Client: Midwest-based Steel Manufacturer
Project: RFID Solution for Steel Coil Tracking

Tracking and Inventory Control Using RFID

Our Challenge

A Midwestern, fully integrated steelmaking facility operated two blast furnaces with the capacity to produce almost 5 million net tons of raw steel each year. A highly productive mill, its output included hot- and cold-rolled coils as well as hot-dip galvanized products.

The facility used numerous work-in-process label applications in areas such as Green Coil, Pickle Line, and the Finished Goods and Inventory areas. However, in such a large facility with numerous products, permanent and removable labels were being used depending on the process and the product. This led to inventory tracking challenges, as well as problems in the shipping department.

Managers at the facility reached out to GO2 Partners for a solution that would help them find and verify coils across the facility quickly.

Our Solution

GO2 determined that RFID labels and tracking systems would provide the efficiency and ease of use the mill needed. The manufacturer needed to label all inventory at the end of each process, which meant that it needed a solution that would also work at various temperatures.

The team at GO2 researched and tested various label face stocks and adhesive combinations to find one that would work in extreme temperatures, up to 400° F (204° C), which the manufacturer identified as its required range.

To increase efficiency and automate tracking, RFID readers were also placed around the facility — on cranes, portals and storage bays. This would allow almost constant tracking control with limited, if any, gaps in visibility.

With an RFID label face stock and adhesive identified, and the RFID systems in place, the team implemented the solution at the facility.

Our Results

Today, the mill has accurate inventory control and can locate and verify coils much quicker. Tracking inventory is also more efficient, with much of the work done by automation. In addition, shipping has more control and few errors, with the RFID tracking inventory up until the point it leaves the facility.