

# Process Control Optimisation Assessment and Execution

key

## CASE STUDY

### Our Goal:

To assess and provide support in the process control and operational improvement space.  
By helping to understand and alleviate the Reject Ore Surge issue, that was limiting plant infeed rate for almost a year.

Apart from analysing and resolving the rejects surges, the senior engineer was also in charge of,

- Generating a work list of automation opportunities,
- Implementation of any approved recommendations,
- Coaching and on the job training of control room operators &
- Documentation of implemented improvements.

### Our Solution:

We produced an analysis of current constraints, understanding performance operating challenges. As well as making some specific changes in the control system to improve the way rejects protection was functioning.

We implemented and tested a rejects PID loop that once connected to the plant's existing constraint control and steadily reduced infeed rate when high rejects are detected.

As part of the solution presented to alleviate the rejects issues we also implemented and tested a new scrubbing control philosophy to control the water to feed ratio into the scrubber.

### Unlocked Potential:

Measurable benefits include the amount of reject surges were reduced to almost zero from October 2017 to present

In addition to solving the rejects issue, we investigated the plant's major process control philosophies to understand how they could improve.

Summarising a series of potential improvement opportunities to be considered by our customer.



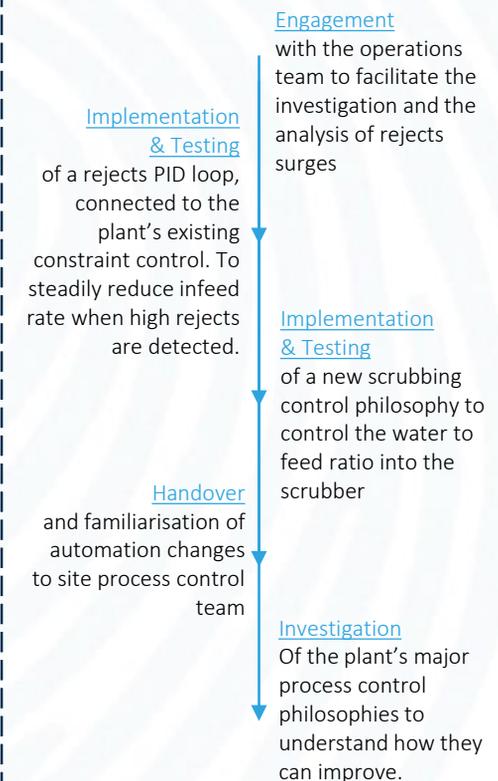
### Wilson Florez

Co-founder / Director  
Senior Control Systems Engineer

#### Key Insight:

*"As usual, what I am most proud of is to have had the ability to add value to the bottom line, while helping to fix a persistent issue, by means of bringing new ideas and thinking outside the box."*

#### Project Process Milestones



### Key Success Factors

