



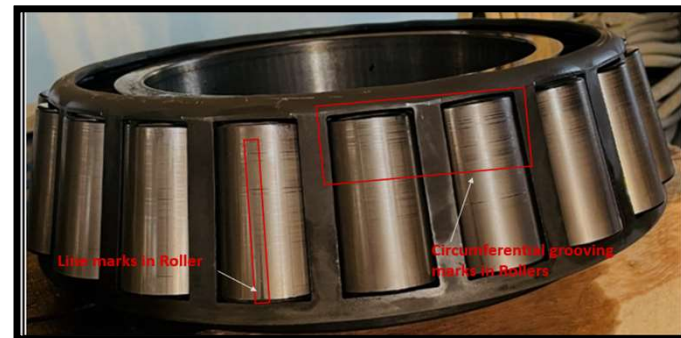
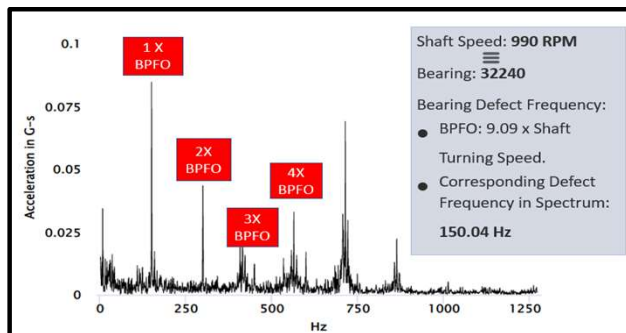
One of the largest cement producers saved **36 hours of unplanned downtime** by adopting a predictive approach to maintenance.

Application-

Planetary gearboxes of a high-pressure roller press at the 2MTPA cement grinding unit

Challenges-

- Gearbox failures often resulted in high-risk events and frequent stoppages.
- The complex design of the planetary gearboxes made it further difficult for the condition-based monitoring teams to detect the issues in time.
- Maintenance activities were reactive in nature adding to the overall complexity and keeping up with equipment availability.



Solution - A comprehensive remote diagnostics solution enabled the plant maintenance teams with real-time machine health and actionable insights. Increased velocity and acceleration in GBX I/P Stage BRG were observed, prompting a fault notification and machine check alert for the maintenance teams. The OEM inspection revealed circumferential grooves and tear marks on the roller press, due to steadily increasing velocity. To avoid further damage gearbox BRG replacement was carried out by maintenance experts resulting in the avoidance of **36 hours of downtime**.