Plant-wide condition monitoring

Comprehensive monitoring of asset condition ensures flexible connectivity and analytics, and visualization capabilities to enable world-class reliability strategies. Bentley Nevada’s data-driven solutions enable smarter decisions to avoid downtime while improving safety and asset life.

Unplanned downtime has major cost consequences. The examples to the right highlight the cost of unplanned for a single power plant operation. Unplanned downtime also increases the full spectrum of asset utilization.

- A large power plant of all fuel for one week: $100 million
- A single power plant outage affects for one year: $5,000,000
- Boiler rent and oil: $76,000 per hour
- Cargo ship docked longer than scheduled: $235,000 per hour
- Overhead ladle crane in a steel plant: $3,200 per hour
- A single-stream mineral process offline for one second: $75,000
- A large power plant offline for one week: $40,000 per hour
- A large power plant offline for one year: $300,000 per hour

THE BENEFITS OF CONDITION MONITORING

- Identify machine challenges
- Enhance planning
- Proactive maintenance
- Provide data to help answer
  - What do we need to do about it and when?
  - Can I continue to run?
  - What’s wrong?
- Recognize root-cause failure mechanisms
- Provide failure avoidance opportunities
- Identify damage and the importance of condition monitoring
- The examples to the right highlight the cost of unplanned downtime while improving safety and asset life.

TOTAL ASSET COVERAGE IN ONE VIEW

- Connect, analyze and visualize
- Plant-wide data analysis
- Full-scale CBM
- Single supplier program from plant level to enterprise level, incorporating:
  - Single, comprehensive Bently Nevada ecosystem—with full-scale CBM from plant level to enterprise level, incorporating:
    - All data in one place
    - Full plant assets

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