

Plantweb Optics Analytics Air Cooled Heat Exchanger Analytics



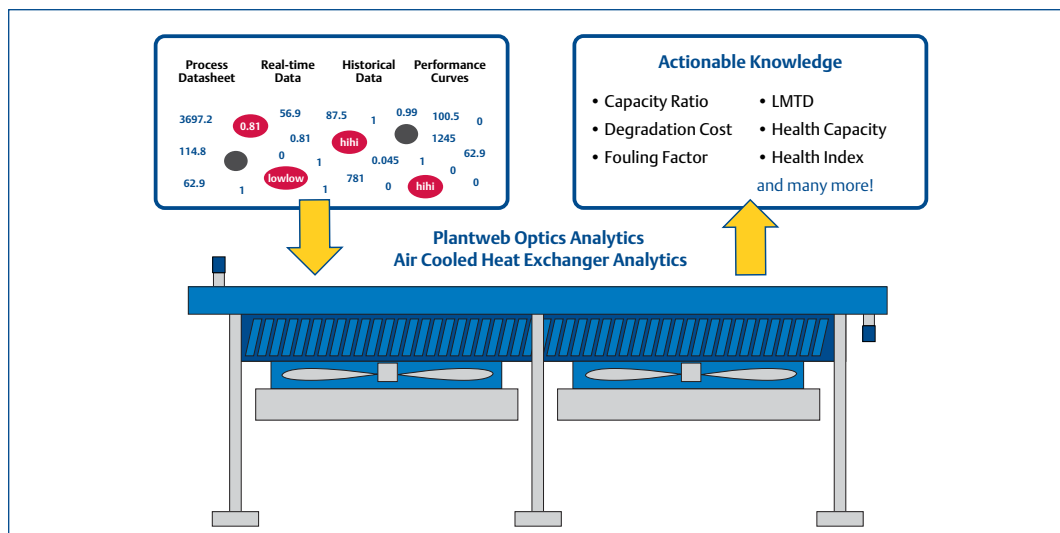
Plantweb Optics Analytics Air Cooled Heat Exchanger Template is a ready-to-use configurable component to monitor health and performance. The Air Cooled Heat Exchanger Templates uses asset process parameters to calculate key performance indicators (KPIs) and easily identifies issues before failure saving costly slowdowns and shutdown.

Key features include:

- Real-time KPIs calculation with visualization
- Early warnings for abnormal conditions
- Easy implementation of machine learning for unique failure modes and predictive models
- Ability to quickly scale up to hundreds of assets

Top 5 Addressed Challenges

1. Combine process and equipment data for a holistic view of health and performance
2. Proactively detect / predict heat exchanger low performance
3. Monitor performance in real time
4. Receive fouling factor and fouling rate continuously versus periodic offline calculations
5. Receive notification before rotating equipment fails through vibration trending alerts



Plantweb Optics Analytics Air Cooled Heat Exchanger template uses thermodynamic models in real-time to handle the most well-known operational challenges.

With the Air Cooled Heat Exchanger template, users can:

- Obtain real-time feedback on setpoint changes to ensure optimal asset performance is achieved and maintained
- Identify impending condition and/or performance issues and prioritize planned activities
- Determine cost of degradation compared to the cost of repair
- Incorporate and plot vibration data

Plantweb Optics Analytics Features & Capabilities

Fast & Scalable Deployment

- Compliant with ISA 95 Equipment Hierarchy model
- Object-oriented design and inheritance of classes' definition, properties, methods, and templates
- Graphical environment based on drag, drop, and connect

Performance Management

- Advanced expert rules to which pattern recognition can be added
- Embedded performance curves to identify recurrent mechanical dysfunction

Proactive Maintenance

- Prediction and detection of abnormal conditions with the ability to add automatic root cause identification
- Online support with pertinent corrective actions
- Enforce best practices for corrective actions using the workflow engine
- Find the root cause of problems with RCA

Intuitive Visualization

- Web dashboard built specifically for an Air Cooled Heat Exchanger complemented by thick client and integration with third party systems
- Intuitive role-based HMI with summary overviews and drill down-capabilities
- Statistical reporting dashboards



“Ready-to-use software component with highly valuable knowledge insights”

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