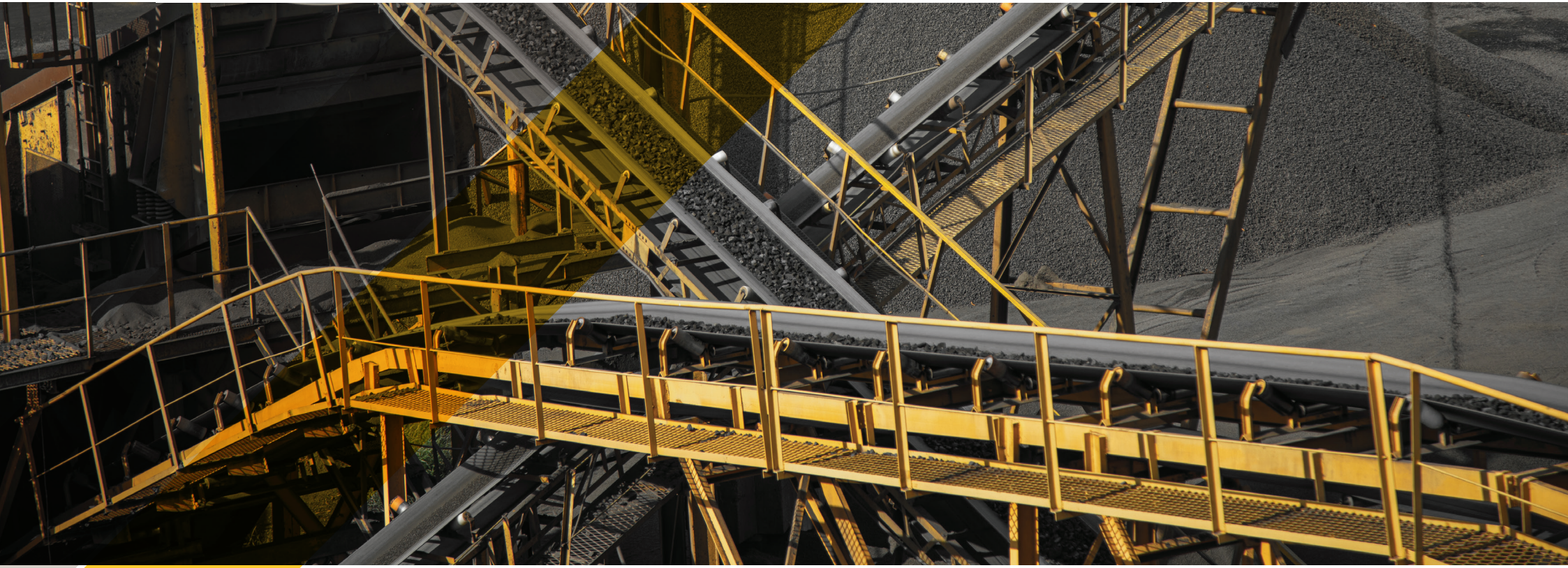
# Improve operational efficiency.



## Downtime prevention for mining from Axis

In mining, uptime is everything—if the equipment isn't working, you're not earning. Predictive maintenance technologies and strategies play a significant role in avoiding downtime for unscheduled repair and maintenance. But often, they rely on sensors and in-person confirmation of the situation after a full stop—an unplanned break that hits your margins from minute one, and exposes your people to potentially dangerous situations.

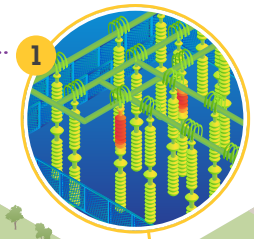
Axis solutions use machine learning and deep learning capabilities to provide you with high situational awareness and the possibility for visual confirmation of alarms—so you can avoid unnecessary shutdowns and catch potentially serious problems while they can still be handled safely and cost-effectively. From temperature alarm cameras and sensor-linked wear detection, to remote operations of dangerous mining processes and increased overall awareness, Axis can help you add a new dimension to your current process monitoring capabilities.

Axis solutions are also all based on the open-platform concept. That means they're easy to integrate with your existing network infrastructure and always ready for future capability upgrades. In most cases, your solution can be installed without needing to stop production.

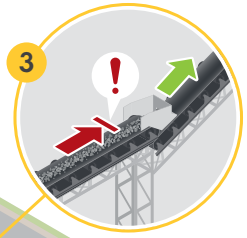
# Axis network solutions for mining.

AXIS COMMUNICATIONS

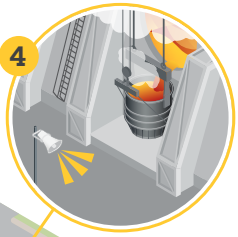
1 Monitor equipment temperatures. Track changes in equipment heat levels with temperature alarm cameras to use as indicator for predictive maintenance and prevent equipment failure.



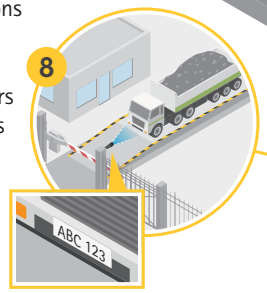
3 Visual confirmation of the nature of emergency alarms and their severity before sending staff into potentially hazardous areas or effecting costly unnecessary shutdowns.



4 Efficient operations with remote management of mining equipment in dangerous areas using cameras for visual presence. Audio for live or pre-recorded warnings about ongoing operations.



8 Lower raw material losses. Cameras in combination with software and weighbridge applications to help prevent skimming or identify anomalies when haulers move extracted masses from the mining areas.






2 Optimize predictive maintenance. Help avoid emergency stoppages and associated production downtime for repair with visual tracking and confirmation of deterioration, using cameras with edge integration to sensors embedded in equipment.



6 Document and support maintenance work. Follow up of maintenance work performed, both from a proof standpoint and educational purposes, with body worn cameras.

5 Smoke detection in equipment likely to overheat. Protect operations before minor problems become major incidents, using visual cameras with intelligent analytics.



7 Total situational awareness and greater coverage, with lower cost, power usage and less installation time, using multidirectional cameras.



**For more information, please visit:**
**www.axis.com/mining**