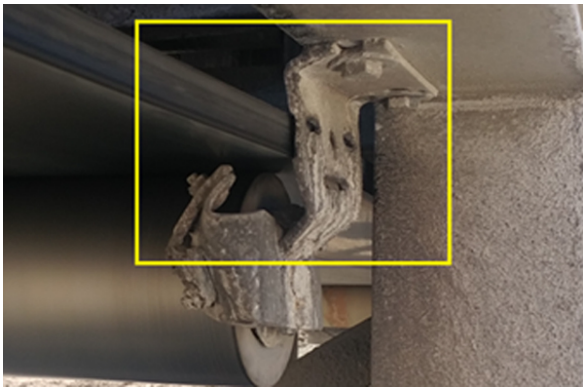
PROBLEM SOLVED™ PAPER

SOLUTION: Martin® Tracker HD

INDUSTRY: Gold Mining

LOCATION: Argonaut Gold, Minera Pitalla, Unidad La Colorada

Poor belt alignment caused significant spillage from the conveyor, forcing unscheduled shutdowns for cleaning.



The severe mistracking damaged the belt from rubbing against the frame and support structure.

Even with no other changes, the Martin Trackers reduced spillage by an estimated 80%.

PROBLEM

The conveyor feeding the crushing unit at Argonaut Gold's Minera Pitalla was experiencing serious belt alignment issues. The mistracking belt was rubbing against the return roller frame, causing damage to both the belt and the frame. The resulting spillage was clogging the receiving chute and decreasing the availability of the conveyor, as the sealing system was inadequate to the task of containing the load. Unscheduled shutdowns were necessary at least once a week to realign the belt manually and remove the fugitive material. Eventually, the belt damage became so severe that replacement was necessary, at a cost of approximately $55,000 USD.

SOLUTION

The company contacted Martin Engineering Mexico to help find a solution to the problem. Technicians performed a field inspection and system analysis using the company's Walk the Belt program, featuring a thorough review of the belt, cleaners, tracking, chutes, dust control and other components by experienced specialists with the training and expertise to maximize productivity and reduce downtime. The Martin team determined that the mistracking was a result of the varying conditions and loads on this conveyor, and they presented the company with a proposal to install a Martin Tracker HD on both the load-carrying side and the return path.

RESULT

Within just weeks of installing the tracking devices, the changes were readily apparent. The belt was tracking on-center, preventing contact with the conveyor structure. Spillage was reduced by an estimated 80% without making any other changes, and unscheduled shutdowns from fugitive material were eliminated. The Martin technicians are now working with the customer to implement a sealing system to improve containment to 95% or more. Operators are pleased with the solutions and have shown great interest in additional equipment to help optimize the material handling systems throughout the plant.

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