel fabrication, industrial construction and specialized architectural applications.

In addition to his sales duties, Ben also provides educational services to the market, presenting the popular "Galvanize It!" seminars developed by The American Galvanizers Association at locations across the Southeast. He is also lends his expertise to Galvan's "Professor Zinc" Q&A, answering technical galvanizing questions for professionals around the globe.

Laurens Willard, President of Galvan said, "Ben's wealth of experience and industry knowledge has made him a key addition to the Galvan Industries family. His success shows that we are maintaining and growing our position as the leading hot dip galvanizer in our region of the country."

In addition to his work background, Ben's education includes a BS in Civil Engineering from Florida State University and an MBA from North Carolina State University. Ben is married with three children. In his free time he enjoys golf and is an accomplished outdoor cook on both the grill and the smoker.

