LM Wind Power - NFPA33 Code Compliance



Grand Forks, North Dakota

Electrical Construction: \$904,000

Year Completed: 2011

Project Manager: Vern Thingvold **Project Foreman:** Rudy Luczak

LM Wind Power is the world's leading supplier of blades for wind turbines and has factories in Europe and Asia, as well as its North American facility, located in Grand Forks, North Dakota.

A change in the Electrical Code forced the company to rewire the area where workers spray the molds for the turbine blades in its Grand Forks facility. Bergstrom Electric, who had completed the initial electrical construction on the original building, was hired to complete the project.

The area in question was 110,000 square feet. The new code considered all paint booths hazardous areas and required all conduit to be removed - at least 20 feet out of the zone. Bergstrom removed all existing conduit, replaced it with some EMT (Electrical Metalic Tubing) and mostly GRC (Galvanized Rigid Conduit), and ran most of the conduit at a higher elevation to be out of the hazardous zone. In addition, crews cut up the flooring and ran power underneath to 44 new pedestals that had receptacles on them. This prevented tripping hazards for LM employees. Bergstrom brought in Lunseth Plumbing and Heating and ICS Construction to assist with the construction work necessary.

The largest obstacle for Bergstrom crews was working while the plant was fully operational. Crews started at 24 hour shifts, but eventually went to long day shifts. As safety was a large concern for everyone involved, Bergstrom technicians had special safety training before being allowed onsite and wore masks while working in the spray area.

The project took over 8,200 man-hours and was complete in January of 2011 at a total cost of \$904,000.

