Using Condition monitoring tools to improve the reliability of various Hydraulic Drive system for Cement plant Applications

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This paper describes the installation and operation of various sensors and monitoring techniques and processes to create base line and trends to evaluate the health of various Hydraulic drive systems used in a Cement plant for applications like, Apron Feeder Drives, Kiln Drives, Clinker Cooler Drives, Ball mill Drives, Ball mill inching Drives, HPGR Drives, Feeder breaker Drives, Conveyor Drives etc.

This paper provides details of steps involved and key sensors to be considered and monitoring the data and preparing the trends and charts to provide real performance v/s base lines for factors like temperatures, viscosity, pressures, leakage flow rates etc. Organize these data and establish guideline and methods for the plant maintenance team.

Using the result helps improve Reliability, productivity, performance and reduce the down time for the plant from facing unscheduled shut down.