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EARLY DETECTION SAVES BIG:
HOW SMART MONITORING PREVENTED A COSTLY SHUTDOWN

In the heart of a major paper manufacturing facility, every hour of downtime carries a heavy price. With an annual containerboard capacity of nearly 900,000 tons, reliability isn't just important; it's mission critical.

THE HIDDEN THREAT

Emerson Wireless Vibration Monitors detected lubrication severity on both vacuum pump bearings. Left unchecked, this could have led to catastrophic failure, unplanned downtime, and significant financial loss. Our onsite vibration technicians quickly verified the readings using their 2140 analyzer, confirming the alarm was real.

Further investigation revealed pulp buildup around the shaft, allowing water intrusion into the bearing housing—a silent enemy compromising the integrity of the bearings.

SWIFT ACTION, SMART PLANNING

The team purged the bearing cavity with fresh grease, temporarily reducing alarm levels. But when the asset alarmed again the next day, it was clear the bearing was compromised. Thanks to early detection, the team scheduled a bearing inspection and replacement during the next planned outage, avoiding an emergency shutdown.

THE MEASURABLE IMPACT

- **Vacuum Pump Replacement Cost Avoided: $26,450**
- **Unplanned Downtime Avoided: 4 hours= $120,000**
- **Drive-End Bearing Replacement: $3,000 during scheduled outage**
- **Additional Downtime Avoided: 8 hours=$80,000**
- **Preventive Upgrade: New seals installed to combat water intrusion**

By leveraging Emerson's wireless vibration technology and proactive maintenance strategies, the mill turned a potential crisis into a controlled, cost-effective solution saving over **$200,000 in avoided downtime and repairs.**

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