



An Ordinary RFP Leads to an Unexpected Proposal & Staggering Savings

After years of corrosion from sea salt, a Florida-based industrial plant issued an RFP to have its degraded carbon steel pipe and cable tray support structure sandblasted and recoated. The structure ran approximately 400 feet, with several changes in elevation and direction, and incorporated many different sizes of pipe, conduit and stainless steel electrical cable trays. It was extremely corroded having suffered from delamination.

Our engineers clearly understood the problem, and they had an innovative solution in mind. Rather than sandblast, repair and recoat the existing structure, Engineered Rigging submitted a proposal to replace it with laser-welded 316L stainless steel. Every detail in our proposal emphasized corrosion prevention (even the fasteners were a high-strength stainless steel), while maintaining the strength of the original structure.

Our value-added solution initially saved the client \$2M in repair costs, and during the next 20 years, the client is projected to save another \$1.5M in future coating costs. Given that 316L stainless steel is one of the most corrosion-resistant materials available, a new finish or coating will never be needed, and rusting will be minimal.

BEFORE



AFTER



Needless to say, Engineered Rigging was awarded the project. For this turnkey effort, we provided:

- 3-D "as-built" model that incorporated all changes the plant wanted to make to the existing structure as well as all fabrication drawings based on the 3-D model.
- All labor and equipment to repair a 350-foot security catwalk. We removed all existing grating, sandblasted the structure, performed structural steel weld repairs and

replacements, metallized and epoxy coated the entire structure and installed new grating.

- All engineering, labor and equipment to replace the pipe and cable tray support structure: Laser scanned the existing structure; created fabrication drawings for all beams, columns and braces; fabricated all 316L members; replaced all existing degraded carbon steel with 316L stainless sections utilizing temporary shoring supports; replaced all existing base plates and anchor bolts; completed all associated core drilling; and replaced all pipe with 316L stainless steel pipes on multiple lines.
- The design, installation and utilization of a cart-mounted articulating boom crane on the adjacent security catwalk for rigging operations associated with the support structure replacement.

The plant now has a structure that will last just as long, if not longer, than the plant itself.

