



# LoaderMetrics™

## Mitigate production loss caused by tooth breakage.

LoaderMetrics uses artificial intelligence and rugged thermal imaging to provide accurate missing tooth detection for all loader types. Our proprietary lens cleaning system, which is deployed either remotely or by the operator, ensures accurate performance under the harshest environmental conditions. We build our hardware in Canada to meet or exceed military standards for temperature, shock, vibration, and dust.

*"The average crusher obstruction costs our operation about USD \$300K in production loss. Since installing LoaderMetrics, we have experienced zero crusher downtime."*

## Features



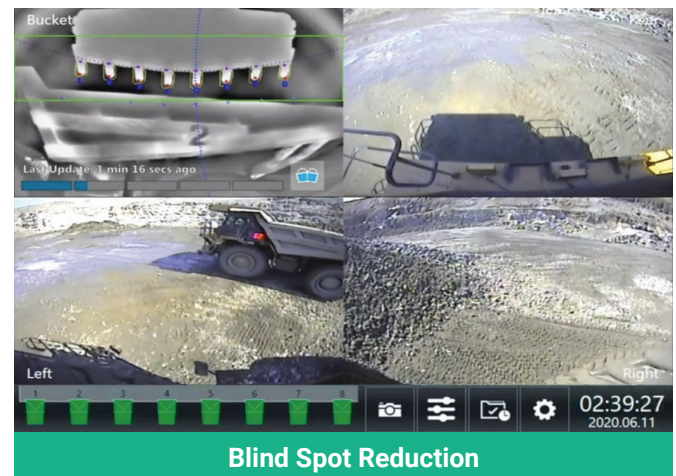
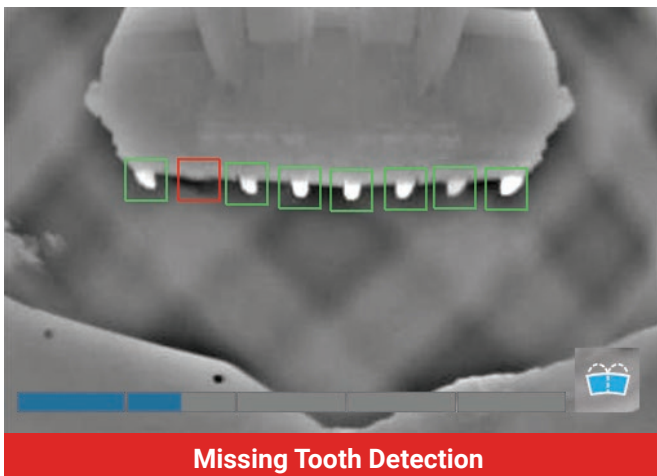
### Missing Tooth Detection

Prevent crusher obstructions and conveyor belt damage by monitoring loader teeth.



### Blind Spot Reduction

Prevent equipment collisions with real-time surveillance views.





## LoaderMetrics™

How LoaderMetrics helped a large copper mine **avoid an estimated production loss of approximately \$1.25M**

Like many hard rock mines, this South American copper producer experienced significant production loss from tooth breakage each year. Between 2012 and 2015, the mine attributed 153 hours of crusher downtime to obstructions - an average of 51 hours per year. To mitigate the impact from missing loader teeth, the site installed LoaderMetrics on two loaders. Since installation, the mine has experienced zero crusher downtime due to missing loader teeth and **avoided an estimated production loss of approximately \$1.25M because of the missing tooth detection system.**

The mine's crushers process an average of 5 kilotons per hour. If there is additional stock to provide operational support, an obstructed crusher may not immediately impact operational continuity. But, if plant operations must be halted, the cost to the mine is approximately USD \$25K per hour. Thus, the roughly 50 hours of yearly lost production due to crusher obstructions costs the mine \$1.25M. Over the course of a year, the system detected 12 missing loader teeth and the mine experienced zero crusher downtime – preventing the \$1.25M production loss that the mine otherwise experiences in an average year.

