



PROJECT PROFILE

Improving Grid Resiliency with the Tough Truss Core®

In 2023, Osmose® unveiled the latest member of the Tough Truss family, the Tough Truss Core. A national, legacy client of Osmose jumped at the chance to try this new trussing system, and the results were astounding.

The Situation

For decades, Osmose field crews have been using Osmose trusses to restore damaged and decayed utility poles. These trusses, like the C-Truss and C2-Truss ensure poles meet or exceed code-mandated strength or other specified structural requirements. However, the crews often encountered impediments, like underground piping, gas lines, or other immovable objects, where replacing the pole may be the only viable option.

This was the case for a longstanding Osmose utility client during a rigorous revisit of reject poles unable to have the traditional truss designs properly installed on hundreds, if not thousands, at-risk poles needing remediation. Initially, full replacement was considered the only option due to the obstructions preventing proper truss placement. With replacement costs averaging over \$10,000 per pole, the utility sought the most cost-effective way to extend the life of its inventory and reduce risk quickly.

The Solution

Dissatisfied with the missed opportunities to strengthen in-service poles for utilities, Osmose engineers sought to develop a more robust trussing solution. The goal was to create, test, and launch designs allowing for a larger range of placement options on weakened poles, knowing the importance of the truss's orientation to ensure its strength.

The newly designed and patented Tough Truss Core offers a distinctive cross-section with inward-formed legs, adding strength in all bending directions while improving its fit to the wood poles it restores. Because this new design can be used universally with more orientation options on the pole, utility crews spend less time and resources preparing a range of truss sizes needed for the job from anticipating the variety of obstacles they could face.

The Result

Now armed with the new Tough Truss Core, the Osmose crew recategorized over half of the utility's poles marked for replacement due to restoration obstruction, successfully restored them, and saved hundreds of thousands of dollars by avoiding costly replacements. With every 100 poles previously categorized for replacement due to obstruction, this utility expects to save well over half a million dollars.

With improved performance, consolidated offering, and the ability to restore more poles, the Tough Truss Core is a simple adoption for pole owners.



To learn more, contact your local Osmose professional at poleinfo@osmose.com.