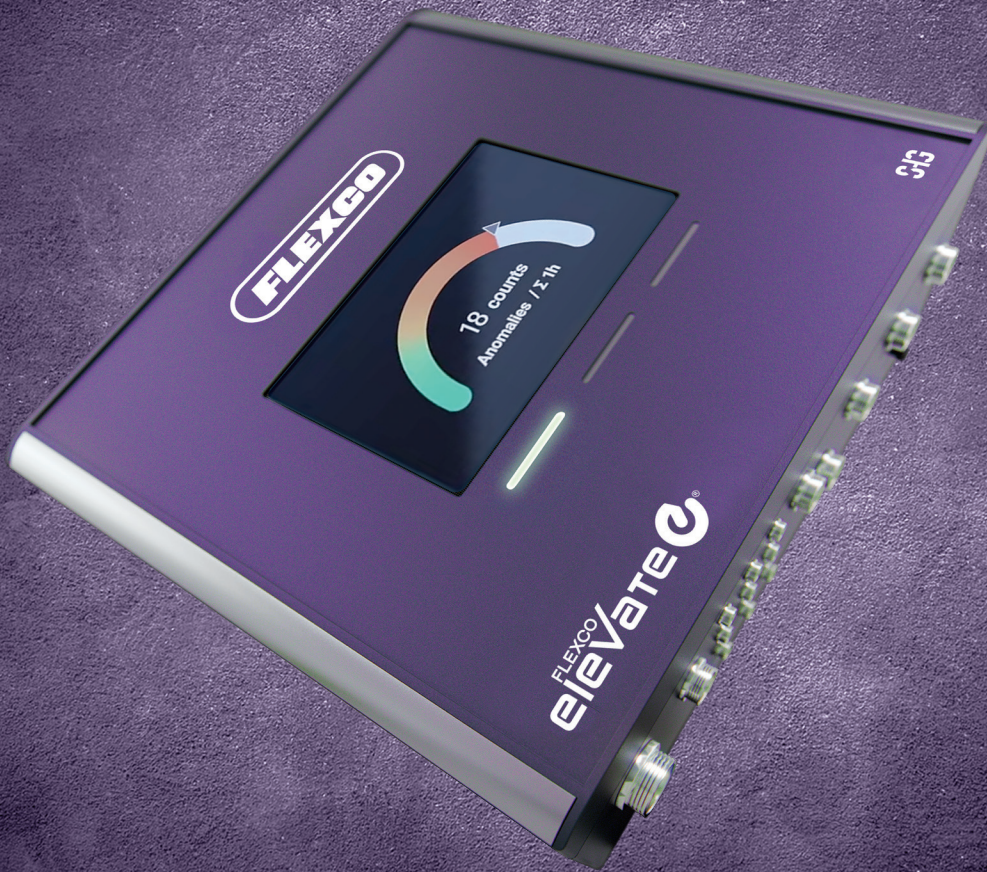




BELT RIP PREVENTION



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Predictive analytics provides a host of potential benefits to the mining industry. By using the data generated through mining operations alongside machine learning and AI, operators can predict equipment failures hours, or even months, in advance.

The mining industry is facing a growing array of challenges, from volatile markets and intensifying competition, to decarbonization and regulatory compliance.

Flexco is proud to support the mining industry with a first-of-its-kind platform to digitize conveyors in a cost-effective manner with an OPEX model or a CAPEX model. The Flexco Elevate® Belt Rip Prevention system utilizes an AI approach to produce groundbreaking technology that reduces sensor costs and makes digitization possible across the entire belt conveying process.

Flexco Elevate® helps to protect your investment, maximizes the efficiency of your conveyor line, and prevents workflow interruptions.

Through trust, transparency, innovation, and reliability, we continuously enhance and update Flexco Elevate® and its platform.

Data Analytics

Vast amounts of data are produced every day across modern mining operations. Much of this information is wasted—either unused or poorly leveraged to provide insights to mine operators.

With the right tools, this data has the potential to reduce unplanned downtime and enable predictive analytics solutions.

Flexco uses data from the conveyor line for its AI-based predictive model to detect the most critical failure for a conveyor belt: the rip event.

With mining operators facing a future of dwindling resources and the challenges presented by deeper mines, rising energy costs, infrastructure shortages, and skill gaps, there has never been more pressure to improve efficiency and cut costs.

A predictive maintenance approach can offer significant savings. According to Deloitte analysis, predictive maintenance can reduce maintenance planning time by 20–50% and overall costs by 5–10%. Flexco Elevate® accomplishes this by helping customers prevent unplanned shutdowns and optimize their conveyor lines.

Flexco remains committed to the development of solutions that limit unplanned conveyor shutdowns, increase energy efficiency, and reduce operating costs for customers—all through Elevate®'s detailed conveyor data analysis.



Flexco Elevate®

Belt Rip Prevention

The Flexco Elevate® Belt Rip Prevention system is an intelligent platform solution designed to protect and optimize conveyor systems. Featuring a wide range of innovative functions, it detects and prevents damage early, reduces downtime, and maximizes operational efficiency.

Flexco Elevate® analyzes data from the conveyor with an AI-based predictive model to deliver the following functions:

- › **Rip Detection & Rip Prevention**
- › **Anomaly Detection**
- › **Motor Monitoring**
- › **Energy Efficiency Analyzation**
- › **Electrical Network Monitoring**
- › **Mass Flow Calculation**
- › **Gearbox & Bearing Monitoring**
- › **Roller Monitoring**
- › **iScale Function**

Experience the next level of operational intelligence with Flexco Elevate®.

Our belt rip prevention platform seamlessly integrates a wide range of sensor data, empowering you to harness advanced analytics and implement proactive preventive maintenance strategies, all at a fraction of the cost of conventional competitor systems.

PLATFORM

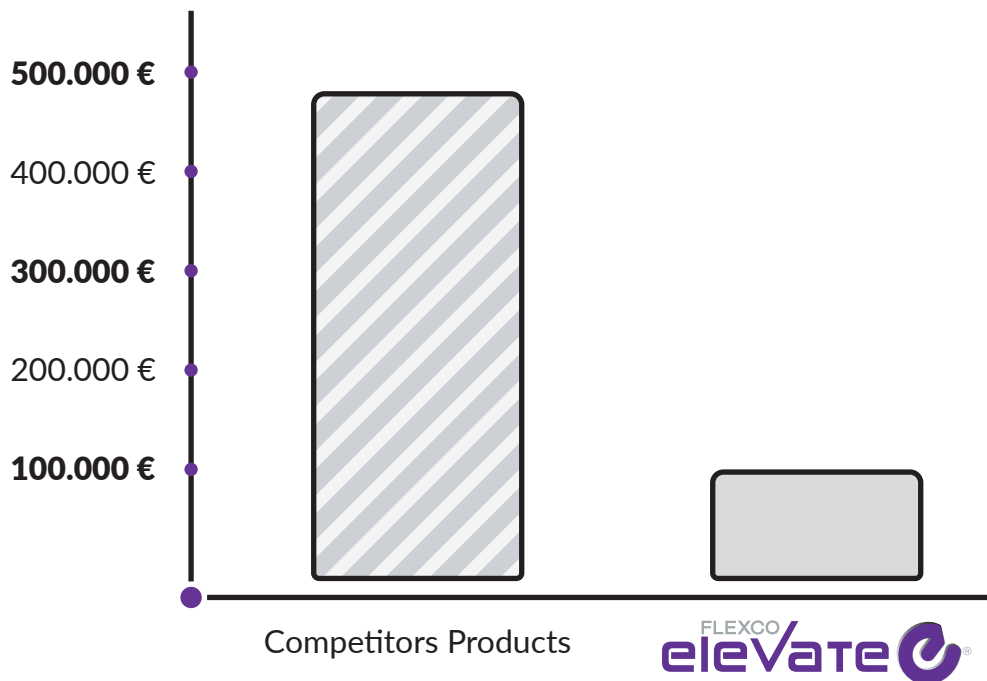
Flexco Elevate® is a single system that collects and correlates data from multiple sensors, transforming raw inputs into actionable insights. This holistic approach not only provides a comprehensive view of your operations, but also enhances your ability to detect anomalies early, optimize performance, and reduce downtime.

With Flexco Elevate® Belt Rip Prevention, you benefit from a data-driven environment where every piece of information is intelligently processed using AI to forecast potential issues before they become costly problems. Embrace the future of maintenance and operational excellence, and turn your sensor data into your most valuable asset.

Benefits

Beyond the initial purchase price, factors like operating expenses, maintenance, and wear parts all play a role in determining a system's true total cost of ownership. Flexco Elevate® Belt Rip Prevention offers a significant advantage over standalone systems that rely on expensive hardware and per-unit subscription fees, particularly when it comes to cloud-based applications.

Over a five-year period, Flexco Elevate® costs only 20% of competitor solutions. Due to wear components and subscription models, that gap is continuously growing.



With Flexco Elevate®, your sensitive data remains completely offline—a decisive advantage that protects against data leaking and hacker attacks. Unlike competitor solutions that send data to the cloud, Flexco Elevate® guarantees complete data sovereignty, offering your business unmatched security and control.



Rip Detection & Prevention

Experience the innovative rip detection and prevention of Flexco Elevate®, an advanced AI solution that identifies potential risks early and proactively prevents costly damage. Leveraging state-of-the-art sensor technology and intelligent data analytics, Flexco Elevate® ensures comprehensive monitoring that enhances operational safety while significantly reducing long-term maintenance expenses.

Discover how proactive prevention can future-proof while maximizing efficiency and peace of mind with Flexco Elevate®.

“The loopless rip detection system has drastically improved our operational efficiency. The real-time alerts and rapid response have prevented potential catastrophes, saving us both time and money. We highly recommend this technology for any mining operation. It has saved 3 rip events eliminating extensive downtime and material costs.”

GROUP MANAGER
NORTHERN STAR RESOURCES LTD

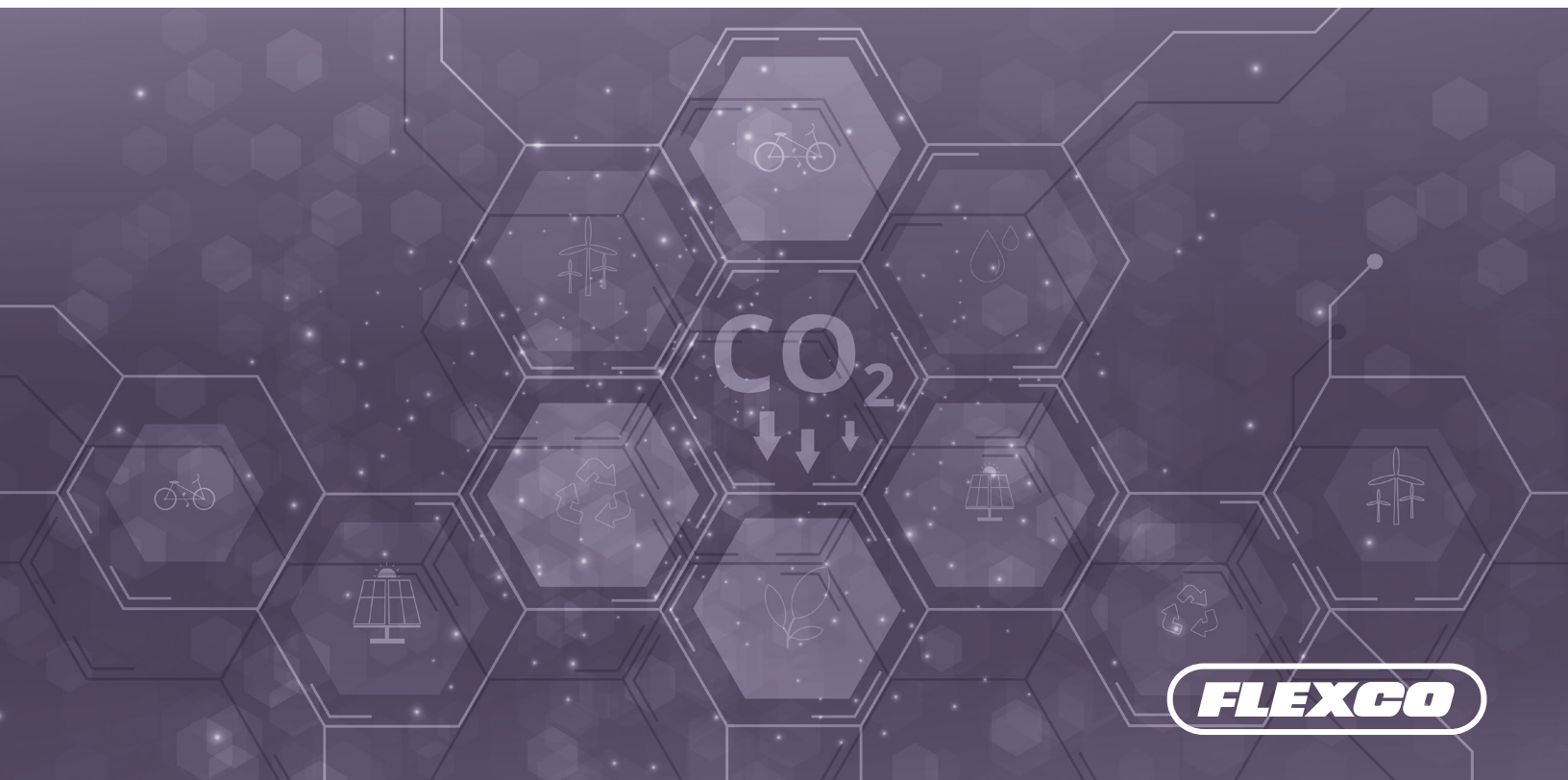
Drive Monitoring & Energy Efficiency

Drive Monitoring

Optimize your conveyor system's performance with our advanced motor monitoring solution, which continuously tracks key electrical parameters. This intelligent approach detects early signs of wear and potential issues, enabling timely maintenance interventions that reduce downtime and prevent costly failures. By ensuring your motor operates at peak efficiency, you safeguard the reliability and productivity of your entire facility.

Energy Efficiency

Maximize energy efficiency and reduce operational costs with Flexco Elevate®. Through frequent conveyor monitoring measures, our advanced solution optimizes energy consumption, significantly cutting costs and lowering CO2 emissions. Embrace a greener, more cost-effective future where sustainability meets high performance.





Mass Flow Calculation & iScale

Mass Flow Calculation

Experience unparalleled precision in mass flow calculation with Flexco Elevate®. Based on electrical analysis, our innovative technology operates without any wear components, ensuring robust performance even in challenging environments, all while its self-calibration machine learning feature continuously adjusts to deliver consistently-accurate measurements. This breakthrough solution not only optimizes process efficiency, but also drives cost savings and operational excellence.

“The system is easy to install at existing conveyors, without any modification and is handing over besides the rip detection other useful features such as the mass flow calculation.

The mass flow calculation is working since the commissioning with a deviation to a calibrated scale of <1% and does not require any calibration effort.”

MATTHIAS RAMSAUER
OPERATIONS MANAGER, SSK AUSTRIA

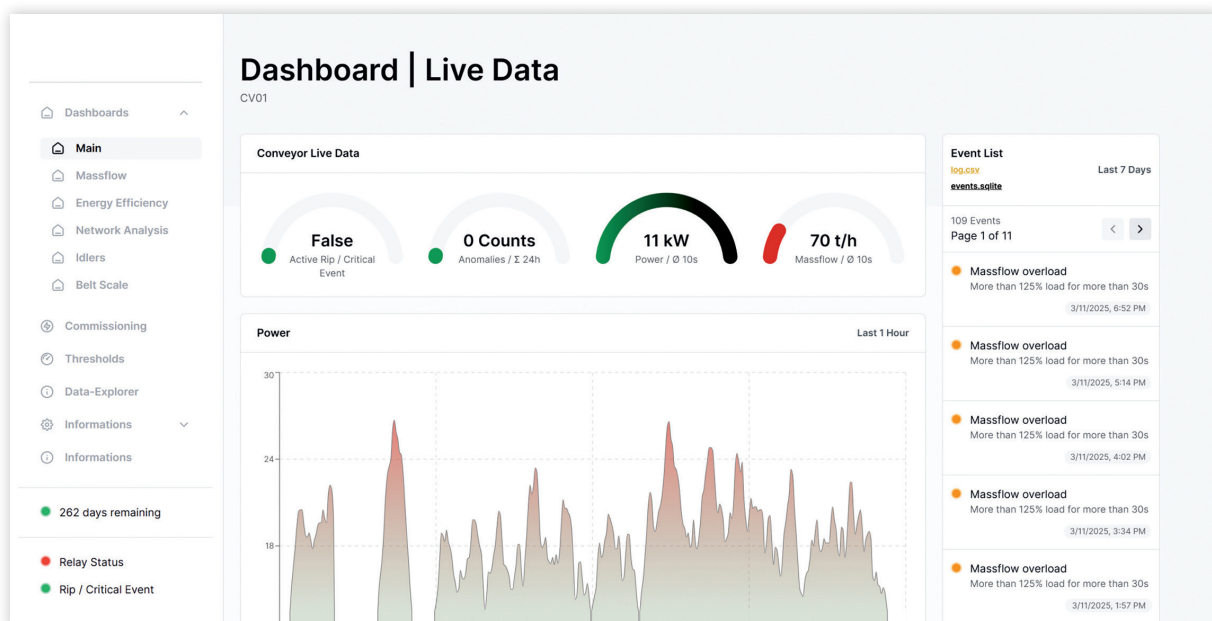
Electrical Network Analyzation

In today's industrial landscape, maintaining a stable and efficient electrical network is essential to safeguard your operations.

Harmonic overtones, often generated by non-linear loads, can disrupt power quality, leading to equipment malfunctions, increased energy costs, and potential downtime. Beyond harmonics, failures within the electrical network pose significant risks; such issues can result in catastrophic equipment damage, unscheduled production halts, and, in the worst-case scenario, fire hazards and serious safety incidents for personnel.

Our advanced electrical network analysis solution is designed to detect and mitigate these risks early, ensuring that your industrial systems operate at peak performance. By continuously monitoring your power supply, our system provides real-time insights into harmonic distortions, voltage fluctuations, and other anomalies, enabling you to take proactive measures to optimize energy consumption and protect your critical assets.

With intelligent data analytics and predictive maintenance capabilities, you can identify inefficiencies, implement effective maintenance strategies, and avoid the severe consequences of network failures. Embrace our cutting-edge solution to secure your power network, drive operational excellence, and ensure long-term cost savings while protecting your business from the potential hazards of electrical system failures.





Gearbox & Bearing Monitoring

In today's high-performance industrial environment, ensuring the reliability of critical components like gearboxes and rolling bearings is paramount. Our advanced vibration analysis solution continuously monitors these components, detecting early signs of wear and imbalance before they escalate into costly failures. By analyzing vibration patterns and identifying anomalies in real time, the system empowers you to perform proactive maintenance, significantly reducing downtime and extending the life of your equipment. This not only leads to substantial savings, but also enhances overall operational safety and efficiency. Embrace our cutting-edge technology to optimize your maintenance strategies and secure a competitive edge in your industry.



Our innovative 3-axis MEMS technology delivers precise measurements in axial, vertical, and horizontal directions—all from a single measuring position.



The ultra-durable stainless steel housing withstands even the toughest conditions, while built-in self-tests, an M12 connector, and a status LED ensure maintenance-free operation and ease of use.



Using data analytics for gearbox monitoring, imbalance and bearing analyses enables continuous monitoring of fatigue, friction, shocks, and surface temperatures.



With IO-Link integration into Flexco Elevate® and compliance with the ISO 20816-3 standard, limits can be easily adjusted to suit the machine type and power rating.

Roller Monitoring

In modern conveyor systems, monitoring rollers plays a crucial role in ensuring seamless operations and preventing unexpected expenses. By leveraging advanced monitoring technologies, early signs of wear or imbalance can be detected, and the exact location of any damage on the carrying rollers can be pinpointed. This targeted maintenance approach prevents minor issues from escalating into costly breakdowns or further damage.

Another significant advantage of our monitoring system is the considerable reduction in maintenance efforts and downtime. Traditional inspections during operation always carry inherent risks, as they expose personnel to moving machinery. With our solution, these risks are eliminated, allowing you to access precise and reliable data without having to halt production.

Enhance both safety and efficiency by proactively monitoring your conveying systems, reducing long-term maintenance costs, and ensuring maximum operational reliability and sustainability in your business.

