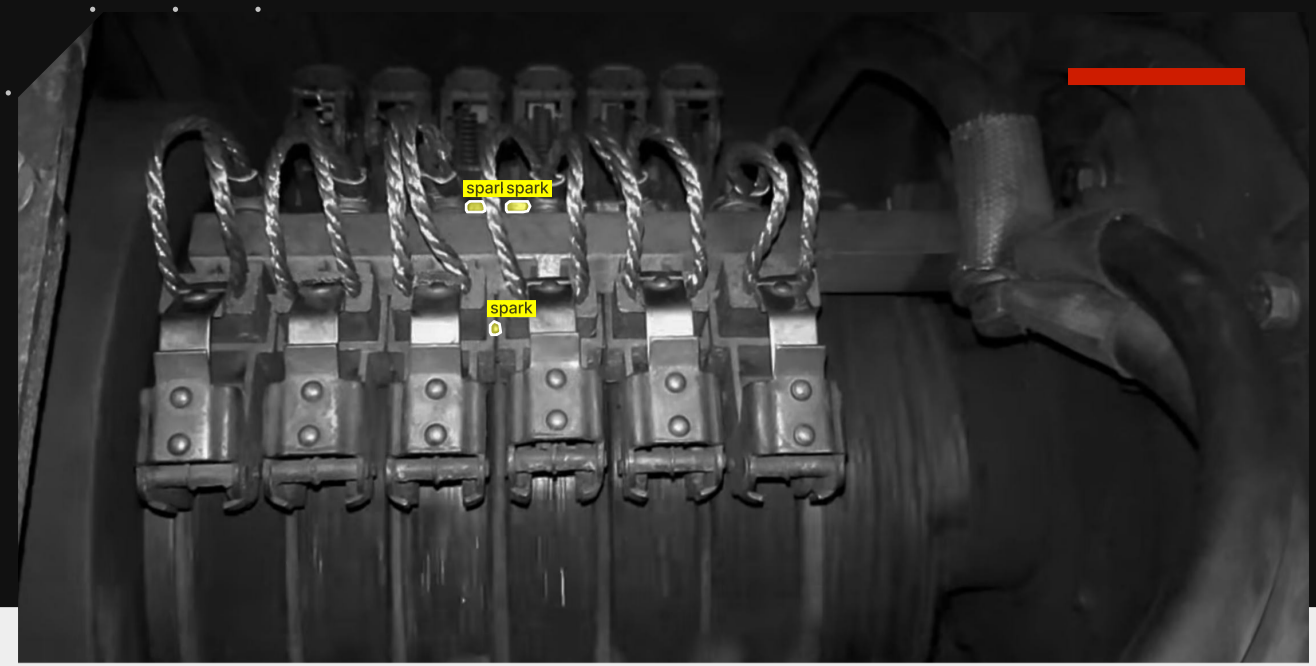




DC Motor Condition Monitoring through Automated Spark Detection AI



CHALLENGES

Hazardous Sparks and Production Loss

Large motor brushings require manual inspection, which is time-consuming and potentially dangerous for maintenance crews, as they must inspect the motors while operating. This manual process also necessitates running machines at lower-

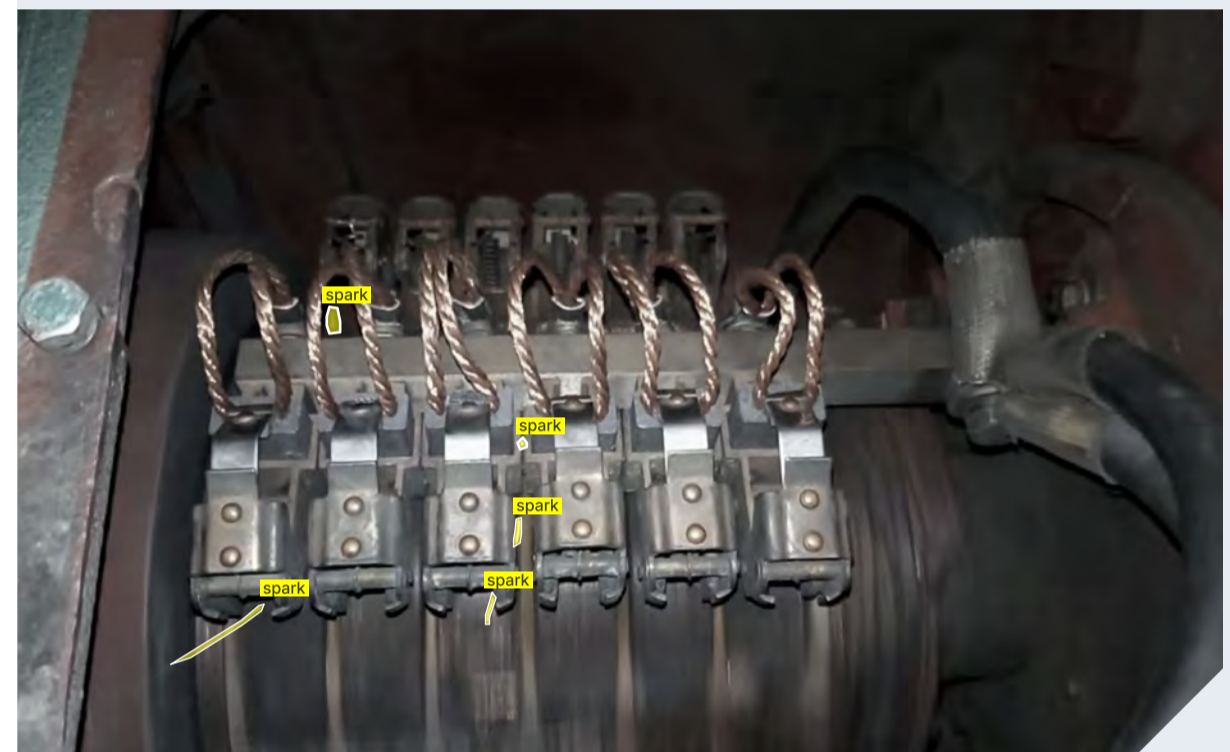
than-designed speeds, resulting in lost production.

Additionally, manual monitoring often fails to identify the root cause of sparks, making it challenging to optimize operating parameters and calibrate speeds effectively.

SOLUTIONS

Automated Monitoring and Analytics for Optimized Production

Unleash live's solution generates condition analytics through live image processing by installing a camera to monitor the motor brushings. Utilizing a Siemens IPC520A (Tensorbox) and our AI-driven live camera processing, we provide real-time data to indicate potential maintenance needs. This data is not just for reference but also serves as a basis for proactive maintenance. The system can predict when a brushing is likely to fail or require replacement, allowing operators to schedule maintenance activities in advance and minimize production disruptions. This feature enhances production efficiency and safety by ensuring that maintenance activities are carried out at the most opportune time, thereby reducing the risk of unexpected equipment failures and production downtime.



Unleash live's Spark Detection AI in action

BENEFITS



Continuous Monitoring

The system operates alongside the plant, detecting required parameters 24/7 without the need for shutdowns



Real-Time Information

Operators receive instant updates on the condition of motor brushings. This information is not just for reference but also serves as a basis for proactive maintenance. The system can predict when a brushing is likely to fail or require replacement, allowing operators to schedule maintenance activities in advance and minimize production disruptions



Enhanced Accuracy

Collaboration between Siemens and Unleash live delivers a more precise and comprehensive condition monitoring system.

FEATURES



Edge Solution

Easy onsite deployment for live monitoring.



Rich Analytics

Detailed analysis of spark characteristics to complement data from non-vision sensors.



Open APIs

Seamless integration into in-house predictive analytics systems for comprehensive insights.