FIBERGLASS CONDUIT PROVIDES COST EFFECTIVENESS FOR PREFABRICATED MODULAR ELECTRICAL ROOMS IN A PHARMACEUTICAL PROJECT

In building a new manufacturing facility, a large pharmaceutical producer in the Southeast launched a complex construction project requiring prefabricated modular electrical rooms. The modular electrical rooms were loaded with precise specifications due to their size and mobility requirements. Fiberglass conduit offered an opportunity for savings and speed.

Challenge

The ability to fabricate modular electrical rooms to a unique specification and ship anywhere in the U.S. while meeting shipping size constraints presents two issues: size of the module and shipping weights.

In addition, engineers and contractors don't always have the benefit of full picture for pricing. For example, local commodity reports used as a guide for pricing can exclude materials such as fiberglass conduit. As a result, some project managers, electrical contractors and engineers are unfamiliar with it.

Solution

For this project, a savvy contractor had the foresight to research and recommend fiberglass conduit. Fiberglass conduit offered the following engineering benefits: lower weights for installation, lower coefficient of friction and higher tensile strength.

With lower weights for installation, less structural steel, hangers and installation time were required. Lower coefficient of friction resulted in lower pulling tensions, less stress on conductors and less installation time. Higher tensile strength provided heat resistance, no burn-through in 90-degree bends, a cheaper solution to the use of GRC elbows, and less re-work resulting in less installation time.

Results

Champion Fiberglass electrical conduit was 90% less than galvanized rigid conduit at the 4" size, a massive cost-saving opportunity for the customer. Plus, fewer hangers and other parts were needed, providing additional project savings. The lightweight nature of fiberglass conduit helped save shipping costs for the conduit duct banks within the prefabricated modules. This contributed to installation savings for the project.

Additionally, the Champion Fiberglass team provided hours of guidance and expertise in partnering with the contractor to develop a customized solution that saved a lot of time and money for the pharmaceutical company. This is just one of many ways Champion Fiberglass team and products Do More to help customers reach successful project outcomes.

FIND A REP

QUICK FACTS

PROJECT NAME
Pharmaceutical Project

APPLICATION
Industrial/Commercial

CHAMPION FIBERGLASS PRODUCT(S)
Champion Duct®

- Project challenges included size of the modules and shipping weights.
- Fiberglass conduit resulted in the following engineering benefits: lower weights for installation, lower coefficient of friction, and higher tensile strength.
- Fiberglass conduit was successful in saving the pharmaceutical customer thousands of dollars in product, shipping and installation costs while supplying an electrical conduit offering longevity for years to come.

6400 Spring Stuebner Rd, Spring, TX 77389 Main: 281.655.8900 Fax: 281.257.2523
CHAMPIONFIBERGLASS.COM