

# Monitoring cracks in a ladle crane to prevent costly downtime

## Situation

- The ladle crane is critical to steel production, downtime halts the entire process.
- Repairs require careful planning, expert knowledge, and are difficult to execute.
- **Unplanned repair work could lead to long delays and substantial production losses.**

## Solution

- Villari sensors were installed in less than one hour with **minimal disruption to operations.**
- Continuous monitoring allowed safe operation while proper repair plans were developed.
- Standalone monitoring system that does not require local integration



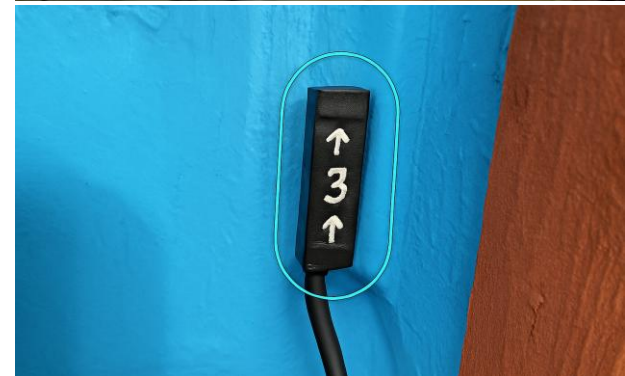
**400+ ton**  
size ladle crane



**12**  
sensor probes  
installed



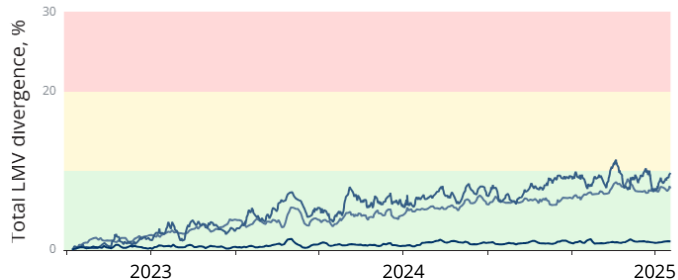
**4 years**  
of repair work have  
been postponed



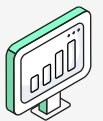
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## Results

- Data revealed slow, consistent crack propagation over time.
- Immediate repairs were deemed unnecessary, allowing safe postponement.
- **Repair costs a ~\$30,000 can be deferred** with 4 years.



Data indicates slow but steady crack growth over the past two years. Current projections suggest that no action will be required for another two years.



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