



## Sem Materials Improves Quality and Efficiency Through Automation

### SITUATION

SemMaterials is a provider of asphalt emulsions in Boise, Idaho. Prior to improvements done by Enterprise Electric, SemMaterials relied on its operators to manually mix material into the multiple products offered by the company and to quantify tank levels simply by looking at them at its extensive tank farm in Southeast Boise.

### CHALLENGE

The manual method resulted in inconsistencies in product as well as great potential for error in filling of tanks and billing material. Recognizing these problems, SemMaterials looked for a solution.

### SOLUTION

The solution uses laser sensors to determine the exact level of product in

each tank and report this information immediately and continuously to a central system.

Automated valves mix the required product quickly and efficiently. The installation of this system would require 3,500 feet of data cable secured within rigid conduit.

SemMaterials contracted Enterprise Electric for the project. Enterprise Electric is an electrical contractor with extensive experience in rigid conduit installations and the ability to meet SemMaterials' high safety standards. Larry Wearin, a journeyman electrician with Enterprise Electric, assisted in the design of the new system and suggested changes to the design to enable future expansion of the project.

### RESULTS

The automation project was completed safely, on

time, and within budget.

Tim Folwell of SemMaterials notes that Enterprise Electric did an excellent job and that the assigned electrician's knowledge and ingenuity greatly added to the efficiency and value of the completed system.

### BENEFITS

**The project resulted in a 500% reduction in wasted material—from more than 10% to less than 2%.**

Now, formulas for each product are kept in the system and automated flow controls mix the emulsion with a very high degree of accuracy. Levels of material are recorded ten times per second and can later be used to verify the accuracy of specific batches. Further, record keeping is automated and documentation can easily be supplied to customers.