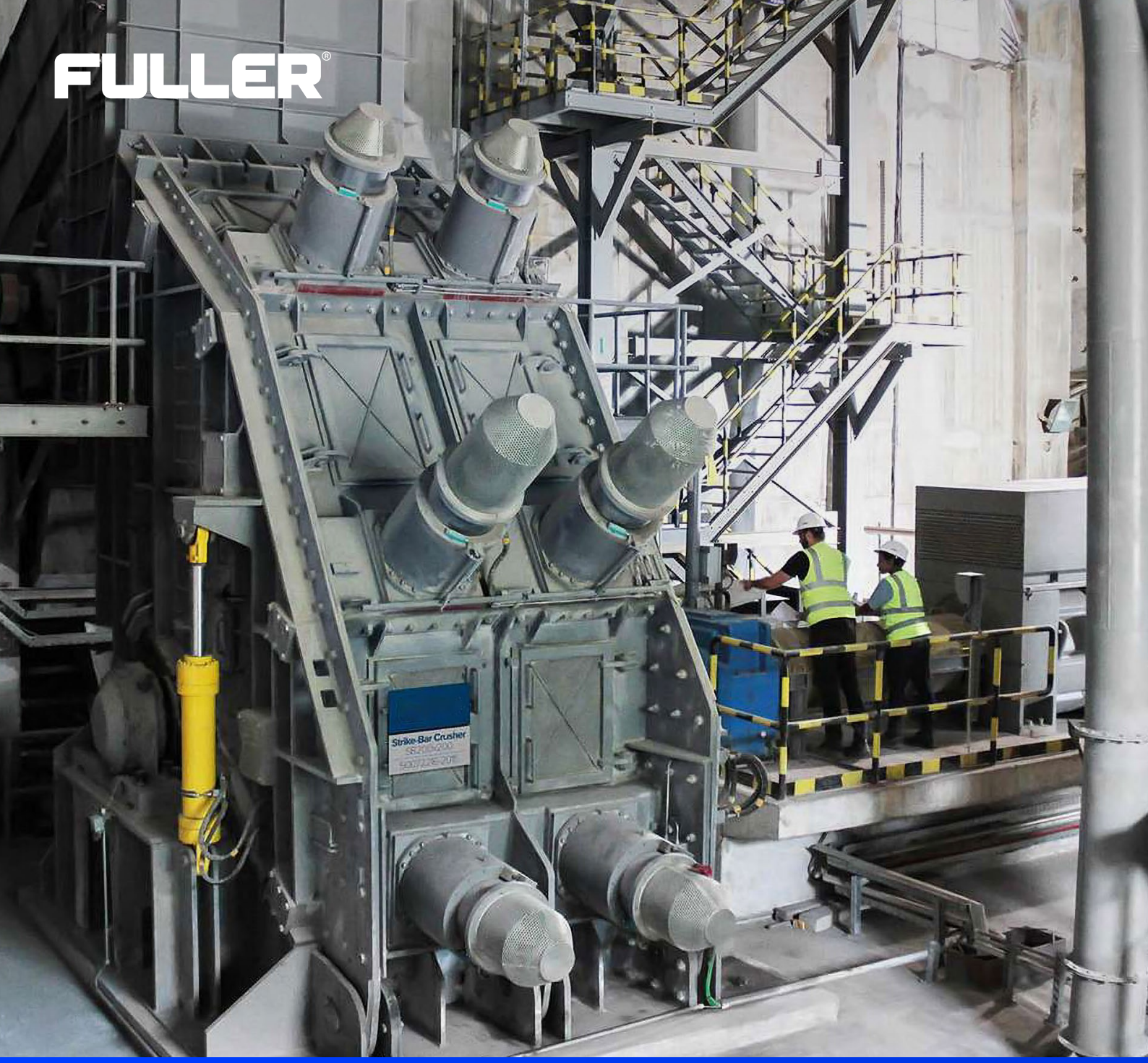
FULLER®



ONLINE RELIABILITY SERVICES

FOR STRIKE-BAR™ CRUSHERS

MONITORING AND EXPERTISE TO IMPROVE STRIKE-BAR PERFORMANCE AND AVOID UNPLANNED DOWNTIME

Our Strike-Bar crusher is a high-speed impact crusher designed for cement applications. It can handle throughput capacities up to 2,600tph, reducing material larger than 2m and 4 tonnes. That's an impressive 1:40 size reduction. Despite constant impacts and wear from these large, heavy materials, however, your crusher must provide day-to-day reliability and durability with minimal interventions.

Our Online Reliability Service for strike-bars enables early identification of potential issues before they escalate. Multiple sensors installed on your strike-bar transmit real-time data to our Global Remote Service Centre, where specialists continuously monitor the equipment for process abnormalities, component failures, and other operational deviations. By applying early-warning analysis techniques, including Rule Based methods, Condition Based monitoring, Artificial Intelligence and Machine Learning (AI/ML), and custom-created models, we identify when equipment failures may occur and recommend the appropriate corrective actions to optimize your strike-bar's performance.

KEY BENEFITS

01

Increase uptime and output.

02

Gain fuel and power savings.

03

Lower labor costs by transforming unplanned shutdowns into planned ones.

04

Extend equipment lifespan with improved preventive maintenance.

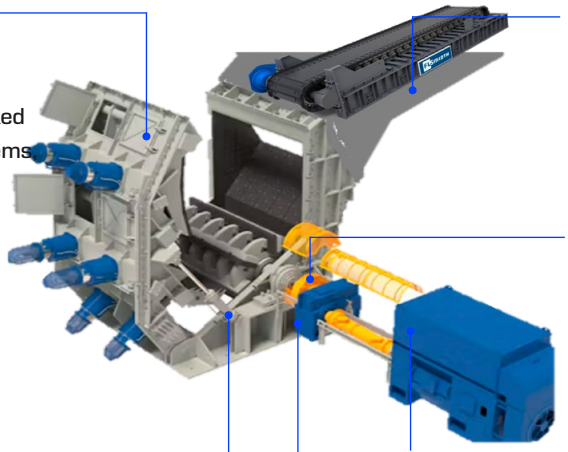
05

Reduce premium costs and services by having the right spares on site at the right time.

06

Return of investment: 3 months

STRIKE-BAR CRUSHER



Crusher
- Bearing failure: subcomponent failure, rotational looseness, cocked bearing, lubrication problems high/low temperature
- Structural looseness
- Broken hammer or other parts
- Damaged rotor, grate bars, or breaker plates
- Crusher overload
- Hopper over/underfilling, uneven feeding

Apron Feeder
- Damaged lamellas and support rollers
- VFD failure
- Ripped main shaft

Coupling
- Coupling wear
- Loose pin shaft

Hydraulics
- Breaker plates opening

Gearbox
- Bearing failure: subcomponent failure, rotational loosness
- Tooth wear: cracked or broken
- Misalignment of gears or motor
- Eccentricity and backlash
- High bearking temperature

Motor
- Rotor Failure: broken/cracked rotor bar, rotor imbalance, loose rotor, rotor bow
- Bearing failure: subcomponent failure, rotational looseness, cocked bearing, lubrication problems
- Structural looseness
- Stator failure: eccentricity, soft foot, phase loss, windings problems
- Misalignment
- High/low temperature

The OEM expert advantage

Many providers offer to monitor your equipment, but do they truly understand your Strike-Bar crusher? We have decades of experience installing, troubleshooting, maintaining, and optimising Strike-Bar crushers. We have integrated that OEM experience and insight into our ORS. So, while others tell you what to worry about, we tell you how to solve recurring problems and enhance reliability. This includes extensive root cause analysis to prevent minor issues from escalating into major problems.

After all, your success is our success. Our OEM expert advisors support and coach your maintenance personnel to achieve excellence, delivering optimised maintenance planning and effective maintenance procedures.

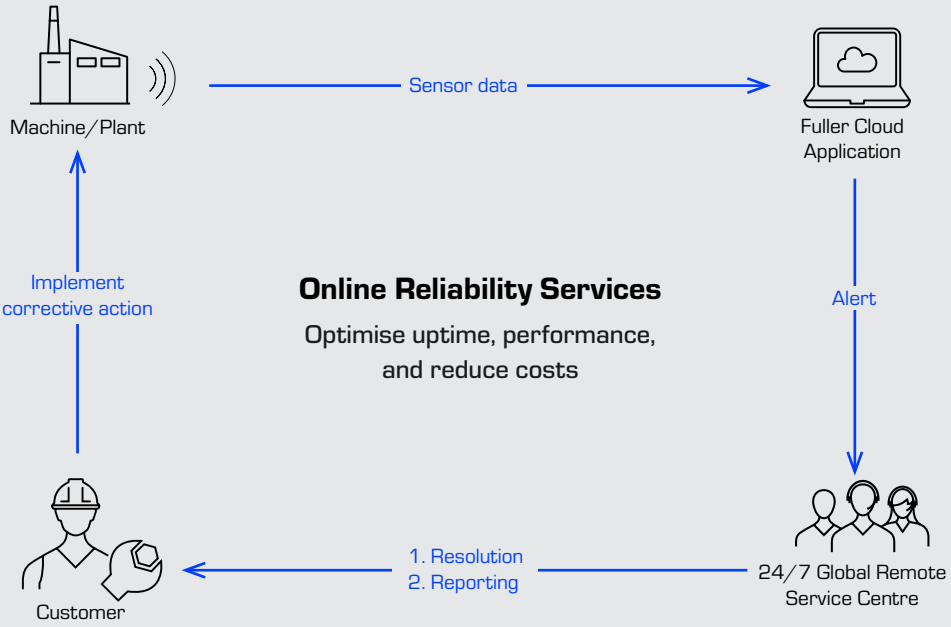
A comprehensive monitoring package

Our ORS uses existing control system signals to identify common issues, such as over- and underfilling, component damage, bearing and drive failure, and overheating gears and bearings. On top of this, we provide additional monitoring systems, such as vibration, optics, image processing, electromagnetic, ultrasonic, and oil analysis, to detect a broader range of abnormal conditions and component failures, delivering continuous insight into your Strike-Bar crusher's status.

Implementing ORS

A Fuller project manager will oversee the delivery of any hardware required to provide the service. Your maintenance team will usually be able to install the sensors themselves; however, we can offer installation as an optional extra. After the Health and Usage Monitoring System (HUMS) is installed, we will come to you and commission the systems. Once commissioning is complete, the project manager will hand over to a dedicated service account manager, whose job is to support your maintenance department as their go-to contact whenever assistance is needed. The service account manager will initiate and drive the service to deliver on your KPIs, ensuring that you receive optimal value.

HOW DOES ORS WORK?



Signals from monitoring systems on your equipment are securely sent via the Cloud to our Global Remote Service Centre for continuous performance monitoring. When alarms or abnormal events occur, our experts immediately analyse the data. We provide clear preventive or corrective recommendations to your maintenance team, helping reduce unplanned downtime and extend equipment life. Your Fuller specialists keep you informed throughout, enabling fast decisions and timely action before issues escalate.

FULLER® TECHNOLOGIES

fuller-technologies.com

C 2-26 2000-16-ENG