

A large offshore oil rig structure is shown against a blue sky and ocean. The rig features a complex network of yellow and white pipes, walkways, and structural beams. The perspective is from a low angle, looking up at the rig's framework.

CHEMICAL MANAGEMENT *starts with* VISIBILITY OF YOUR DATA

Oil Producers Can Save between
10–20% in Chemical Costs
with AssetWise



LOSING TRACK OF YOUR CHEMICAL USAGE

The oil and gas industry use a rich variety of chemicals across upstream, downstream, and midstream operations. But, it is easy to lose track of how much to use, what it costs, and the consequences of over-injection or under-injection.

Insufficient chemical injections can impair production, with expensive downtime at best and the catastrophic loss of an entire asset at worst. This leads to over-injecting chemicals, which brings its own costly consequences.

Chemical Management core challenges:

- Over-injection of up to 20% more chemicals than required, so costs can spiral
- Mismanagement of chemicals - corrosion, scaling, emulsification, causing downtime, can be costly
- Data still held on spreadsheets, and within data silos
- Decision making relies on out-of-date or unreliable data
- No real measurable way of monitoring chemical usage
- Lack of insights and visibility into performance

In some cases, customers are over-injecting 20% above the recommended level, resulting in an expense of USD \$350,000 per chemical, per well, per year.

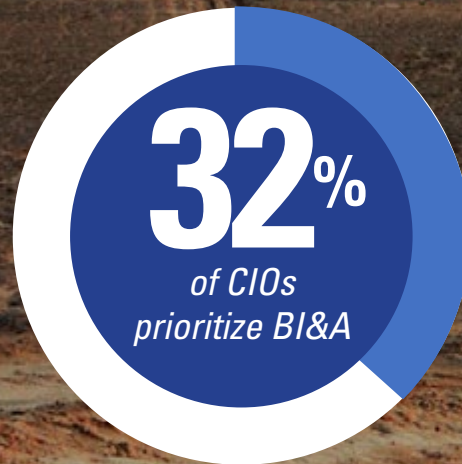
REDUCE CHEMICAL COSTS BY **10%** AT LEAST OR MORE

Dramatically reduce chemical costs – monitor, manage, and control the application of chemicals with AssetWise 4D Analytics to become more efficient, productive, and cost-effective.

Chemical usage management throughout production and processing is an often overlooked area that can reduce costs. The injection of chemicals in a controlled and reliable process across an operation, be it land-based or offshore, is a key factor in the productivity, efficiency, and profitability of oil and gas producers.

Why now?

In the past, chemical usage was typically unmonitored. Often, there would be a tendency to add more than necessary to ensure pipes were never underdosed. What was previously thought of as an acceptable cost and a normal part of the production process is now proven to be unnecessary and expensive. Now you can optimize chemical usage and save millions.





BUSINESS BENEFITS

AssetWise Chemical Management optimizes your biocides, demulsifiers, corrosion and scale inhibitors, and helps your engineers to work faster, smarter, and more efficiently to increase production, availability, and uptime.

INCREASE
AVAILABILITY
BETWEEN
1-2%



Optimize Chemical Usage

Understand costs of production per barrel, M3, hour, day, week, month, quarter, and year and determine optimum dosage rates.

Schedule Chemical Deliveries

Arrange and schedule chemical deliveries to all sites and know the historical and current level of chemicals so dosage rates are kept current.

Reduce Environmental Impact

Calculate emission levels and determine discharge. Configure alarms on variance against compliance and report on results.

Increase Performance

Make faster decisions by having all information within one central application, and make critical decisions based on accurate performance-based data.

Manage Inventory

It's important to know what assets you have and how much chemicals you have remaining. Always be ahead and know remaining chemical levels against current and planned production.

Monitor and Control Corrosion

AssetWise provides analysis of corrosion probe data, acoustic and metal loss, and the necessary calculations to predict corrosion rates.

COMMON AREAS OF APPLICATION

The scope for what can be monitored and managed depends entirely upon what information you have.

Integrate, analyze, and share information.

Production monitoring and optimization and scheduling

- Move away from anecdotal observations
- Clearly identify concurrent events
- Information visible to all
- Identify gaps in data and need for more instrumentation
- Schedule chemical batch samples

Chemical Management

- Stock Control
- Tank Tracking
 - Legislative recording/reporting (Environmental)
- PON15D Chemical Permit
- Usage monitoring
- Ensure application and OPEX control
- Performance tracking
- Track samples collected for onshore analysis
- Laboratory instrument management

Fluid Management

- Process optimization
- Process BS&Ws, oil in water, etc.
- Legislative reporting (Environmental)
- Overboard water, export/fuel/flare gas (onshore)
- Trending and graph analysis
- Well sampling (BS&W and onshore ions)
- Corrosion
- Wells, water injection, cooling medium
- Allocation
- Well BS&W, well tests

View the **Datasheet** for more information

DOWNLOAD



SUCCESS STORY



Major operators in the oil and gas industry have used Bentley's chemical management solution delivered by AssetWise to save millions in costs.

Going from a lack of information and visibility on chemical usage, plus rising costs, to having controlled access to all aspects of chemical and production processes, the operator can now optimize and report on chemical usage across all areas for day-to-day performance and planned treatments.

Challenging geology, complicated chemistry, and geographically disparate assets are just some of the challenges experienced before acquiring Bentley's chemical, corrosion, and production management solution to manage the operational control of chemical sampling and usage.

Through effective management and control of information about multiple third-party vendors, these forward thinking organizations now centralize all data from relevant wells, chemicals, corrosion, scheduling, and operations. The data can now be easily analyzed and reported on, resulting in significant savings with faster implementation, scalability, and reduced time for consolidating KPI reports.

WATCH
VIDEOS



OPTIMIZATION VISIBILITY INSIGHT

The AssetWise Chemical Management solution provides unprecedented insight into the usage, cost, performance, inventory, logistics, and overall production levels that relate to all things chemical.

To find out more, visit

www.bentley.com/chemical-management

