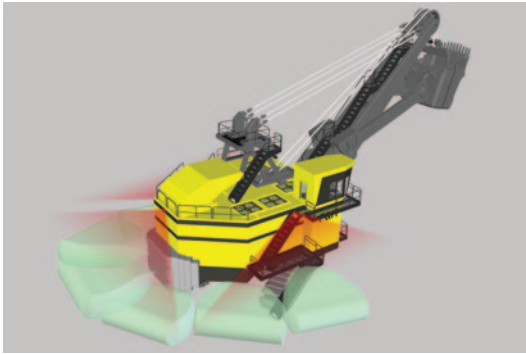


ViewMetrics™ & RadarMetrics™

A Radar and Camera Based Collision Avoidance System for Mining Equipment



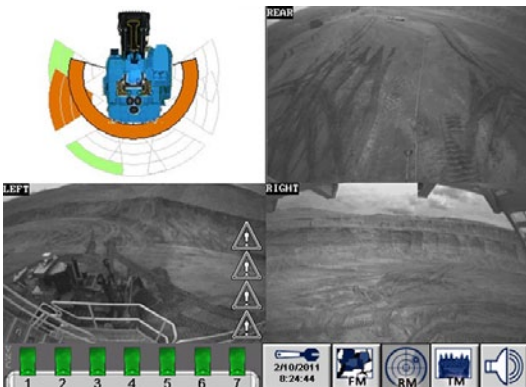
Full blind spot coverage



Prevent accidents caused by poor visibility



Integrated surveillance views



RadarMetrics™ graphical user interface

BLIND SPOT VISIBILITY

ViewMetrics™ provides the shovel operator with greater visibility around the shovel by providing up to four surveillance views. The system improves operation safety by displaying the left, right and rear surveillance views of the shovel on a high-resolution LCD monitor mounted inside the cab. Allowing the shovel operator to have a clear view of the area around the shovel prevents fatal accidents and costly equipment damage.

RUGGED COMPONENTS

The surveillance cameras provided with the ViewMetrics™ system have a wide horizontal viewing angle of 120 degrees to cover as much area as possible. The internal heater allows the cameras to operate in subzero environments and are built to withstand heavy shock and vibration. The cameras have been customized to use military specification connectors and are covered by an industry-leading, 5-year manufacturer's warranty.

INTELLIGENT RADAR PROXIMITY DETECTION

The RadarMetrics™ solution is an optional addition to the ViewMetrics™ system which offers the most advanced proximity detection system for mining shovels. By incorporating a series of radar sensors around the shovel to convey distance information, the patent pending technology intelligently accounts for the shovel swing action when alerting the operator. The proximity to obstacles around the shovel is correlated with the view of each surveillance camera to eliminate confusion and minimize distraction. This complete system enables the operator to be aware of dangerously close objects around the shovel at all times. The optional warning lights for RadarMetrics™ expands the effectiveness of the system by flashing a series of wide-angle, high-intensity LED lights installed around the shovel to alert nearby equipment and personnel if they are in the collision path of the shovel.

COMPLETE SHOVEL MONITORING SOLUTION

The ViewMetrics™ system shares a common base platform with the ToothMetrics™, WearMetrics™, and FragMetrics™ systems and can be combined together to provide a complete shovel monitoring solution at a reduced cost. The four solutions are integrated seamlessly into a single, intuitive graphical user interface.



ViewMetrics™ & RadarMetrics™ System

www.MotionMetrics.com

Advanced Monitoring Systems for Open-Pit Mining