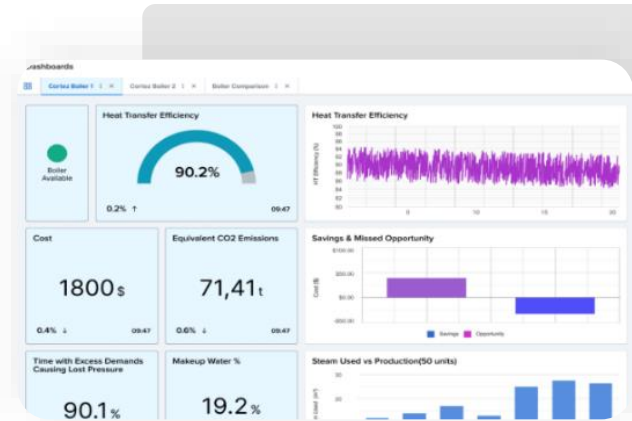


# Plant Insights

Advanced industrial analytics for process manufacturing



In the digital era of Industry 4.0, the industrial landscapes are undergoing significant changes owing to technology, connectivity, and data. The amount of data generated by industrial processes is enormous, and as we move forward, this volume will only increase. However, despite this data surge, over 90% of the data remains unused, presenting enormous opportunities for discovering previously unknown insights.

## Challenges faced by manufacturers

- Absence of unified information:** Due to many siloed data sources and interfaces, manufacturing plants face challenges in achieving a unified view of their operations. This limits visibility from the top floor to the shop floor to gather comprehensive insights quickly and to view tailored insights that drive business decisions.
- Unexplored AI analytics:** The potential of AI-enabled insights and predictive analytics is often unexplored or siloed from existing systems, causing missed opportunities for forecasting, predictive maintenance, and operations optimization. Without predictive analysis tools, it becomes difficult to maintain consistent product quality across batches or plants, which can negatively impact production targets and customer satisfaction.
- Inadequate tools for exploratory data analysis:** Insufficient tools for exploratory data analysis restrict the discovery of patterns or opportunities for improvement in manufacturing processes.
- Downtime and maintenance:** Inefficient maintenance schedules and the inability to predict equipment failures increase downtime, reducing productivity.
- Production process optimization:** Inefficient production methods lead to higher costs without process optimization tools.
- Challenges with demand forecasting:** Manufacturers may struggle to predict market demands without AI-powered demand forecasting, which can lead to inventory issues or production surpluses/shortages.
- Lack of standardization across facilities:** Standardizing processes across multiple plant locations can be daunting, as each facility has its own unique operating methods and systems.

## SymphonyAI's innovative approach—Plant Insights

Plant Insights enables businesses to get a unified view of all operations by utilizing real-time data from various industrial data sources. It enables any user to quickly set up real-time monitoring for their key performance indicators (KPIs) via alerts, notifications, flexible visualizations, and various advanced analytics out of the box. There is no need for a large project to aggregate data, define KPIs, or build actionable visualizations with Plant Insights. It offers a comprehensive industrial intelligence tool that can be set up in minutes from the shop floor to the top floor.

Plant Insights includes pre-defined KPIs for your industry, vertical, problem, and asset classes. It also includes a KPI builder, allowing you to define KPIs using a visual, no-code interface. This combination makes it simple to set up without requiring a large project and simple to maintain and expand over time without requiring any software or data engineering expertise.

Plant Insights' visualization system is also designed for flexibility and extensibility. You can select your preferred visualization, link it to one or more KPIs, configure interactions with the visualizations, and change the visual appearance without any coding skills required. Additionally, you can create visualizations and reports, share them, and save them as templates to deliver scalability.

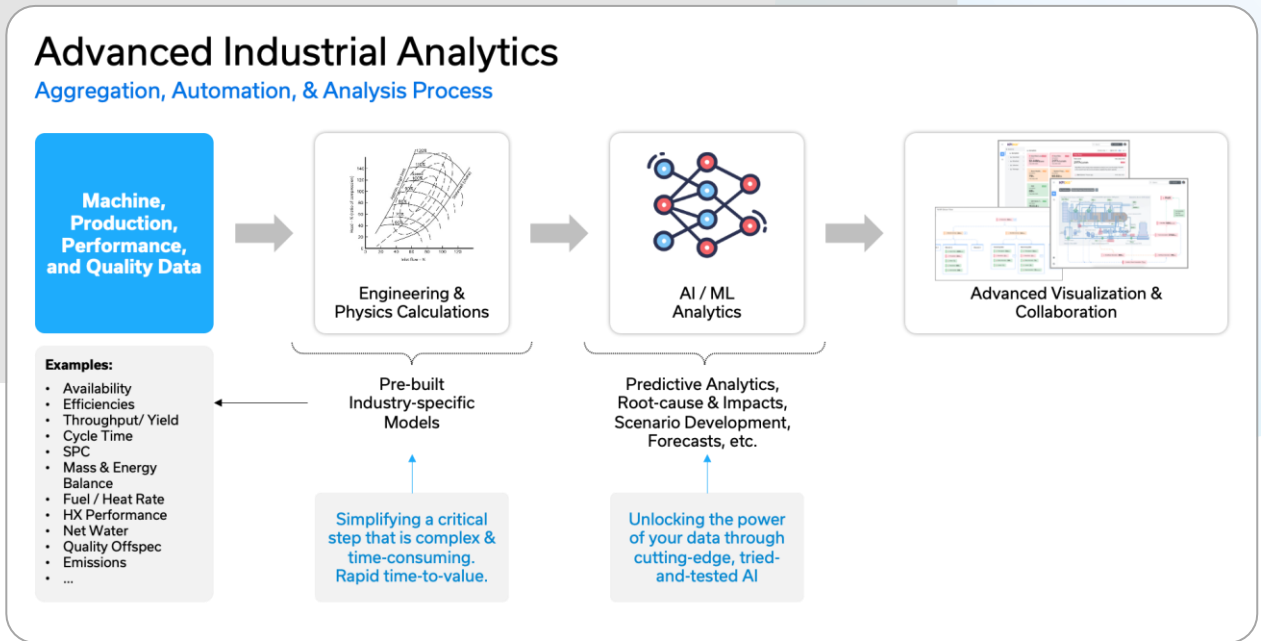
## Why Plant Insights

- 1. Drive plant performance:** Enhance your operational performance by gaining real-time and accurate insights. Plant Insights also helps boost uptime, yield, quality, efficiency, safety, and environmental performance with transparent operational metrics.
- 2. Proactively mitigate risks & bottlenecks:** Identify and address potential issues in your processes before they impact operations. In addition, Plant Insights utilizes AI/ML engines for early warnings, root cause analysis, and proactive risk mitigation.
- 3. Data-driven decision making to:**
  - Foster a culture of data-driven decision-making across your organization.
  - Consolidate data sources, create intuitive dashboards, and facilitate real-time collaboration.
  - Receive timely alerts, track decisions, and utilize flexible analysis tools for informed choices across the enterprise.

## Product capabilities

- 1. Data acquisition:** Connects seamlessly to various data acquisition systems and presents an efficient data management system capable of streaming and batch analytics.
- 2. Automated data pre-processing:** This process utilizes advanced machine learning algorithms to automatically de-noise, impute, and contextualize data, ensuring its accuracy and relevance.
- 3. Templated pre-built KPIs:** Offers out-of-the-box KPI definitions and visualizations based on extensive industrial expertise and experience.
- 4. Custom KPIs and analytics:** Integrate your own KPIs and analytics, enabling easy incorporation into the Plant Insights system for real-time analysis.
- 5. Real-time KPI monitoring:** Stay informed about your operations with real-time Key Performance Indicator (KPI) monitoring. Send instant alerts enriched with contextual information in a unified dashboard.
- 6. KPI graphs:** Easily identifies contributors to KPIs using physics, thermodynamics, and AI-based analysis through a visual graph view.
- 7. Alert system:** Notifies relevant organizational personnel instantly when KPIs start trending towards undesirable levels.
- 8. Built-in physics and engineering calculations:** Utilizes pre-built, industry-specific physical models and calculations. Enrich your data effortlessly, generating high-value insights instantly.
- 9. Advanced AI/ML engines:** Harnesses cutting-edge deep learning and generative AI engines. Automatically analyzes root causes and predicts events before they occur.
- 10. Flexible visualization:** Enables effortless customization, configuration, and sharing of appealing visualizations without coding skills.
- 11. MLOps, continuous integration, continuous deployment:** Ensures hassle-free integration of updates and feature enhancements without burdening end-users or IT staff, maintaining a continuous improvement cycle.
- 12. Built for enterprise-wide collaboration:** Enhances collaboration across your organization with seamless features and integrations, eliminating bottlenecks and communication gaps.
- 13. Industrial copilot with generative AI:** Transforms your interaction with plant data using the world's most potent, explainable, and reliable Industrial Copilot. Using natural language prompts, ask questions and generate visualizations, forecasts, and reports in your language.

# Plan Insights Step-by-Step



## About SymphonyAI

SymphonyAI is building the leading enterprise AI SaaS company for digital transformation across the most critical and resilient growth verticals, including retail, consumer packaged goods, finance, manufacturing, media, and IT/enterprise service management. SymphonyAI verticals have many leading enterprises as clients. Since its founding in 2017, SymphonyAI has grown rapidly to 3,000 talented leaders, data scientists, and other professionals. SymphonyAI is a SAIGroup company, backed by a \$1 billion commitment from successful entrepreneur and philanthropist Dr. Romesh Wadhvani. Learn more at [www.symphonyai.com](http://www.symphonyai.com).

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