

Increase Production by Improving Process Performance

Ovation™ Control Loop
Tuning Software



 **EMERSON™**

Ovation™ Control Loop Tuning Software

Sustain optimal performance with adaptive, advanced process control

Emerson's Ovation™ control loop tuning software, part of the advanced power application suite, helps to improve process performance by adapting to ever-changing plant conditions and reducing process variability and alarming.

Utilizing Aspen Watch Performance Monitor™, the Ovation control loop tuning application monitors loop performance identifies abnormal operation and enables quick tuning adjustments that mitigate the effects of degrading conditions. The application employs rigorous process calculations that:

- Accurately model process nonlinearities
- Continuously assess process performance
- Identifies degraded conditions
- Enables rapid tuning of multiple control loops
- Provides long-term management of non-linear processes

Results -

- Reduces process variability
- Decreases alarm rates
- Optimizes control strategies

Estimated Quantified Value -

- Save up to approximately \$125k annually by optimizing control loop performance
- Reduce process variability by up to 30%
- Decrease alarm rates by up to 50%



\$125k

estimated annual value



30%

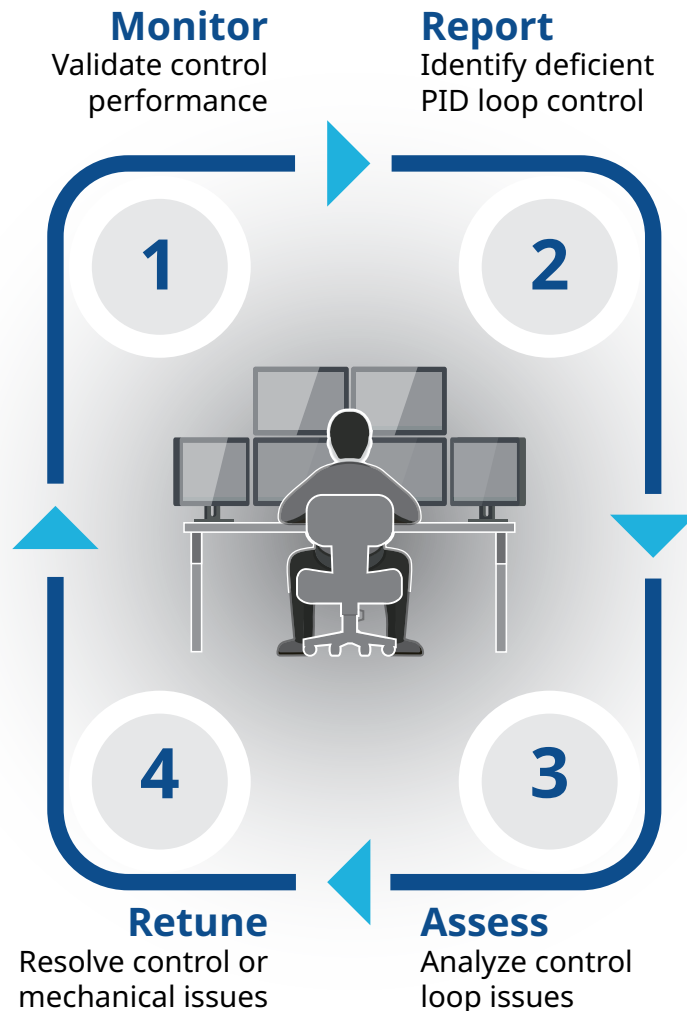
process variability reduction



50%

alarm rate reduction

Optimize Plant Operations by Improving Process Control



Optimal plant performance hinges on a complex web of systems and processes connected by control loops at the center.

Process or asset operation can quickly degrade as the amount of abnormal control loop behavior and unmeasured disturbances increase. Undetected control issues can result in reduced performance which leads to unstable operation.

Emerson's Ovation control loop tuning advanced application leverages Aspen Watch Performance Monitor software to calculate optimal control (PID) tuning using a model-based approach.

The software continuously monitors plant processes for deficient control loop operation. Once a potential problem is identified, the application quickly evaluates, analyzes and helps to resolve the issue through control loop retuning.

Employing a novel, singular model-based approach avoids the tedious iterative rework often exercised in traditional manual tuning actions.

Ovation control loop tuning software accurately tunes PID loops for stable process operation leading to higher production outputs which results in increased revenue and profitability.

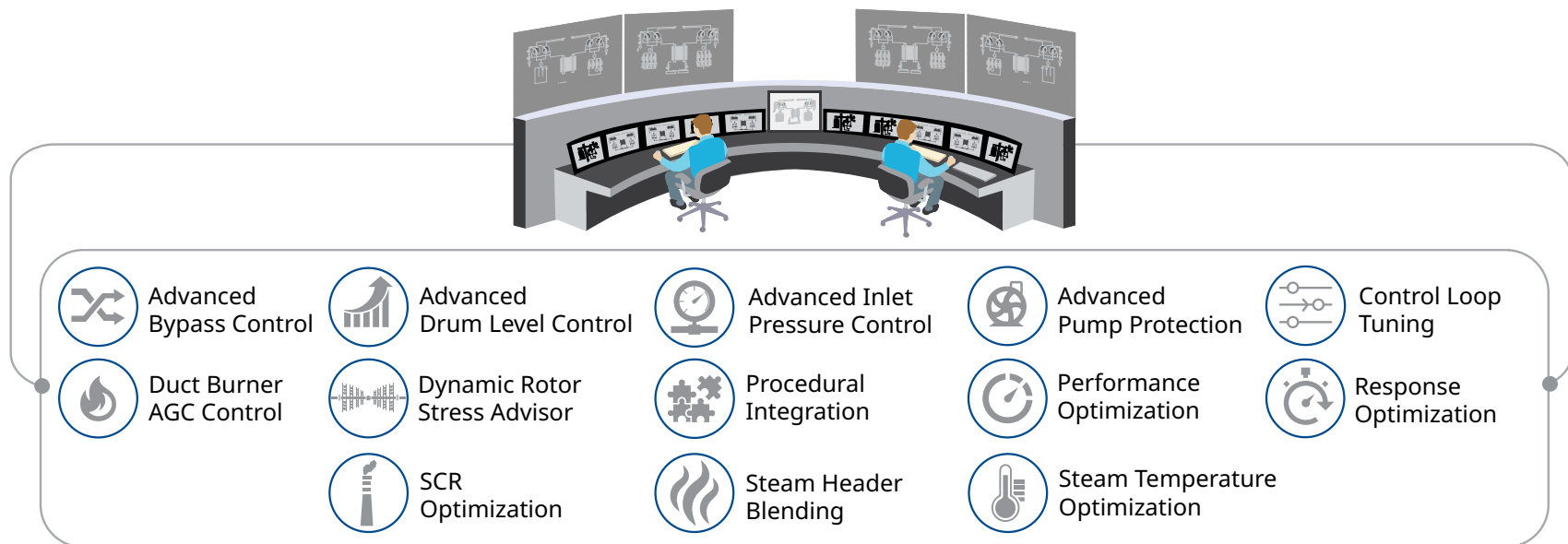
Ovation™ Advanced Power Applications

A suite of software applications that improve operational flexibility, increase reliability and availability and optimize environment performance

Emerson's Ovation™ automation software and technology was designed from the ground up to help customers achieve operational excellence and create a sustainable competitive advantage.

The Ovation platform's broad range of field-proven control design techniques leverage over five decades of expertise to provide tighter, more precise and reliable process control. Integrated advanced power applications further enhance operations by automatically balancing performance or economic improvement opportunities to deliver optimum results.

Installed applications provide immediate operational and financial returns that can offset alternative capital expenditures. Emerson's high-value and low-risk software, developed using advanced algorithms and modeling methods, is field-proven to provide sustainable benefits that address specific control challenges.





Emerson and AspenTech Better Together

Together, Emerson and AspenTech provide software that delivers customer outcomes from edge to enterprise – providing safer and more sustainable operations, increased profitability and improved reliability.

Our combined software solutions optimize operations through industry-leading state-based control in the Ovation automation platform to maximize process performance.

We provide a comprehensive, holistic approach to asset optimization to achieve the highest possible value across the entire asset lifecycle.

We focus on the design, operations and maintenance of assets – while optimizing for safety, sustainability, reliability and performance.

Emerson's Ovation advanced application suite combined with AspenTech's advanced control software delivers an integrated solution for improving asset control strategies

The Ovation control loop tuning advanced application leverages Aspen Watch Performance Monitor to help customers sustain optimal process performance.

For more information visit
www.Emerson.com/Ovation



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