

SEMI-AUTONOMOUS PLANT

Outcomes

139



Total No. of
Plants Digitalized

490

Total Areas

3815

No. of Critical
Equipment

2.5%

Utilization rate
increased in
mills section

36108 Hrs.

Unplanned Downtime
eliminated

6917 Hrs.

MTBF (Mean Time Between
Failures)

The **99%** Trust Loop™

ABOUT THE COMPANY

JSW Steel is a global leader
with integrated and
downstream steel
operations.



KEY AREA

- Pellet Plant (Ball Mill, Conveyor)
- Electric Arc Furnace
- Blast Furnace (Dedusting & Blower Fans)
- Steel Melting Shop (Continuous Casting)
- Hot Strip & Cold Rolling Mill



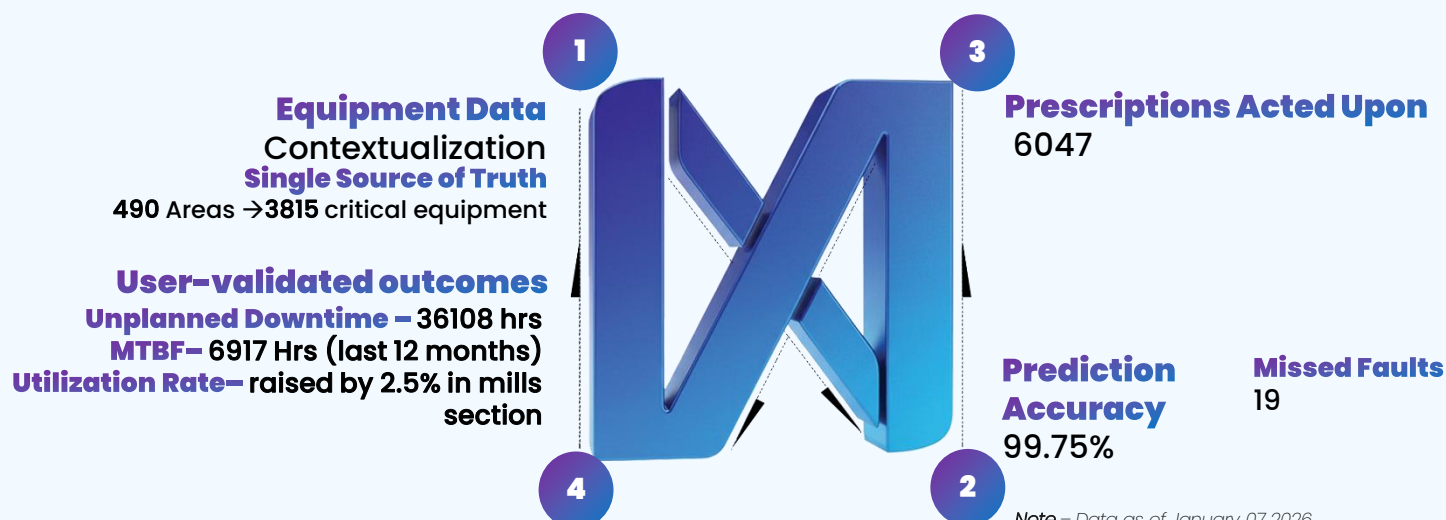
Hot Combustion Blower – Sinter Plant



Coke Oven Pump



PlantOS™
Manufacturing
Intelligence



Note – Data as of January 07 2026

Source – PlantOS™ Digital Reporting System – User Validated
True Positives & False Negative Rate

1 The Challenge: Building Trusted Reliability at Scale

JSW Steel set out to improve reliability across complex, multi-plant operations without adding to the operational burden on plant teams. The journey began in India in 2021, with early deployments focused on validating predictive insights and earning the trust of maintenance and production teams. As prescriptions consistently translated into real outcomes, confidence in PlantOS™ became the foundation for broader adoption.

2 The Solution: Precision, Prescription & Co-Innovation

PlantOS™ enabled JSW Steel to establish a closed-loop reliability model—where predictive insights drive actionable prescriptions, outcomes are validated, and value is continuously proven. Deployments scaled rapidly from Indian plants to mills across the Americas, evolving the partnership into a true co-innovation engine.

Key pioneering solutions include:

- Crane application optimization for enhanced operational uptime
- Predictive maintenance for steam fans to prevent critical failures
- Advanced ROT roll monitoring in hot strip mills for precision rolling
- Gearbox reliability enhancements in long product mills for sustained performance

3 The Pivot: The Rise of Prescriptive AI

With 24×7 monitoring and deep domain expertise, JSW Steel's operations shifted from reactive decisions to prescriptive, data-led actions. Digital workorders and automated prescriptions improved execution discipline, reduced manual intervention, and strengthened adoption on the shop floor. The current focus is on deepening reliability outcomes and scaling across more global sites, with future plans to integrate reliability, process, and energy optimization into three outcomes in a single prescription with zero guesswork.



4 The Result: The 99% Trust Loop Delivered

JSW Steel's PlantOS™ partnership delivered explosive reliability gains—nearly doubling unplanned downtime savings from 18,367 hours (Jan 2025) to 36,108 hours in just one year.

Reliability Outcomes

- 36,108 hours unplanned downtime eliminated (doubled in 12 months)
- 6,917 hours MTBF achieved across critical assets
- 2.5% utilization rate increase in mills section

Reliability Intelligence Outcomes

- 6,047 prescriptions executed at 89.61% implementation rate
- Proven closed-loop trust from prediction to validated action
- Enterprise-wide data-driven reliability culture established

Infinite Uptime has been a strategic partner of JSW for the last four years, playing a pivotal role in transforming & optimizing our Steel, Cement and Paint Plant production outputs.

–Mr. Rishi Shroff, CEO,
JSW New Age

We needed a partner willing to co-innovate on our most difficult problems. [With Infinite Uptime] we're not monitoring equipment anymore; **we're enabling AI-assisted decision-making from work order creation through execution.**

–Mr. Alec Glenn, Vice President of Reliability,
JSW Steel



Diagnostic Report

Equipment: SERVICE_WATER_PUMP_3

Plant:

22 Dec 2025 - 06:38am

IUSERV980854438

Report Status: COMPLETED

Completed On: 22 Dec 2025 - 08:45am

Observation

1.Total acceleration $17 \text{ (m/s}^2)^2$ (0.18G²) to $199 \text{ (m/s}^2)^2$ (2.07 G²) at motor DE bearing since 12th December 2025. 2.Spectrum indicates nonsynchronous frequencies and multiples of 1xrpm & repetitive impacts in 1Wf at motor DE bearing.

Diagnostic

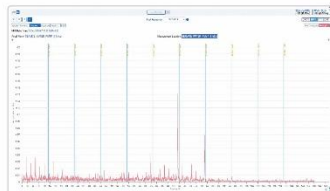
Vibration characteristics Indicates bearing defects in outer raceways & rolling element in motor DE bearing (SKF 6219).

Recommendation

1.As a preliminary action, Relubricate the motor DE & NDE bearings. 2.In an opportunity, Replace the motor DE bearing with respect to defects within outer raceways & rolling elements.

Business Impact

Downtime savings of 24 hrs



Corrective Actions Taken

Lubrication

Carry out Bearing replacement

Customer Comment

Grease was added to the drive end bearing. About 10-15 grams were added. This is a reconditioned motor that was installed on December 3/4th 2025. The temperature of the motor is around 125F.

Attachments



Completed By:

@jswsteel.us



Diagnostic Report

Equipment: SERVICE_WATER_PUMP_2

Plant:

20 Oct 2025 - 02:47pm

IUSERV959401325

Report Status: COMPLETED

Completed On: 20 Oct 2025 - 05:05pm

Observation

1. Acceleration RMS has gradually increased from 0.4 G-s to 0.9 G-s at the Motor DE bearing & 0.4 G-s to 0.8 G-s at the Motor NDE bearing since September 28, 2025. 2. The acceleration spectrum indicates non-synchronous frequencies at the Motor DE & NDE bearings.

Diagnostic

1. Vibration characteristics indicate inadequate lubrication condition in Motor DE & NDE bearings (SKF 6219), (SKF 7228 BCBM).

Recommendation

1. As a preliminary action, lubricate the Motor DE & NDE bearings.

Business Impact

Downtime savings of 24 hrs

Corrective Actions Taken

Lubrication

Customer Comment

The drive end motor was lubricated with grease. We will change the oil on the non-drive end during the next scheduled outage

Completed By:

@jswsteel.us

Ready to close the Trust Loop in your facility?

Infinite Uptime is currently delivering results for **844 plants** in **26 countries**

Click Here to

Try PlantOS™ Today