

# Seeq® is a visual analytics solution for process manufacturing data.

Seeq's multiple applications enable users to rapidly investigate and share insights from data stored in enterprise data historians—such as OSIsoft PI, Honeywell PHD, and GE Proficy—as well as contextual data sources such as SQL Server, Oracle, and MySQL. Typical tasks benefitting from Seeq include data wrangling, production analytics, and reporting. Users include process engineers, data scientists, plant managers, and operations staff.

Plant engineers and subject matter experts (SME) use Seeq to analyze and improve production outcomes. Seeq's support for time series data and its challenges – connecting, displaying, interpolating, cleansing, and contextualization as examples – relieves engineers of hours and days of futility spent finding insights in process manufacturing data. Seeq enables engineers to get more value from data already collected, and enables organizations to access and execute on those insights.

## **Enabling Data-led Decision Making**

Seeq enables the rapid creation, distribution, and updating of insights within organizations of any size to produce faster and better data-based decision making. A key part of this value is achieved by unlocking the expertise currently hidden within spreadsheets, employees, and data silos. Seeq features to support organizational learning and access to insights include:

- Productivity: Seeq is a self- service solution for engineers that leverages data science and machine learning innovations to enable features that accelerate time to insight
- Knowledge Capture: engineers using Seeq
  Workbench can capture their work and thought
  processes in Journals, enabling colleagues to leverage
  their efforts
- Document Management: Seeq applications
   (Workbooks and Topics) may be shared among employees and sites to document existing analyses and best practices
- Real-time collaboration: Seeq is an HTML 5
   application that runs in any modern browser,
   enabling two or more users to collaborate on the
   same analysis simultaneously
- Publishing: The rapid analyses achieved in Seeq may be quickly assembled for distribution and access in the form of reports so many employee types can benefit from the insights

#### **Customers**

Process manufacturing customers rely on Seeq to improve yields, margins, product quality, asset availability, and safety metrics. In addition, Seeq supports key "IIoT" scenarios such as "Connected Products" and "Smart Manufacturing" for remote monitoring and predictive analytics.











Specialty Chemicals



Food & Beverage



Power & Utilities



Metals & Mining



Pulp & Paper



IIoT

### **APPLICATIONS**

# Seeg Workbench™

Seeq Workbench is an application for engineers and includes data visualization, data modeling, and interactive tools for diagnostic, monitoring, predictive and descriptive analytics. Features include Google-like search, knowledge capture and collaboration, and integration with modern business intelligence applications.



## **Deployment**

Seeq may be set up and running on a dedicated server, server cluster, or virtual machine in less than an hour, depending on the tag count.

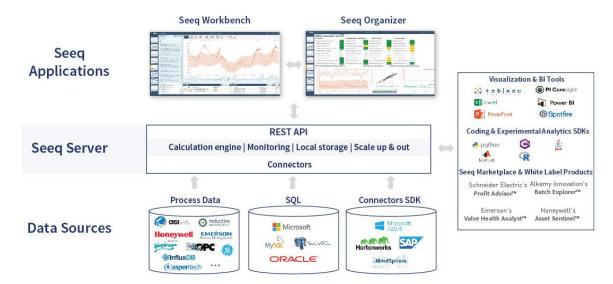
On-premise installations on the same network as a plant or enterprise historian, or on the cloud (Azure, Amazon Web Services, etc.), or on a mixed environment of on premises and cloud resources are supported.

# Seeq Organizer

Seeq Organizer is used by engineers and managers to create documents which assemble analyses and visualizations into reports, presentations, and meeting agendas. Organizer documents are dynamic because they tie directly to the underlying data, and are "time relative" so they can be defined by any batch, shift, day, etc.



## **ARCHITECTURE**



- Seeq Runtime: Perform continuous data cleansing, boundary management, and streaming calculations on historian data. Accessed through either Seeq Workbench features or the Seeq REST API, it runs autonomously and may be integrated with existing alarm systems or dashboard solutions.
- Seeq Server: The application server for Seeq functionality connects to historian, manufacturing, and business data sources.
   May be deployed on premise or in the cloud. Near real-time monitoring, plus scalability, reliability, and storage with "scale out" deployments are available as optional services.
- Seeq REST API: Seeq is extensible through data export, data integration, and a REST API for creating custom templates and modules. Data export options include Excel, PowerPoint, and any OData client (Tableau, PowerBI, etc.). Data integration with OSIsoft Vision is supported, and the REST API has SDKs for programming in C#, Python, MatLab, and Java—with additional languages coming soon. Seeg Workbench may also be customized with new Tool Panel and Display Pane capabilities.

### Connect data historians, sources, and silos

No matter where your data is or how it's stored, Seeq can connect to it without ETL or duplication, on premise or on the cloud, in a historian or in a data lake. In addition to integration with all leading process historians, Seeq works with data sources that provide context, like SQL Server, MySQL, and OPC, so you can integrate data from production and business systems.

























# Company

Founded in 2014, Seeq is a privately held company headquartered in Seattle, Washington, that combines many years of process industry experience with big data, machine learning, and open source software development expertise. Employees at Seeq are located throughout the United States, with sales representation is available in the Americas, Europe, and Asia.

## **Seeq Corporation**

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