

Tech Talk Q&A

**Don't use muriatic acid for
cleaning galvanized parts.**

By Professor Zinc

**Q: "Can muriatic acid be used to
clean hard water mineral deposits off
galvanized steel parts in an irrigation
system?"**

A. As they said at Woodstock 50 years
ago, "Stay away from the acid!"

Muriatic acid is another name for
hydrochloric acid. Diluted hydrochloric
acid is often used as a descaling
agent to remove limescale from metal
surfaces in contact with hot water, such
as in boilers, water heaters, and
kettles. However, it dissolves zinc. Zinc reacts
quickly with the acid to form bubbles of
hydrogen and zinc chloride, a salt. Because of
this reaction, muriatic acid is actually used in a
20% solution to remove zinc coatings from steel that has
to be welded after galvanizing. So the answer is 'no' for
using muriatic acid for cleaning galvanized parts.

CLR Calcium Lime Rust Remover would be a
better choice for your task. It will remove hard water
calcium, lime and iron deposits without dissolving or
damaging the protective zinc coating on your irrigation
system components.



If for any reason you need to touch up or repair a
galvanized surface, one simple method is to use a
zinc-rich paint such as Rustoleum Cold
Galvanizing Compound. It can be applied to a
clean, dry steel surface by either a brush or
spray. Zinc-rich paints must contain either
between 65% to 69% metallic zinc by
weight or greater than 92% metallic zinc
by weight in dry film. The coating
thickness for the paint must be 50%
more than the surrounding coating
thickness, but not greater than 4.0 mils.
Measurements should be taken with
either a magnetic, electromagnetic, or
eddy current gauge to ensure compliance.

Thank you for the great question. We hope
you find this answer helpful.

Contact Galvan Industries, Inc.
www.galvan-ize.com
Phone: 704.455.5102
Fax: 704.455.5215
E-mail: sales@galvan-ize.com

Hot Dip News Spring 2019

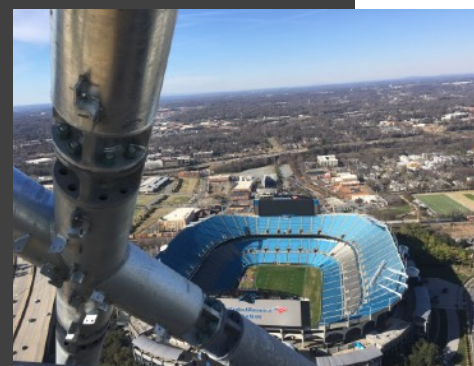
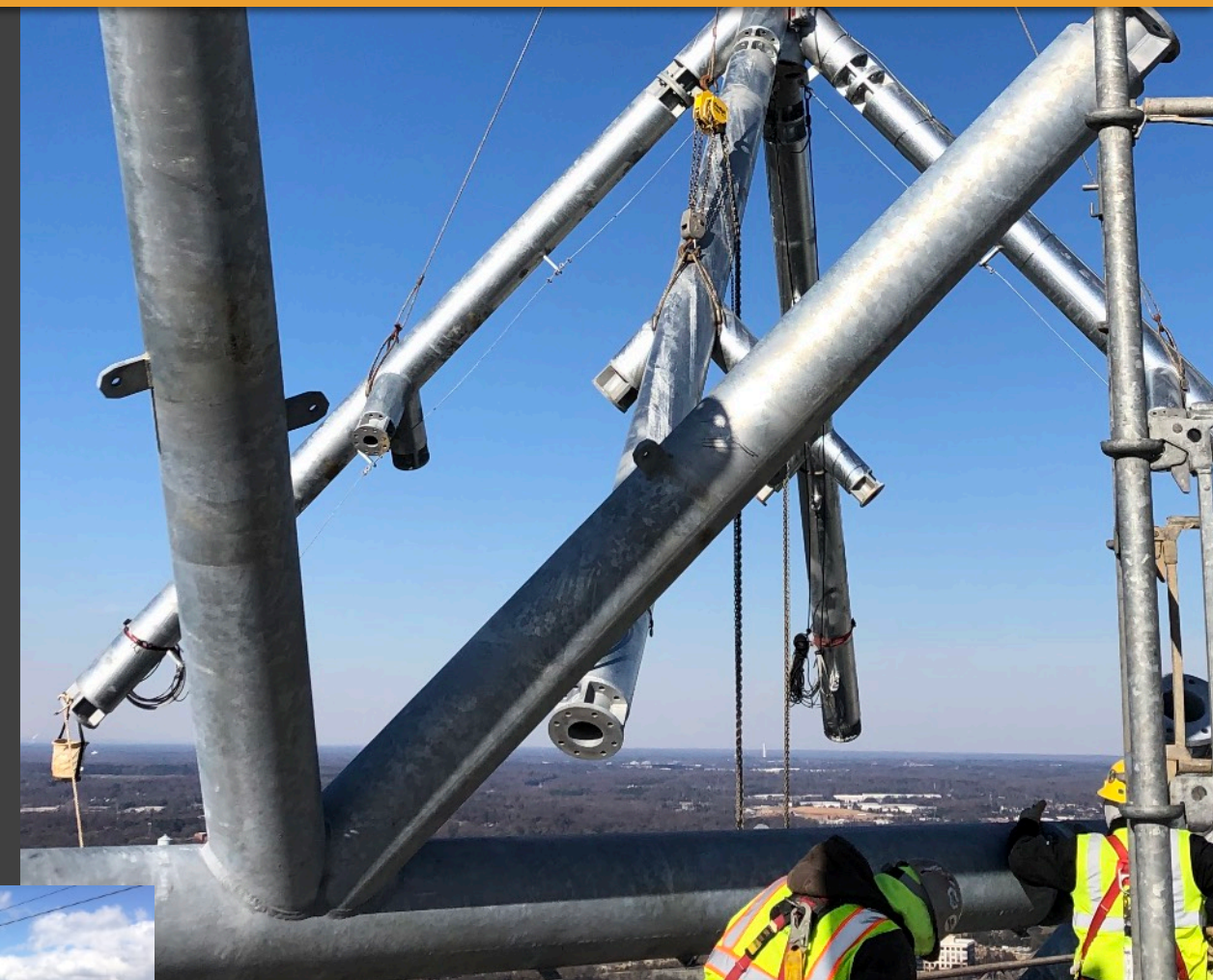
[Spring 2019]



Galvan Industries, Inc. Hot Dip News

Inside:

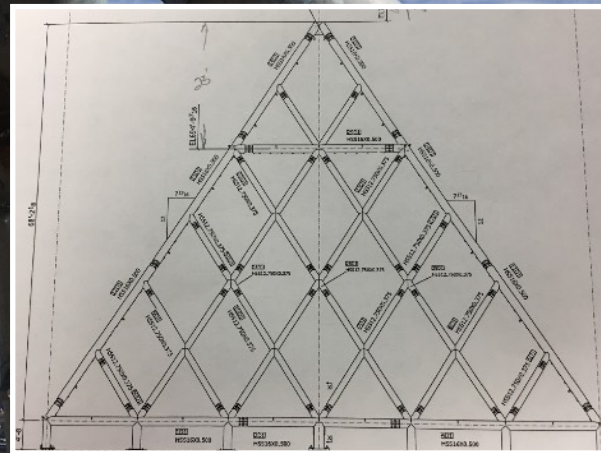
- *More photos from
Legacy Union
Tower*
- *Manufacturing
Focus: Cell tower
V-booms and
reinforcing plates*



GALVAN BRINGS LEGACY OF PROTECTION TO CHARLOTTE'S LEGACY UNION TOWER

The first phase of the Legacy Union project – a 10-acre, mixed-use
development between Tryon Street and Bank of America Stadium in Charlotte, NC
– features a 33-story office tower of stone and glass, set for completion in the first
quarter of 2019. A glass-and-steel pyramid will cap the building, creating a new
landmark on the Charlotte skyline.

Galvan Industries was chosen to protect the beauty and integrity of the steel
used in the tower's roof-top pyramid. Hundreds of tons of uniquely designed
structural steel elements were carefully dipped in molten zinc in Galvan's
large galvanizing kettle, providing a lifetime of protection against corrosion. **See
more photos inside.**



MANUFACTURING FOCUS:

Hot-dip galvanized cell tower V-booms and reinforcing plates protect against “dropped” calls

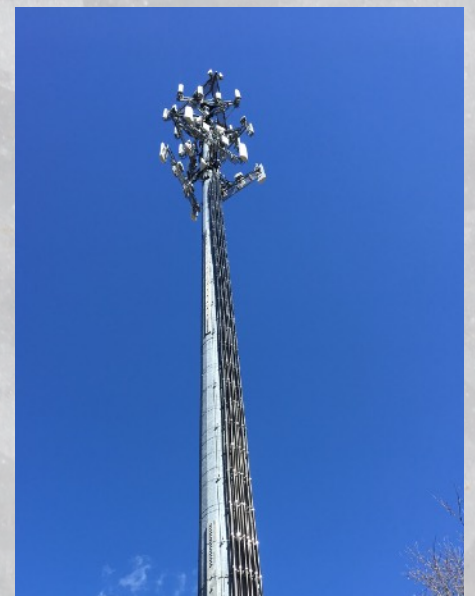
Galvan Industries is a major supplier of hot dip galvanizing for cell tower V-booms and reinforcing plates.

Cell tower operators count on galvanized steel V-booms to keep heavy antenna equipment suspended hundreds of feet above ground, even in high winds, ice and snow.

Rust could compromise steel that is constantly exposed to the elements in this way, but our hot dip galvanizing provides a lifetime of maintenance-free protection against corrosion.

The addition of larger, heavier equipment to existing towers also adds weight and increased wind loads that increase the stress on steel poles. Adding galvanized steel reinforcing plates to the sides of the poles increases both the flexural strength and stiffness.

Find out how Galvan Industries can extend the life and the value of your manufactured steel product. Contact Ben Kelly, 704-455-5102 or bkelly@galvan-ize.com today.



Queen City Gets A New Crown

Legacy Union will be home to a mix of Class A office space, retail and other development, anchored by a 33-story office tower with an illuminated pyramid-shaped crown. Thanks to the lustrous galvanized coating provided by Galvan Industries, the steel of the crown will be rust-free and maintenance-free for decades to come.

“Galvan is happy to be involved in this skyline-changing project,” said Laurens Willard, president of Galvan Industries, Inc. “We’re proud to be a part of making and keeping Charlotte beautiful.”

See more photos and a video on the Legacy Union tower at our website, www.galvan-ize.com. And call Galvan today to learn more about how galvanizing can enhance your next architectural project.