csTuner
powered by control station

Are Your Advanced Controls Full of Hot Air?

In the highly competitive world of process manufacturing even the cost of steam can be an important financial consideration. Although only a source of low-density energy, waste steam is virtually free as it's collected from other industrial processes across the production environment. Compared to the typical cost of steam production, waste steam comes at a fraction of the cost of producing intermediate steam and can prove a valuable contributor to profitable plant operations.

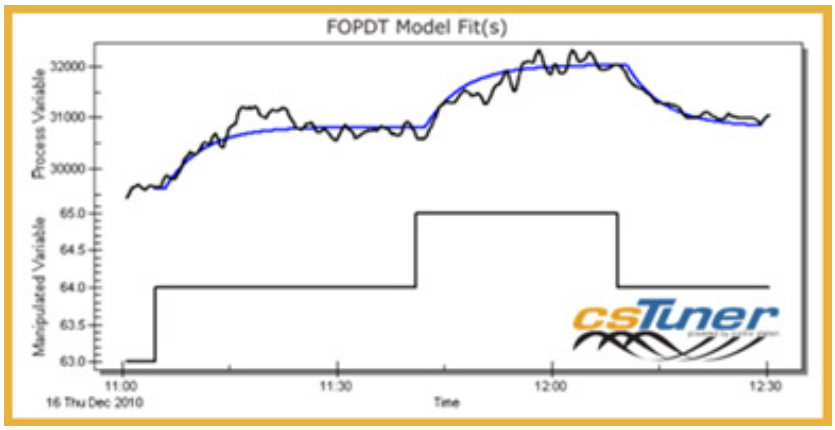
Some advanced process control strategies applied in industry look to maximize the use of waste steam. But when process upsets occur persistently a plant's uptime is put at risk. Even the most advanced control strategy can be derailed and cost considerations quickly fall by the wayside.

"We experienced frequent problems with waste steam flow control—the controller regulating the process was overly aggressive and resulted in unacceptable upsets. Each upset forced us to disable the waste steam optimization and rely on more expensive medium pressure steam. With csTUNER we quickly identified and corrected problems with the controller's tuning parameters. Uptime of the advanced controls has been dramatically improved."

Joe Mansfield - *Process Control Engineer,* SABIC Innovative Plastics

When a Picture Tells a Thousand Words

As a leading supplier of chemicals, polymers and fertilizers, SABIC actively pursues opportunities to maintain both reliable production and operating costs. To achieve those goals the company's plant in Mount Vernon, Indiana employed an advanced control strategy that leveraged lower cost waste steam. Unfortunately, the process' regulatory controllers were tuned too aggressively and upsets became frequent, forcing the disabling of the advanced control strategy.



More costly intermediate steam was regularly needed to drive the process as attempts to retune the regulatory controllers failed due to the process' complex and oscillatory dynamics.

The Mount Vernon plant operates the CentumVP™ DCS from Yokogawa. Leveraging csTUNER – an innovative PID diagnostic and tuning solution powered By Control Station – SABIC's engineers were able to quickly and accurately model the process dynamics in spite of oscillatory behavior. From the software's analysis it was clear that the existing parameters were too aggressive and were driving the process towards the upset condition. The recommended parameters from csTUNER significantly increased the control loop's stability and reduced the potential for future upsets. This has allowed operations staff to utilize the less costly waste steam and regain the upper hand on production cost controls.

Finally – tune your facility's most complex PID control loops for optimal performance.

Contact us today and learn how csTuner can solve your industrial grade tuning challenges.
Contact us today at +1 (860) 872-2920 or sales@controlstation.com.