



# PROBLEM SOLVED™ PAPER

**SOLUTION:** Martin® Hurricane Air Cannon

**INDUSTRY:** Gold Mining

**LOCATION:** Guinea, West Africa

**TITLE:** Martin® Hurricane Air Cannons Boosted Gold Mine Efficiency in Guinea

## PROBLEM

A gold mine located in Guinea, West Africa, experienced severe material build-up in the feed hopper of the conveyor belt, especially during the rainy season. The high moisture content, in seasonally wet weather, caused severe material adhesion and poor flow. This resulted in frequent blockages and unsafe manual clean-up. The persistent build-up required excavators and manual intervention, increasing downtime and leading to structural damage and safety risks.



Moist material caused blockages and frequent downtime for clean-up

## SOLUTION

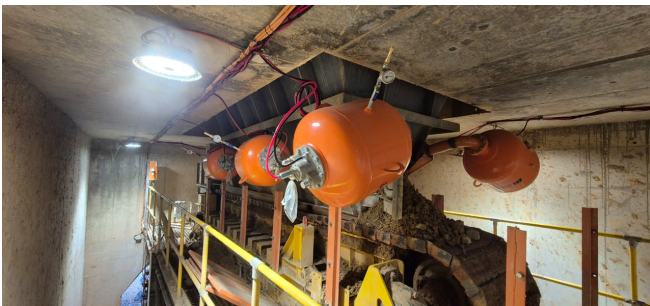
Martin's service technician together with our on-site partner team, conducted an inspection of the feed hopper and collaboratively devised a solution to address the issue, maximise cleaning efficiency and enhanced safety. Martin® Hurricane Air Cannons, renowned for their highly effective and compact design, were proposed to keep material moving. The Hurricane features a new valve concept that provides more force, uses less air, and simplifies installation and maintenance. In total, eight Martin® Hurricane Air Cannons with varying capacities (150L and 70L) were strategically installed on the feed hopper according to the plant's design.



Strategically installed Martin® Hurricane Air Cannons on the feed hopper

## RESULT

The in-plant team reported a noticeable decrease in material build-up, resulting in smoother material flow, less downtime, and greater production efficiency. Safety was also significantly improved by reducing potential hazards from manual cleaning activities, benefiting both the facility and its workforce. The company expressed strong satisfaction with the system's performance and appreciated the comprehensive technical support provided throughout the project.



Martin® Hurricane Air Cannons improved the flow of bulk materials

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