

# PID Optimizer



Manufacturing plants are increasingly automated and complex, yet many still rely on outdated PID tuning methods.

Trial-and-error approaches waste engineering time, create inconsistencies, and can't manage interactions between tightly coupled loops: poor tuning directly affects efficiency and profitability.

Orise's PID Optimizer delivers a fast, model-based approach to tuning, ensuring stability, performance, and readiness for today's industrial challenges.

## Main benefits



### Easy Data Input

Wizard for import of data files or direct OPC connection to PLC / DCS.



### Single, Cascade or Multivariable Loop Tuning

Consistent tuning from simple to complex interacting loops.



### Robust Modeling

Data pre-processing with proven identification technology provides smooth models for tuning optimization.



### Tuning Optimization

Real optimization of control-loop behaviour based on engineering specifications (e.g. robustness, overshoot and deviation constraints...)



### Simple Configuration

Support of PID equation templates for all common PLC / DCS systems.



### Saving Time and Improving Performance

Save days or weeks of engineering effort while significantly improving the overall process performance.

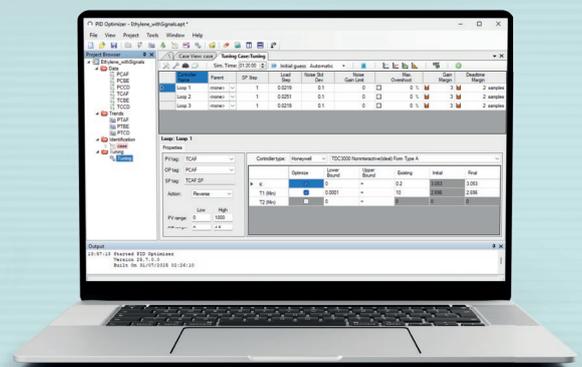
## Our technology

Orise's PID Optimizer is the easy-to-use PID loop tuner that allows you to tune your single and multiple interacting PID loops quickly and efficiently, for any PLC/DCS system.

It ensures loop stability by accounting for worst-case process changes and protects against model errors.

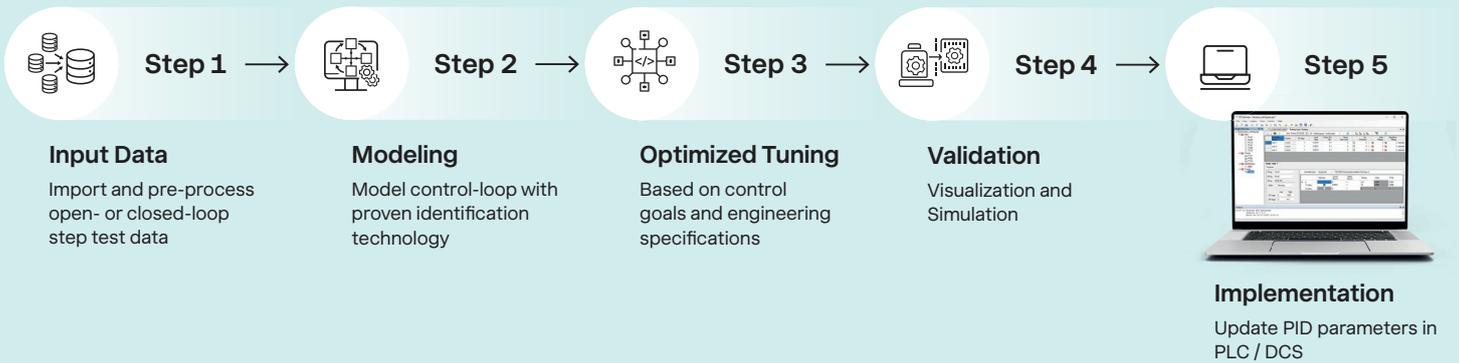
It lets users optimize advanced parameters like setpoint and derivative filters, using the best PID algorithm available.

**The result: faster deployment, improved performance, and reduced engineering effort.**



# How this works

Orise's PID Optimizer delivers fast, reliable, "first-time right" tuning with thousands of configurations tested in seconds, using a simple, streamlined workflow for PID optimization and deployment.



## Supporting services from Orise



### Base layer control services

#### (Model-based) PID Tuning

- PID tuning
- Feedforwards, Linearization, Split range

#### Model Aided Base Layer (Re-) Design

- Complete control redesign
- Dedicated onsite presence
- Capable of simulation studies

#### Control-loop Performance Degradation Detection

- (Cloud) Traditional KPI-based performance monitoring
- (Cloud) AI-based PID degradation performance monitoring

#### PID Optimizer: Model-based Tuning Software

### PID Training Course

#### 3 Day course at Orise office in Boxtel (NL)

- Full Functionality PID Optimizer
- Modeling for PID tuning
- PID control strategies and best practices
- Examples of Batch Reactor, Drum Boiler & Distillation Column

#### Optional on-premise at customer location

- Using real-time data of PID loops of customer asset
- Guided and individual PID tuning by course attendees
- Providing practical PID tuning on the job

Orise Digital is the digital innovation arm of Orise, built to connect and optimize the entire digital process and system landscape. With deep expertise in automation, system integration, and process optimization, we deliver industry-proven tools that enhance connectivity, streamline operations, and turn data into actionable insights. Orise Digital helps enterprises integrate technologies seamlessly, boost efficiency, and stay compliant. As the final link in the digital chain, we turn digitalization from vision into reality—empowering smarter, faster, and more informed decision-making through structured, visualized data.