AVEVA™ Advanced Analytics: Improve quality, energy efficiency, and throughput with cloud-based prescriptive insights

Utilize artificial intelligence and machine learning to improve process efficiency
Maximize the value of your industrial data with real-time predictive insights during the production process to improve overall operational efficiency. With AVEVA Advanced Analytics, you can build and run no-code artificial intelligence (AI) and machine learning (ML) driven models using real-time and historical operations data to generate predictive and prescriptive insights—all from one cloud-based, scalable solution.

With AVEVA Advanced Analytics, operations personnel have access to the tools and insights they need to improve product quality, energy efficiency, and production throughput.

The journey to optimized production efficiency

Advanced process analytics is a journey, and AVEVA Advanced Analytics can meet you wherever you are. Start by visualizing variables and metrics, then deepen your process and asset knowledge by modeling throughput, quality, and energy so you can identify and correct inefficiencies and problems to eliminate waste and improve productivity.

From production to quality, maintenance, or management, users of all skill levels—from novices to data scientists – can easily gain insights using AVEVA Advanced Analytics. Users can:

- Build and run AI-driven models using real-time and historical data, no programming skills required
- Collect and aggregate data from multiple data sources
- Use the power of the cloud to share data with internal and external stakeholders
- Easily collaborate with data scientists and SMEs to find new ways to drive innovation
- Leverage integrated, fully packaged dashboards, analytic tools, and analytic reports, including nearly 200 packaged analytic reports and dashboards
### AVEVA Advanced Analytics by the numbers

Typical deployments enjoy up to:

- **10x** return on subscription investment
- **12%** improvement in uptime
- **5%** reduction in energy costs
- **100%** first-pass quality
- **90%** reduction in hardware, development, and consulting costs

### Predict product quality to minimize waste and rework

Predict batch quality during the production process to increase first-pass yield, reduce recalls, and minimize waste. Detect finished product deviations sooner and receive recommendations to bring processes back in line with KPIs.

**1.3 million**

The amount Hill’s saved annually by implementing predictive models that recommend real-time process and ingredient changes to optimize product quality, including moisture, fat, protein, and density.

### Maximize energy efficiency to ensure sustainable operations

Quickly identify patterns and conditions to reduce your carbon footprint and CO₂ emissions, meet sustainability KPIs, and ensure assets are running using optimal energy rates. Get system-generated corrective actions when operating conditions deviate or assets are unnecessarily using energy.

### Going green

Thanks to AI and ML tools, a large consumer products manufacturer reduced its global manufacturing energy footprint by 5% across all utilities, including water, air, gas, electricity, and steam within one year.
Predict throughput to optimize process conditions

Understand production outcomes and get recommended corrective actions to shorten production time, increase efficiency, and realize cost savings. Optimize throughput on products and lines to operate at the highest possible production rate.

AVEVA Advanced Analytics for AVEVA™ PI System™ customers

AVEVA Advanced Analytics is powered by AVEVA™ Data Hub, a cloud-native data-sharing solution that integrates with AVEVA PI System. AVEVA Data Hub is designed to aggregate and store high-fidelity operations data and contextual information from multiple sites and assets in a single, secure location in the cloud.

By removing the barriers to data sharing using the scale and flexibility of the cloud, AVEVA Data Hub allows you to grant browser-based data access to any authorized user inside or outside your company network. You can easily extract and share predictive insights and contextual information from all aggregated data—anytime and anywhere.

With this fully-managed, ready-to-use cloud service, requiring no installation or maintenance, you can translate production and sensor data into improved efficiency and reduced waste.

• Utilize AI and ML insights to optimize process efficiency
• Operationalize analytics at scale using the cloud and asset templates by type
• Easily manage incidents with alerts and notifications and prescriptive guidance
• Collaborate with trusted partners to enable cross-company collaboration and discover new opportunities
• Integrate insights with other reporting solutions like Power BI or Grafana
• Native integration with AVEVA PI System, enabling hybrid cloud data management

The future is optimized

Now is the time to maximize production efficiency and improve product quality, energy efficiency, and production throughput with AVEVA Advanced Analytics.

To learn more, visit: www.aveva.com/en/products/advanced-analytics