

# Osmo-ET-Truss™



## Osmo-ET-Truss

- Upgrade pole capacity 1, 2, 3, or more classes
- Save money – upgrading is often 1/3 or less the cost of replacement
- Avoid the hassle of coordinating change-outs
- Upgrade an entire line without service interruption

Osmose®



## THE PROBLEM: OVERLOADED POLES

Thousands of poles in service today, although adequate at the time of installation, can no longer safely carry the loads they are required to support. The addition of new distribution lines, telecom equipment, and broadband infrastructure has increased loads beyond the capabilities originally intended, compromising the structural reliability and safety of poles across North America.

## THE OSMOSE POLE STRENGTHENING SOLUTION: OSMO-ET-TRUSS

The Extended & Tapered Truss (ET-Truss) works in conjunction with sound wood poles to create a combined capacity greater than the original pole class rating. The ET-Truss is fabricated from high-strength steel and is engineered to help increase the bending capacity of wood poles.

To ensure that the load is proportioned correctly between pole and truss, the stiffness of the ET-Truss is matched to the stiffness of the pole. The result is a hybrid steel and wood structure, representing the best characteristics of both materials; the bulk of wood and the rigidity of steel.

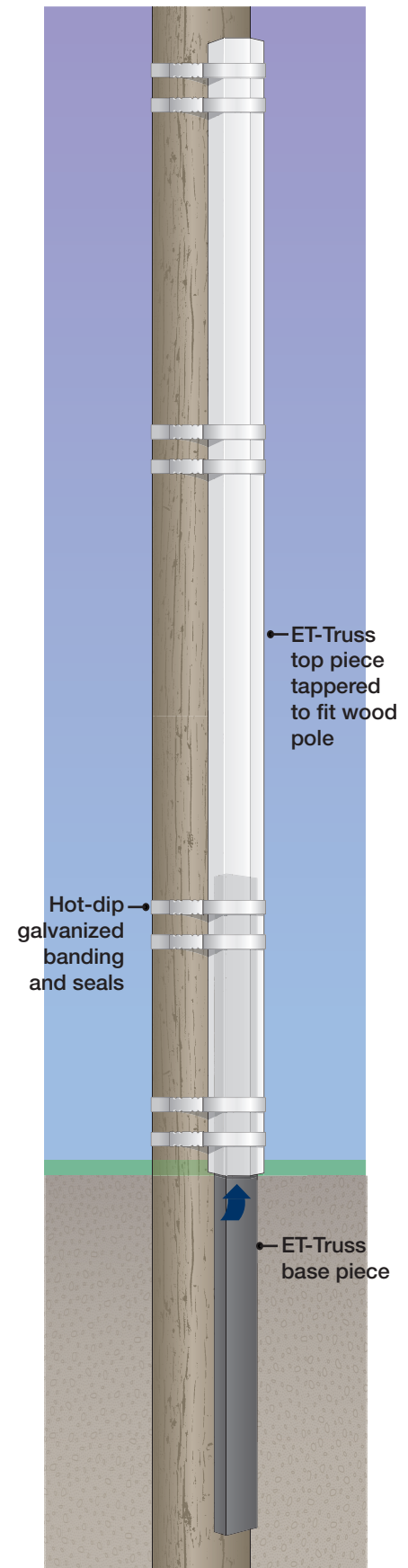
- **Upgrade pole capacity 1, 2, 3, or more classes**
- **Save money – the cost is often 1/3 or less than the cost of replacement**
- **Avoid the extra effort & delays associated with coordinating change-outs**
- **Upgrade an entire line without service interruption**

Extensive testing has verified the theoretical expectations of the Osmo-ET-Truss design, and Mother Nature has been putting it to the test since 2004.

Osmose has been a trusted name in utilities services since 1934. As a leader in wood pole inspection and restoration, Osmose technicians are experts at evaluating a pole's suitability for upgrading. This includes **using preservatives to control decay and protect the sound wood to ensure the longevity of the upgraded pole** and the integrity of your plant.

## The *Genesis* of the Osmo-ET-Truss

West Plains Energy (a division of Utilicorp United), serving 70,000 customers in Western Kansas, was faced with hundreds of overloaded Class 4 poles and blustery Rocky Mountain winds that often reached 100 miles per hour. With few trees and even fewer buildings to break the winds, West Plains knew one break in an isolated area could cut power to an entire community. It was determined that more than 300 Class 4 poles now needed to meet Class 2 load requirements, but the cost for replacement was prohibitive. West Plains turned to Osmose for support. Cooperative efforts led to the development of the Osmo-ET-Truss, saving West Plains thousands of dollars in replacement costs.

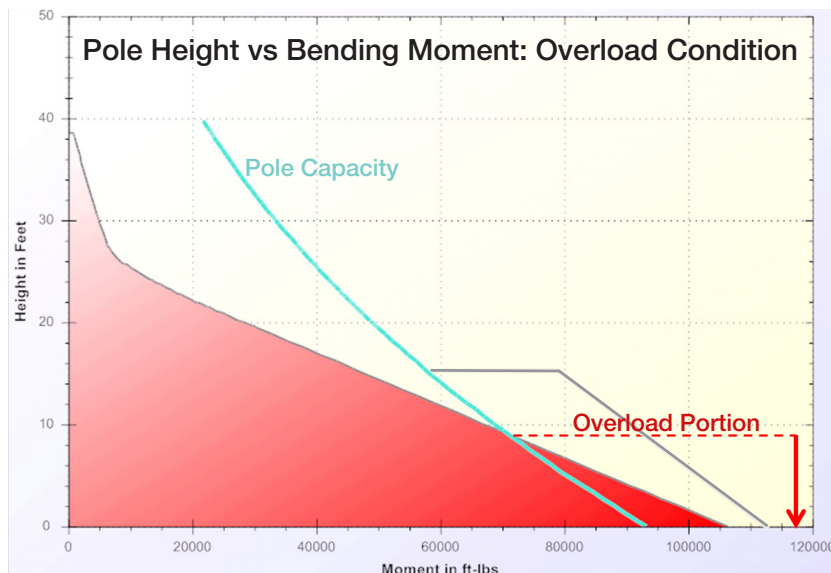


## OSMO-ET-TRUSS FEATURES & ACCESSORIES

The ET-Truss is hot-dip galvanized for corrosion resistance. When installed it looks very similar to a typical riser seen on utility poles around the country. While the appearance of the ET-Truss has been widely accepted, it can be specially finished to meet specific aesthetic needs or requirements. Truss accessories such as ladder clips and steps can be added to any installation.

### ENGINEERED FOR SAFETY & RELIABILITY

- **Constructed to exceed NESC strength requirements**
  - Formed from 80,000 psi yield steel
- **Hot-dip galvanized to ensure long-term corrosion protection**
- **Banding is the strongest in the industry at 138,000 psi tensile strength** (minimum)
- **Maintains positive contact with the pole butt below ground, helping transfer loads during bending**
- **Wood poles should be remedially treated to effectively control decay**



## SYSTEM HARDENING WITH THE OSMO-ET-TRUSS

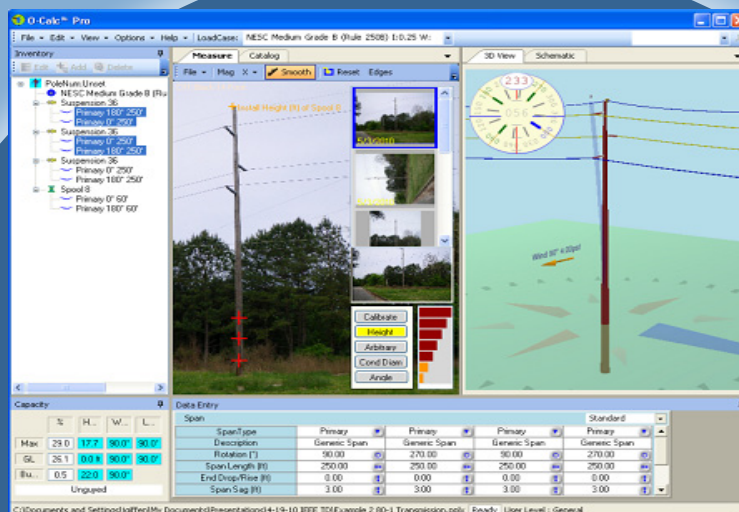
The Osmo-ET-Truss allows you to upgrade the capacity of a large number of poles quickly and cost effectively. Entire lines can be upgraded without service interruption, making the ET-Truss the ideal solution for structural hardening.

Osmose provides turnkey pole upgrading services with **no division of responsibility**. Each year, Osmose technicians evaluate millions of poles and successfully upgrade thousands of those poles. As both the product designer and the service provider, we can take full responsibility for ensuring poles are upgraded properly and that owners receive the highest possible return on their investment.

# O-Calc<sup>Pro</sup>

## Pole Analysis Software

O-Calc Pro, an industry-leading pole analysis software, features Digital Measurement Technology™, a state-of-the-art feature that allows users to extract accurate measurements from digital photos. The drag-and-drop interface and advanced calculation tools make O-Calc Pro a highly accurate and productive application for performing comprehensive pole loading analyses. These analyses are used to help determine the required strength, length, and stiffness of the Osmo-ET-Truss required.





# Osmose®

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