

A Lube Noob's Guide to Condition Monitoring



Condition Monitoring

Measuring specific parameters and noting irregularities or changes that could be early indicators of an impending failure.

- This allows preventive maintenance to be scheduled before serious failures develop.
- Also used to determine how assets will perform and degrade over time.

Applications



- Rotating Equipment
- Backup or Secondary Systems
- Compressors
- Pumps
- Electric Motors
- Presses
- Internal Combustion Engines
- **Methods**
- **Trend Monitoring:** Continuously measuring equipment performance and interpreting the data.
- **Condition Checking:** Periodically measuring equipment performance while the machine is running.

Benefits



- Decreased Maintenance Costs
- Reduced Downtime
- Extended Asset Life
- Cost Savings on Resources
- Shift from Reactive to Proactive

Techniques



- Vibration Analysis
- Oil Analysis
- Infrared Thermography
- Ultrasound
- Acoustic Emissions

Types



- **Offline:** Periodically scanning less critical assets to observe their current conditions.
- **Online:** Continuously measuring assets using wireless machine-mounted sensors to acquire real-time insights and warnings.
- **Route-Based:** Intermittently recording data using handheld devices to create a trend pattern and determine if advanced analysis is required.

To learn more about "Breaking Down Condition Monitoring," scan the QR code.

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