CLOUDLEAF

CASE STUDY

Steel manufacturer needs better visibility on transportation of molten metal to reduce dwell times, which can create excessive material waste.

Challenge

Increase visibility into material condition and asset movement in the time-sensitive manuafacturing process to reduce loss and enable precise planning.

Solution

Monitor and track the cart location and movement and send an alert when approaching dwell time threshold. This automated an existing manual process.

Results

Achieved 90% improvement in production scheduling and **$10-$20M in annual savings** due to material loss of hardened liquid iron.

Critical Tracking Points

The Foundry

Moving molten metal from foundry to stamping facility (intra-plant move) in rail cars/torpedo carts. The carts move slowly and there is a need to know when they leave the foundry so that they can plan accordingly at the plant.

The Factory

The company wants to manage dwell time so that they can monitor the condition of molten metal, which goes bad if it stays out too long. Metal hardens and becomes a total loss for both the metal and the cart it is in.

Summary Of Tracking Needs:

Cart movement to predict the location of molten metal and track dwell times to reduce material waste and increase productivity.

Cloudleaf Solution

Sensors provide the ability to track the location of the carts for better production planning. An alert is sent if molten metal has dwelled for too long. The result has been 90% improvements in production scheduling and $10-$20M in annual savings due to material loss of hardened liquid iron.