Case Study:

Cold Rolling Mill

Quad Plus®

Cold rolling mill needed an update to existing single-point measurement system.

Objective

- Replace outdated single-point measurement system.

Solutions

- The Quad Plus Gauging Team provided the customer with a full-sheet scanning triangulation laser system and then incorporated it into their existing control system to implement an automatic gauge control.

Results/Benefits

- The new scanning system allows for thickness measurements across a full sheet rather than a single point for more accuracy and control.
- By integrating into the customer's existing control system, we were then able to implement automatic gauge control that will adjust the machine automatically and complete the process more quickly.
- Greater accuracy and control produce a flatter product with tighter tolerances more consistently.
- The new system relies less on a human operator for faster, more reliable production results.
- By operating more quickly, reliably, and to tighter tolerances, the customer will enjoy significant cost savings over time.

Background

The Quad Plus Gauging Team received a call from a cold rolling mill customer experiencing problems with their single point scanning system. Along with limited capabilities, the existing scanner was slow to update. The old system also did not offer any automatic controls and instead relied on operator interaction to control the profile of the product.

Quad Plus Solution

The first part of the solution was to provide the customers with a full-sheet scanning triangulation laser system. The new system will allow a thickness measurement across the full sheet and with faster update times. The second part of our solution was to integrate the new scanning system into their existing control system. This allowed us to implement an automatic gauge control that would adjust the machine automatically to create a superior product, and to complete the process faster than a manual operator could.

The final result was a revamped system that produces a flatter product with tighter tolerances delivered more consistently. Along with reducing production costs with better controls, the new system is less reliant on a human operator which allows for more efficient operations.