The Advantage of Elevated Engineering

PyraMAX features are conducive to environmental conditions and in comparison with standard structures, deliver the leverage you need to achieve your cost-containment goals.

- Reduces labor intensity with fewer connections than lattice.
- Mitigates material costs through environmentally friendly, smaller-scale foundations using less concrete, smaller equipment and shallower depths than traditional tubular construction.
- Full structural testing is not required for new designs unlike the full-scale testing that lattice requires.
- Flexible design allows for multiple design families to be generated, accelerating the speed of production.
- Small member sizes and flexible designs are ideal for difficult terrain.

MAXIMIZE STRUCTURE CAPACITY THROUGH DESIGN FLEXIBILITY

PyraMAX®, a new family of scalable structures engineered by Valmont® Utility, is designed to deliver cost savings for projects requiring lattice, large spans, transposition, dead-end and crossing structures. As a new alternative to standard structures, PyraMAX achieves optimal results through structural integrity, scalable loads and substantial savings.

FORMIDABLE STRENGTH

- Vertical, longitudinal and transverse loads create moment in the structure
- Battered legs and proper connections convert the moment into axial load
- Foundations are smaller because the forces travel with the axis of the leg (parallel)

©Valmont Industries, Inc. CU 019 1217
THE NEW ALTERNATIVE

Where PyraMAX Fits Best

LATTICE ALTERNATIVE
One-third the construction cost
- No structural testing required
- Implement where terrain presents challenges (lightweight sections, helicopter lift capable, uneven terrain, multiple foundation types – cages, grillages, micro piles, caissons)
- Reduce time to market on new designs

LONG SPAN / CROSSING STRUCTURES
- Scalable - from 100ft AGH to 500ft+ AGH, single circuit to 6+ circuits, 66KV to 1000+KV
- Significantly reduced foundation sizes
- Capable of FAA “Candy Stripe” painting and lighting for tall structures

FINISHING
- Galvanized, Dull, Darkened
- Corten steel (weathering)
- Aesthetic paint

A FOUNDATION COST ANALYSIS

Converting moment to axial load

CHALLENGE
Two (2) structures needed for a Floodplain/River Crossing
- Double circuit 345kV
- 190’ tall
- 1,575’ span length

THREE (3) DESIGN OPTIONS OFFERED

2 MONOPOLE STRUCTURE
Requires 240 yards of concrete for the foundation
$345,000 Installation Costs (each)
$1,100/yard (Concrete) x 240 yards + $81,000 Construction Labor

LATTICE TOWERS
Requires 33.5 yards of concrete for the foundation
$320,350 Installation Costs (each)
$1,100/yard (Concrete) x 33.5 yards + $283,500 Construction Labor

PYRAMAX STRUCTURE
Requires 33.5 yards of concrete for the foundation
$122,850 Installation Costs (each)
$1,100/yard (Concrete) x 33.5 yards + $86,000 Construction Labor

Total install cost reduction of $222,150

Project savings: More than $395,000!

©2017 Valmont Industries, Inc. All rights reserved. Valmont Utility has a policy of continuous product improvement and development. As a result, certain changes in standard equipment, options, price, etc. may have occurred after the publication of this brochure. Some photographs and specifications may not be identical to current production. Valmont Utility reserves the right to change product design and specifications at any time without incurring obligations.