CASE STUDY

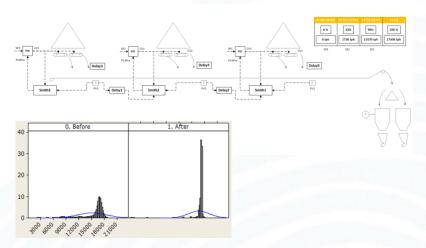
Our Goal:

To automate apron feeders speed control in order to maintain rate over train load out conveyor.

Consolidate roles for TLO operation as current operation required a dedicated operator to manually operate the rate into TLO conveyor.

Our Solution:

A Feedback control strategy was design, approved and implemented within a 5 day period.



Unlocked Potential:

The goal increase rate control was achieved increasing plant performance.

Operator could dedicate his attention to other important tasks. Reduction of Standard Deviation in 3.8% and increase in rate of close to 1430 TPH.



Cimplicity & GE PLC's



Wilson Florez Co-founder & Director

Key Insight:

"The control on the apron feeders was not a simple automation. It was also taken to the next step by the use of Smith predictors (an advanced process control strategy to eliminate dead time).

Principal Process Control Engineer

The use of various smith predictions along the conveyor allowed to reduce variability even further."

<u>Identify Opportunities</u> Identify an opportunity to

improve the throughput, though removing manual interaction

<u>Implement</u>

Execute by implementing code in PLC & SCADA

Communicate

Communicate benefits & solution to stake holders

Propose Solution

Propose Solution / seek approval with stake holders. Incl. engagement with TLO supervisors and operators

Measure

Test Logic & understand data to get results/represent solutions