

A photograph of an industrial plant, likely a refinery or chemical processing facility, featuring several tall distillation columns and a complex network of pipes and walkways. The scene is set against a clear sky at dusk or dawn, with some lights visible on the structure. A semi-transparent blue rectangular overlay is positioned on the left side of the image, containing white text.

Improve Plant Dynamic Performance and Stability

Ovation™ Advanced Drum Level Control Software

The Emerson logo, which consists of a stylized blue and white flag-like symbol, is located in the bottom right corner of the image, positioned above the company name.

EMERSON



The Challenges of Conventional Drum Level Control Strategies

Are your drum level controls failing to predict and smartly manage faster ramp rates and trips induced by significant transient process events?

Conventional drum level control strategies often sacrifice plant dynamic performance to maintain stability under non-steady-state conditions.

For today's conventional power generation fleet, drum level trips induced by significant transient process events are one of the leading contributors to reduced plant reliability.

By implementing a modern, evolved method of advanced drum level control, limitations in conventional control implementations can be overcome.

Combining embedded transient-level response models with the impacts of physical drum characteristics simultaneously improves drum level stability and control performance over the entire operating range.

Consider your current drum level control strategy:

- **Do you wish you could achieve better control stability while operating at higher ramp rates?**
- **Would less wear and tear on your drum level control valves help your O&M budget?**
- **Do you need smarter drum level controls for responding to transient events?**

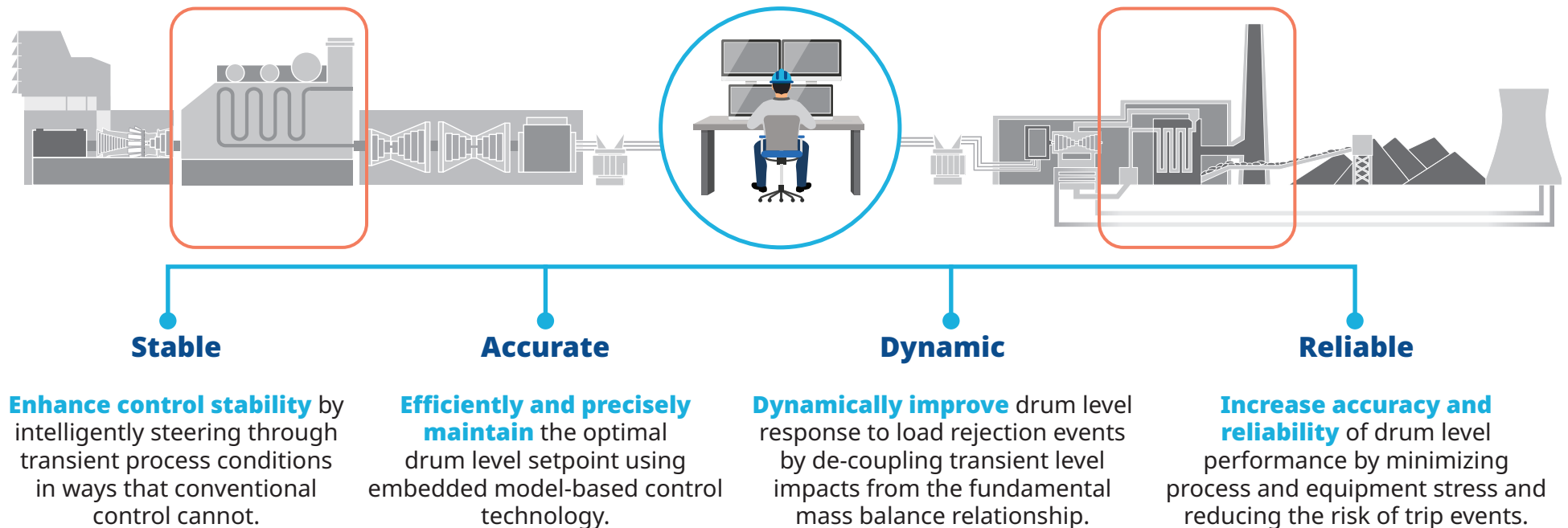
Ovation™ Advanced Drum Level Control Software

Improve dynamic performance and unit resilience by proactively managing transient operating conditions

In the current operating environment, conventional power generating assets must respond to the variable generation from renewable resources. Responding quickly and effectively to load changes places greater demand on the dynamic control capability of conventional units.

The Ovation advanced drum level control solution addresses these challenges, allowing you to operate with confidence at the limits of your allowable equipment ramp rates. The application provides increased operational flexibility that enables better response to changing system or market conditions, maximizing your performance while minimizing reliability risks.

Emerson's Ovation advanced drum level control software uses embedded predictive control capabilities to improve dynamic control performance and reliability. By intelligently controlling drum levels through transient events, the application increases the stability and resilience of this critical process area.



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.



Advanced Bypass Control



Advanced Drum Level Control



Advanced Inlet Pressure Control



Advanced Pump Protection



Control Loop Tuning



Duct Burner AGC Control



Dynamic Rotor Stress Advisor



Procedural Integration



Performance Optimization



Response Optimization



SCR Optimization



Steam Header Blending



Steam Temperature Optimization

For more information visit
www.Emerson.com/Ovation



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