



JFE Steel

Safety improvement during roll change operation

Safety

Challenge

Roll changes on the looper had to be done manually because the looper is positioned under the pickling tank, while the crane is above the tank. As the space was narrow and poorly lit, the work was both dangerous and inefficient.

Action

To improve the operation, JFE developed a carriage for use during the roll change. The carriage can be easily assembled and disassembled at the deck of the pickling tank.

The new roll-change equipment



Outcome

The installation of the new roll changing equipment has led to significant safety and efficiency improvements including:

- Roll balancing and dangerous manual operations have been eradicated.
- The removal of these dangers has changed the risk level for this operation from level 3 to level 1.
- The time taken to change all five rolls on the looper dropped from six hours to two hours and forty minutes.