

# Monitor the health of PID control loops

Use Case Proficiency CSense

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# MONITOR THE HEALTH OF PID CONTROL LOOPS

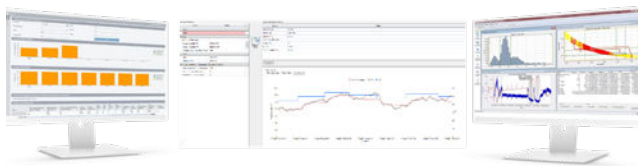


## Challenge

It is estimated that 90% of all control loops in industry are Proportional-Integral-Derivative (PID) loops, yet about 30% of industrial PID loops are often placed in manual mode due to poor performance.

Operators typically become aware of PID loop issues through alarms when the present value (PV) of a PID loop violates an alarm threshold. Problematic loops are frequently switched to manual mode, leaving the operator to control the process manually. This manual intervention often lacks visibility into the performance of the loop and the underlying causes of its poor performance.

Figure 3: Proficy CSense Process+ User Interface



## Solution

A submodule of Proficy CSense, Proficy CSense Process+, continuously monitors the performance of all PID control loops and helps identify underperforming loops. The solution consists of the following approach:

### STEP 01

Configure your control loops in Proficy CSense Process+ to provide a structured approach to quantifying PID control loop health through summarized key performance indicators (KPIs).

### STEP 02

Generate an automated Operations Hub report that ranks the worst-performing loops of all those being monitored.

### STEP 03

Present the structured reporting to users, enabling operators and engineers to focus on the most critical issues.



# Result

This structured approach ensures comprehensive monitoring and identification of underperforming PID control loops, significantly reducing the risk of manual interventions and improving overall process control and stability.



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