

Modular On-Grade "Bull Towers"

Tulsa, Oklahoma



Towers are the name of the game at Hemphill, an Oklahoma-based manufacturer that has honed its expertise in telecommunications, oil & gas, and solar power solutions. After years of experience, they recognized a major gap in the tower industry and saw the perfect opportunity to innovate.

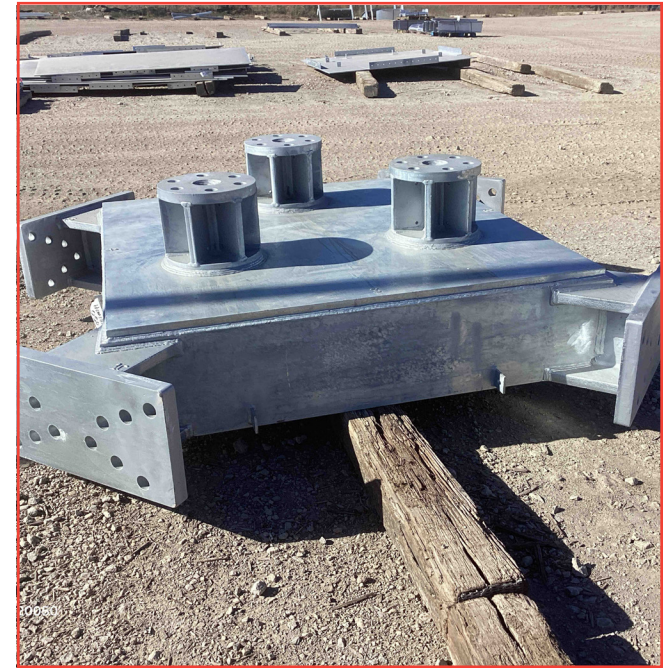
In industries where time is critical—whether responding to shrinking shorelines, raging wildfires, or natural disasters like the 2024 East Coast hurricanes—reliable, portable, and modular

towers are essential. With an increasing need to reach remote and challenging locations like mountains and rural areas, Hemphill's solution was clear: a tower that could perform as well as, or better than, conventional permanent structures, while being rapidly deployable anywhere.

Almost serendipitously, a major telecom company presented the perfect test case for this innovation. Hemphill teamed up with B&T Engineering, also based in Tulsa, to bring this dream to fruition. A key part of the development was collaboration with the galvanizer to ensure the tower components fit together precisely, with properly sized holes for venting and drainage during galvanizing.

Galvanizing is a standard for towers, thanks to its unbeatable corrosion resistance. These modular tower bases are designed to withstand extreme conditions—whether hot, cold, wet, dry, or windy—as they travel the globe in diverse climates. Much like a firefighter prepared to face a blaze, these towers are coated in zinc, giving them the resilience to endure whatever the environment throws at them.

"At the concept stage, there was debate between a concrete and a steel design, so after much evaluation about cost and the inspiration to make it modular with interchangeable interlocking pieces, galvanized steel was the clear choice,"
- John Hemphill, Hemphill Towers



Anyone familiar with current disaster response communications will recognize the term "COW," or "Cellular on Wheels." These compact mobile towers, usually hauled on trailers, max out at about 75 feet in height due to their size and weight, limiting their range and transmission →

Galvanizer
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American Galvanizers Association

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capabilities. Enter Hemphill's innovative solution: the "BULL"—a much larger, heavier, and robust system. Constructed from approximately 15 tons of steel, these modular tower bases are designed to adapt to specific needs, offering customizable heights ranging from 60 feet to the full 160 feet of a permanent tower. What's more, the BULL system delivers "one design, one time," regardless of configuration, ensuring seamless scalability.

While building a permanent tower traditionally takes one to two months, A Hemphill Modular

BULL Tower can be deployed and assembled in just 2-3 days. The required base strength varies depending on factors like elevation, weather conditions, and tower height. To maintain stability, 2,400-pound interlocking concrete weights are added incrementally to the base, ensuring optimal performance in all conditions.

This revolutionary tower design brings a host of advantages: no guy wires for a simpler setup, portability for easy relocation or temporary rental, zero environmental impact (as it doesn't require

ground penetration), the ability to shift from temporary to permanent use, and the capacity to support heavy antenna loads. In short, Hemphill's fleet of modular BULL Towers is not only disrupting an entire industry but also providing a critical, fast-deploying communications solution that people rely on every day! ■



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