

# ORE TRACKING SYSTEM

## CASE STUDY

key

### Our Goal:

To provide a new methodology for tracking ore based on feed rate rather than accumulative tonnage that will in return require less data conversion and therefore reduce system error.

The solution had to be simple, easy to maintain, and more effective to determine ore tracking through the process.

### Our Solution:

Like most of the existing ore tracking systems in the industry, ore tracking in our client's site was based on cumulative tonnage tracking on the conveyor belt.

As the result, the logic can be very lengthy as it has to handle a lot of data conversion, either when the material passed through each feed point, or when correction is applied from the weightometer, or when transiting from one source to another source with different tracking speed.

All these conversions can be avoided by tracking using a feed rate methodology rather than tonnages on the belt.

An initial trial was implemented on a few selected conveyors around site. The newly implemented logic is more compact with a reduction in 75% of coding when compared to the original and delivers on all requirements with high accuracy

### Unlocked Potential:

With the new ore tracking method, the code size has been reduced significantly which makes it simpler and easier to maintain and troubleshoot. This new system has now been used in production as part of the train loading auto feed control.

For a conveyor belt of 650m in length, the ore tracking system can go up to 98% accuracy with 50 segments division.



### Hanh Huynh

Senior Control Systems Engineer

#### Key Insight:

"You get a lot of self-satisfaction when you have got an idea, put it together and see it works"

### Key Success Factors

