

System 1™

Plantwide monitoring
with clarity and
context for complex
manufacturing
businesses

 **Bentley Nevada**
a Baker Hughes business

Your business has challenges

Your assets

are well understood but in fragments

Your knowledge

can be extensive but hard to leverage and transfer

Your insights

are tough to deploy and scale across your plant and beyond

Your priorities

can conflict with your asset strategies

System 1 brings it all together

An asset condition monitoring solution for every industry

Oil and Gas

Upstream offshore
Upstream onshore
Pipelines
LNG
Refining
Petrochemical

Power

Wind
Hydro
Fossil
Nuclear



General Industry

Fertilizer
Steel
Mining
Pulp and paper
Marine
Food and beverage
Automotive

System 1's comprehensive capabilities



Visualization

Desktop app

Plant and machine HMI, trend analysis, diagnostics, alarm management, case history



Analytics

Core

Condition monitoring (CM) alarming, state analysis, core extractions

Decision Support

Custom algorithms, advanced extractions

Performance

Thermodynamic efficiency, machinery performance

Failure Mode Detection



Connectivity

Secure OT/IT Data Transfer

Comprehensive Asset Health Data

Collect Vibration, Control, Process, and Emissions Data in a single platform












Extensive Data Interfaces

Online, Wireless, Scanning, Portable, and Industrial Protocol Sources

Tested, trusted, and built on a legacy of Bently Nevada machinery know-how and customer engagement

- Over 20 years on the market as a pioneer in machinery condition monitoring software
- The result of input from end users in ~35 of the biggest industrial companies in the world across 15 countries and 50 sites
- 12 remote monitoring centers
- Thousands of System 1 users globally
- 300 field and diagnostic engineers to provide unmatched support worldwide

Seamless plantwide monitoring that connects processes and assets so you can run without unplanned downtime

 Asset Health Diagnostics		
 Turbomachinery	 Reciprocating compressor	 Performance
 Diagnostic HMI	 Emission	 Case management
 Complex gear	 General machine	 Fixed equipment
 OT/IT system integration		



System 1 and Decision Support: supplying information from the edge to the cloud

- Gain new insight into equipment and process behavior
- Reduce time spent performing manual diagnostics
- Use Decision Support rules to qualify and derive data for root cause analysis associated with simple or complex scenarios
- Capture, document, and share knowledge

Bently HOST: an end-to-end solution to unlock the power of plant wide condition monitoring

- Full benefits of well-managed condition monitoring system with less infrastructure for a fixed yearly fee
- Lower total cost of ownership (no servers, IT personnel needed)
- Real-time and historical data from any type of equipment aggregated in System 1 datacenter
- Analytics and continuous expert support with prescriptive advisories
- Data is secure and compliant with industry and regional cybersecurity standards
- Customer retains ownership of the data