

THIS.

IS.

SID 1.

Product Brochure.

Smart. Industrial. Diagnostics.

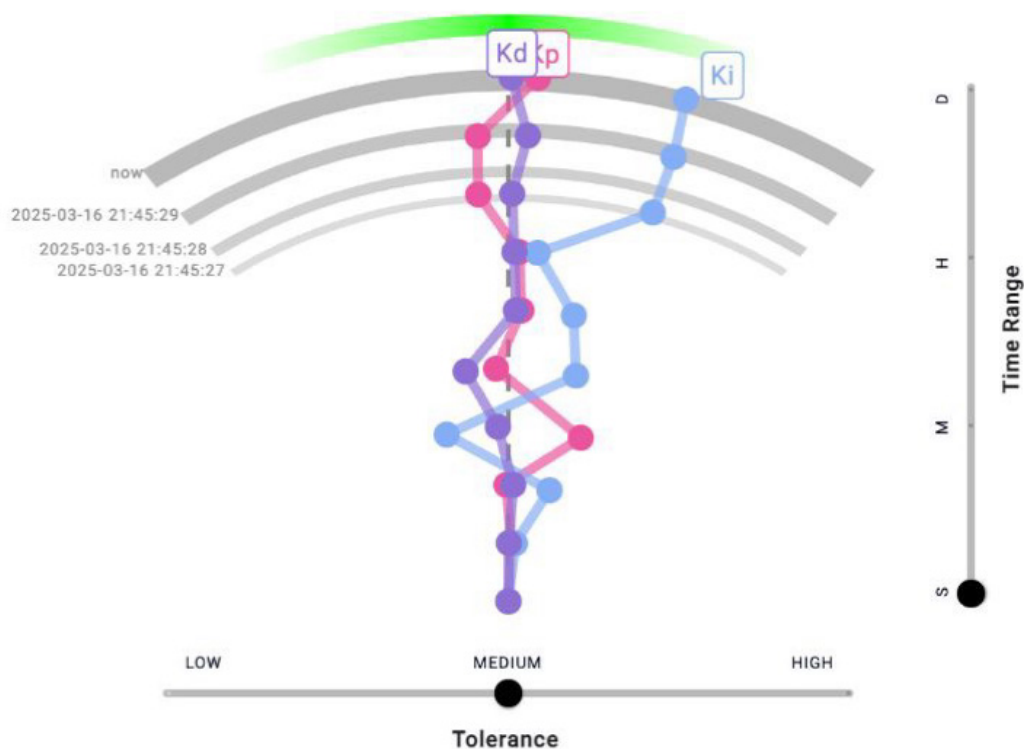


Introducing SID 1.

Smart. Industrial. Diagnostics.

Pronetiqs introduces SID 1 – a standalone **predictive maintenance software** that calculates the mechanical health of your industrial machines **without any external cloud connection**. Using inverse **control loop technology**, it provides early indications of wear & tear and mechanical faults based on a true **mathematical algorithm**.

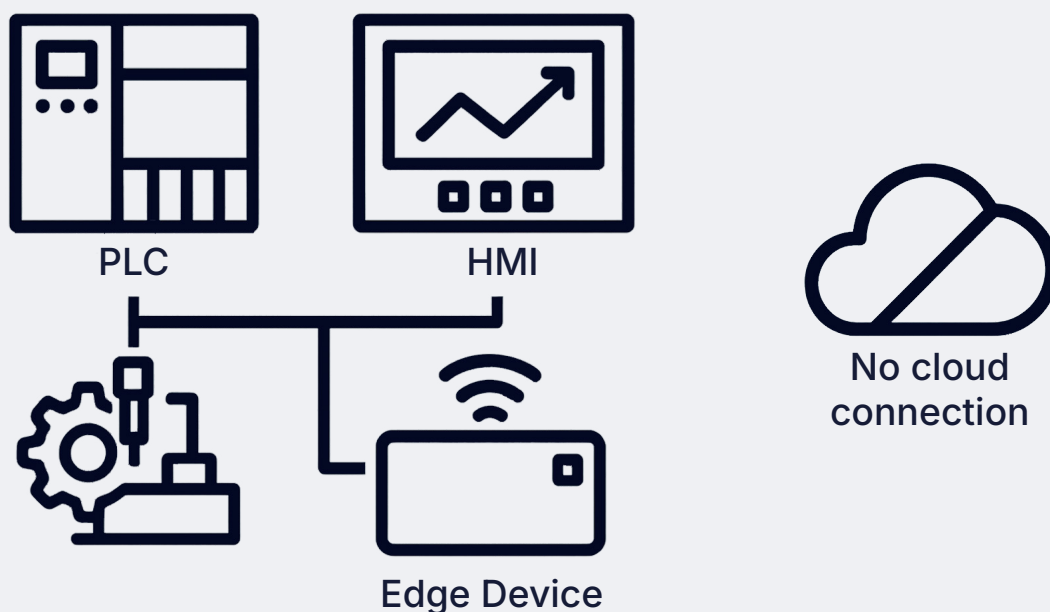
This gives machine owners time to put preventative measures in place, **avoiding higher cost of production, costly downtime or even delayed shipment of products to customers**.



Predictive Power. Zero Guesswork.

Pronetiqs developed an easy-to-use diagnostics software that enables you to take preventive actions based on mathematical certainty, which gives you unprecedented control over your downtime. As the results are based on an algorithm rather than indications or likelihoods, we can guarantee that any changes in your network are for certain. This allows for scheduled maintenance and preventive measures to be taken, so you can be home on time.

SID 1 being a self-contained software-only package operates without a cloud connection, which allows limitless scalability with NO data leaving your premises. It is compatible with any system and not bound to any processes, enabling borderless deployment across multiple sites.



- **Seamless Compatibility:** Works with any PLC, HMI, or Edge device.
- **Enhanced Security:** No cloud connection required.
- **Efficient Data Handling:** No large datasets or raw data storage.
- **Unmatched Flexibility:** Not bound to any specific processes.

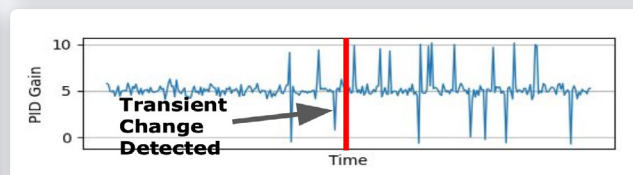
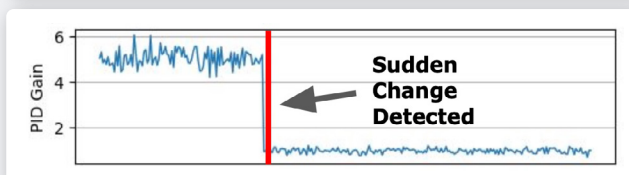
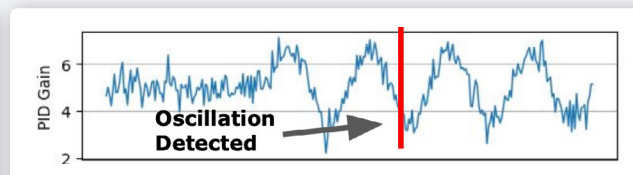
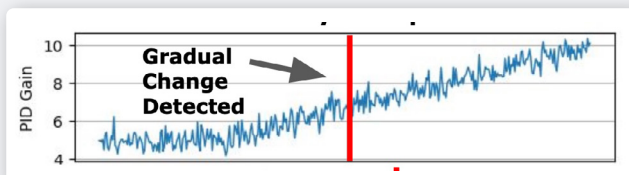
Control Loop technology explained.

SID 1 monitors machine parameters to detect changes to the control loop behaviour. Detecting a change is an indication of mechanical changes to the machine.

Machine parameters are configured using Control Loops, for instance PID's. As an example, PID stands for Proportional, Integrative and Derivate Gains which manage changes to the physical state of the machine such as movement, acceleration, pressure or temperature. SID 1 monitors these variables responsive behaviours once it is installed. As a result, changes to the response behaviour are the indication of changes to the controlled system, which in turn can be concluded to mechanical faults or wear & tear.

These anomalies can be put into four categories:

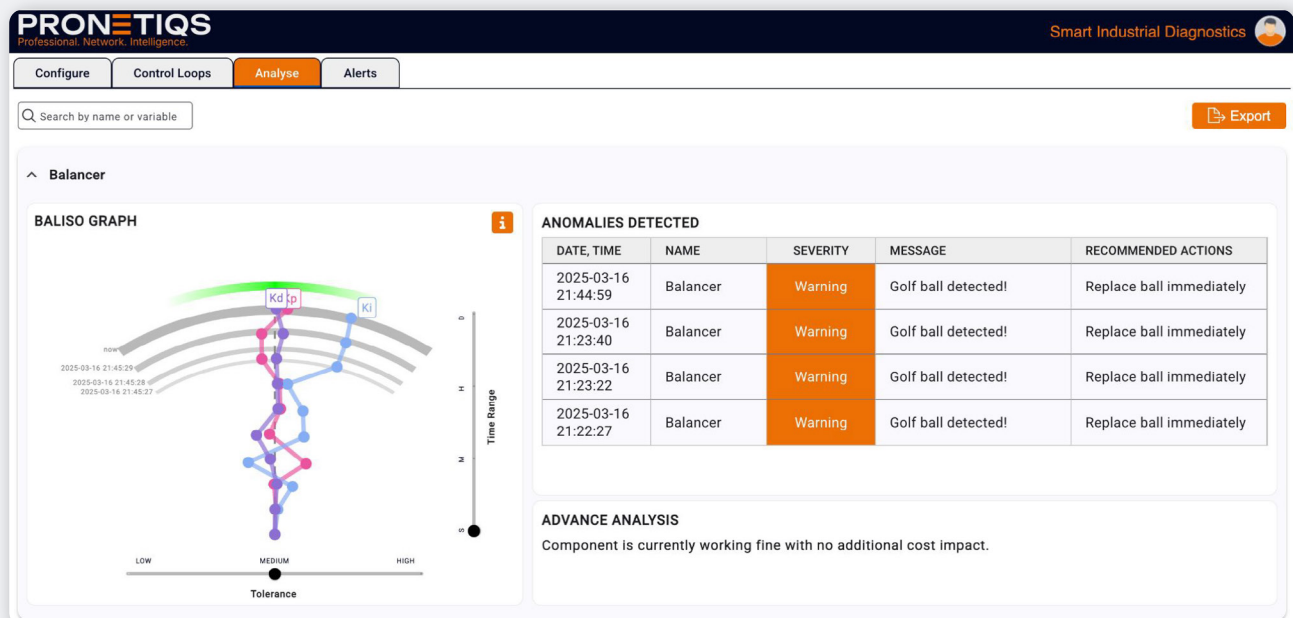
- Gradual change
- Oscillation
- Sudden changes
- Transient changes



The Baliso Graph.

We have created The Baliso Graph; a simple graph that gives you the most important insights. The Baliso Graph visualizes any changes detected within the Control Loop in an intuitive and easy-to-understand way. It displays live data points gathered and separated into the Proportional, Integral and Derivative gains.

As we know that error or fault margins per type of industry vary, the graph lets you define the parameters with which you feel most comfortable when operating your systems without overloading you with alarms.



Control your alerts.

When your gains start to deviate outside of your set tolerance, SID 1 will immediately prompt you with a warning. For each of the control loops added you will be alerted with a severity level of whether it is a “warning” or “critical” case, based on the settings that have been configured within the control loops section. Each alert comes with its timestamp and can be acknowledged once the desired action has been completed. It will also show you the monetary value of the error, making sure that immediate action will be taken to fix it!

This will allow you to keep your head cool even in the worst of circumstances, giving you the power to decide upon the best course of action for your processes.

PRONETIQS

Professional. Network. Intelligence.

Smart Industrial Diagnostics

ConfigureControl LoopsAnalyseAlerts

Current Alerts

Past Alerts

DATE, TIME	NAME	SEVERITY	MESSAGE	RECOMMENDED ACTIONS	STEPS TAKEN	ACK
2025-03-24 09:56:16	Balancer	Warning	Golf ball detected!	Replace ball immediately	<div>Enter Text</div> <div>Submit</div>	✓
2025-02-25 17:44:02	Heaterband 1	Warning	Heater Band has failed	Replace immediately	<div>Enter Text</div> <div>Submit</div>	✓
2025-02-25 17:43:32	Heaterband 1	Critical	Oscillation detected.	Please check this component.	<div>Enter Text</div> <div>Submit</div>	✓

Your data. Your privacy.

SID 1 collected data does not leave your premise! There is no cloud connection to the outside world, keeping your data safe. Calculated information can be viewed via Restful API or HTTPS. Once installed, SID 1 will gather minimal production data from the process and use data points to create its predictive mathematical matrix. Once calculated it will start presenting you with its findings within minutes and will keep on doing so 24/7, 365 days a year: year after year.

The screenshot displays the PRONETIQS Smart Industrial Diagnostics web interface. A modal window is open for configuring a new alert. The modal has a title bar with tabs: Balancer Warning, Standard Gradual Change, Standard Sudden Change, Standard Oscillation, Standard Transient Change, and an 'Add new alert' button. The 'Add new alert' button is highlighted. The modal contains the following fields:

- Name:** A text input field with the placeholder text 'Add new alert'.
- Alert Type:** A dropdown menu with 'Sudden Change' selected.
- Message:** A large text area for entering a message.
- Action:** A text area with the placeholder text 'Replace immediately'.
- Impact of the failure is:** A section with three dropdowns: 'Value' (set to 1), 'Cost Units' (set to '\$ per item'), and 'Cost Type' (set to 'Cost').

At the bottom of the modal are two buttons: 'Delete' and 'Save'.

The background interface shows the PRONETIQS logo, navigation tabs (Configure, Control Loops, Analyse, Alerts), a search bar, and a list of control loops under 'Critical Components' and 'Non Critical Components'. An 'Export' button is visible in the top right corner.

Please verify all control loops have been added.

Who are we?

Pronetiqs is a software development and expertise powerhouse, specializing in diagnostics solutions to monitor internal control behaviours within industrial machines and processes. Its intuitive approach enables predictive maintenance, minimization of downtime, and optimization of operational efficiency.

Additionally, Pronetiqs offers comprehensive network support, consultancy services and certified trainings with more than 50 years of industry experience, providing tailored solutions to enhance connectivity, reliability, and system integration.

Would you like to discover how we can optimize your business processes? Get in touch with us today!

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