

Shell Predictive Maintenance Control Valves



Detect Control Valve Anomalies Early to Improve Availability and Reduce Maintenance Cost of Control Valves

Shell Predictive Maintenance Control Valves uses advanced data analytics to support operators with detecting the early signs of control valve failures and make timely interventions before failures cause unscheduled deferment or unplanned downtime. Insights from **Shell Predictive Maintenance Control Valves** can help support your engineers to increase asset availability and reduce maintenance costs through timely intervention and provide insights on the state of the equipment that can be used to improve equipment care strategies and reduce preventive maintenance costs. By providing an application designed specifically for monitoring control valves at enterprise scale, **Shell Predictive Maintenance Control Valves** augments BHC3.ai Reliability's monitoring capabilities where control valve reliability is critical.

With Shell Predictive Maintenance Control Valves, operators can:

- **Monitor the health of control valves** and associated instrumentation, identify assets at risk in advance, and mitigate risks through AI-driven alerts.
- **Embed specialist knowledge** using instrument engineers' expert knowledge about the equipment to tune model training and alerting.
- **Compare multiple automatically trained models** to select the best performing models to use for monitoring.
- **Understand control valve health at enterprise scale** with simple and extensible valve onboarding process and monitoring tools.
- **Enable engineers to intervene early** and take preventative action.
- **Improve turnaround efficiency and focus areas** by using a data-driven approach to prioritize equipment and maintenance tasks.
- **Seamlessly embed insights** into exception based surveillance workflows.

Shell Predictive Maintenance Control Valves Features

- **Self-serve insights** – Access AI insights and set up alerts in a simple, easy to use self-service interface
- **Machine Learning model development and training at scale** – Create predictive maintenance models for up to hundreds of control valves in one go
- **Data evaluation** – Use advanced visualization functions to explore and evaluate the performance of control valves and models
- **Model performance monitoring** – Review tag data, training and test periods, predictions and monitor model performance over time
- **Results visualization** – Visualize alerts against expected and actual valve behavior
- **Broad compatibility** – Deploy on any installation without hardware investments
- **Built on the BHC3 AI Suite** – to enable rapid deployment at enterprise scale

Shell Predictive Maintenance Control Valves Enhances Control Valve Performance

- **Enable early detection of anomalies** to reduce unscheduled deferment and unplanned downtime, ultimately increasing availability.
- **Reduce maintenance costs** through timely intervention.
- **Provide assurance on the state of the equipment** to support proactive equipment care strategies and cost.
- **Improve productivity, availability and performance** of control valves.

