

Bulletin Semeq



JBS Beef plant - Brooks - AB

Predictive Maintenance in Focus

JBS Beef plant – Brooks - Alberta



Successful Partnership



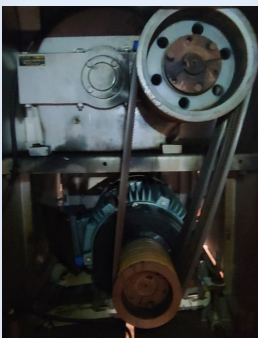
We consistently strive to enhance asset performance, boosting equipment reliability and availability. Online monitoring stands out as a valuable tool for detecting failures early on and pinpointing process deviations. At JBS Brooks, our online monitoring has progressed significantly in reliability, This reliability aligns with our ongoing digital transformation initiative, encompassing MCA sensors and Oil analysis turning process in digital data.

Success Case

GROUND BEEF - GRINDERS - FINAL GRINDER #3



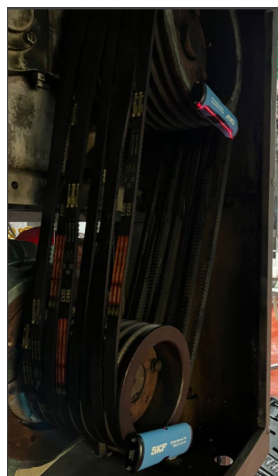
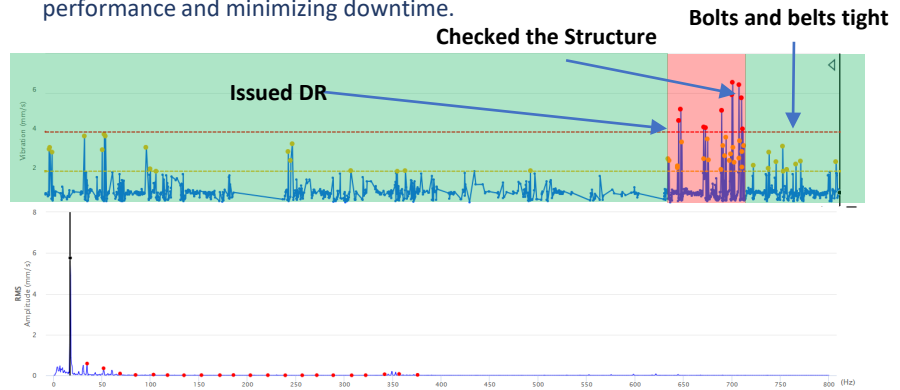
Meal Grinder West/East



Motor

In 2023, the Brooks plant implemented online sensors in the ground beef area. Since then, the AI and the Semeq intelligence center have consistently monitored equipment and generated alarms. It was notified when the online system detected high vibrational levels on the Final Grinder #3 gearbox, indicating structural looseness. A Diagnosis Report (DR) was generated to request that the maintenance team inspect the base.

Subsequently, the maintenance team conducted a thorough inspection. They checked the tightness of bolts, examined the rotating assembly (pulley, sheave, and belts) for wear, and identified loose bolts on the motor base along with some loose belts. After the intervention, as operations resumed, vibration levels decreased significantly to acceptable levels. This proactive approach exemplifies Semeq's and JBS Brooks' team commitment to maintaining optimal equipment performance and minimizing downtime.



The spectrum presents high amplitude at 1x rpm in the radial direction. This highlights the comprehensive insights provided by the online monitoring system, helping to identify and understand equipment's issues.

Upon assessing the gearbox in the field, it became evident that the issue lay with the bolts and belts. High vibration was identified on the motor feet, and loose belts were observed, confirming the source of the problem.