



## Case Study - Manufacturing

### Company

United Copper Industries

### Industry

Manufacturing

### Website

<http://www.unitedcopper.com/>

### Challenge

United Copper needed a centralized and unified way to operate, monitor, and analyze each of their production lines in order to improve performance.

### Solution

FactoryStudio from Tatsoft was chosen because the client was looking for an affordable solution that could connect easily to existing plant PLCs, as well provide easy connectivity to SQL databases to allow integration to existing Quality Department data sources.

FactoryStudio enabled the creation of a Data Acquisition and Reporting and Analytics layer on top of the existing legacy systems and operator interfaces.

### Results

FactoryStudio reduced the engineering time, and the product's features helped keep the project organized and limited clutter throughout the project.

*“Automated reports including production, downtime, OEE, Alarm and more will help uncover areas of the lines where improvements need to be made.”*

**- Fred, Project Manager**

### How to improve performance?

One of United Copper's main processes consists of several different OEM production lines which extrude various gauges of 600 volt building wire, which is used in both residential and commercial construction. United Copper needed a way to operate, monitor, and analyze each of their production lines to improve performance.

### Why FactoryStudio?

United Copper chose FactoryStudio in part because of its mobile client connectivity tools, in addition to its ability to connect to existing plant PLCs and SQL databases, such as United's Quality department's SQL data sources.





The first major project delivered a data acquisition and reporting/analytics layer on top of the legacy systems being used for the operator interface. The following project is to also use FactoryStudio at the production-line operator level.

One of Tatsoft's system integrators, Wunderlich-Malec, assisted with this project. Wunderlich-Malec is an experienced integration company that has been providing customers with engineering, system integration, and fabrication solutions for more than 30 years.

### Technical Aspects

Many of FactoryStudio's abilities were utilized for this project. In addition to creating an interface for the production lines, production data was logged in custom SQL tables. This production data was then easily accessible through FactoryStudio's built-in query tools and reports.

In addition, all setpoint changes are now archived to a custom audit table, and includes valuable information such as the operator name, client node, previous and current setpoint values.

QR codes were also used to help enable a mobility solution. Each device (drive, motor, control loop) was assigned a QR code that can be scanned via an iPad or iPhone. Using that QR code a SQL query both selects the correct display to use for the device chosen, and populates it with the correct device tags - providing a powerful real-time display anywhere in the plant.



### About the Integrator

*"Wunderlich-Malec has been terrific to work with on this project. We appreciate their expertise and ability to stay on top of newer technologies to provide longevity, stability, and reliability to our systems."*

- Fred, Project Manager

### The project

The FactoryStudio project took approx. **11 weeks** and contains approx. 10,000 tags. When integration is fully completed the system will have approx. **30,000 Tags**.

