

4 TYPES OF DATA ANALYSIS



LEVERAGING DATA FROM CONDITION MONITORING

As condition monitoring devices gather more data over time, the complexity of analysis increases. However, this complexity translates into higher value for facilities. More data allows for more accurate predictions, better fault detections, and improved decision-making.

WHAT
happened?

DESCRIPTIVE

- Comprehensive overview of the current state of equipment
- Collecting and analyzing data to identify patterns, trends, and anomalies

APPLYING ANALYTICS:
By understanding historical performance, maintenance teams can establish baselines and benchmarks for comparison.

WHY
did that
happen?

DIAGNOSTIC

- Identifies the root cause of issues or failures
- Analyzing data to pinpoint specific faults or abnormalities

APPLYING ANALYTICS:
By diagnosing problems accurately, maintenance teams can take targeted actions to prevent further damage or downtime.

WHAT
will happen
NEXT?

PREDICTIVE

- Utilizes historical data, oil analysis data, and statistical model to forecast future performance
- Anticipate potential failures or degradation in equipment

APPLYING ANALYTICS:
By predicting maintenance needs in advance, maintenance teams can schedule maintenance activities proactively, minimizing unplanned downtime.

WHAT
should
WE DO?

PRESCRIPTIVE

- Takes predictive analysis one step further by recommending optimal actions
- Suggests the most effective maintenance strategies

APPLYING ANALYTICS:
By providing actionable insights, prescriptive analysis empowers maintenance teams to make informed decisions and optimize asset performance.

COMPLEXITY

VALUE