A Stable Process is a Profitable Process

Improving the Stability of Wax Temperature

Engineers in the Basic Materials market understand the value of Set Point tracking as a means of controlling business-critical production processes. Simply put – better Set Point tracking results in improved disturbance rejection and more consistent product quality. That makes for safer and more profitable production, and Control Station's LOOP-PRO is making that possible.

For one producer of copper rod, LOOP-PRO was applied to several of the mill's underperforming PID controllers that were associated with speed and process water treatment systems. In addition to improving process stability, mill staff sought to increase throughput and overall product quality. LOOP-PRO proved to be an easy-to-use technology that consistently and accurately modeled data feeds from the mill’s data historian. The technology’s graphic displays made it easy for users to tune PID controllers for disturbance rejection, facilitating improvements to process stability as well as increases to both throughput and quality.
Oscillations within wax temperature process were impacting product quality and requiring frequent maintenance of the associated instrumentation. In the “Before” section of the graphic below, oscillations are seen in the process that cause the valve to swing from full open to full close. LOOP-PRO was applied in the analysis of closed-loop bump-test data. The technology produced an accurate model of the process and enabled mill staff to quickly tailor tuning parameters to meet their control objective. The results were as plain as day.

Reducing Process Variability
Tests demonstrated notable improvement in consistency. Variability in wax temperature was decreased by 60%. Statistics showed a reduction in Standard Variation from 2.0% to 0.8%.

Extending Equipment Life
Tests produced other statistical data that showed a 90% reduction in Valve Travel, dropping from 135%/Hour to 17%/Hour.

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

Learn why LOOP-PRO is the only product that accurately models oscillatory, noisy process data. Contact us today at +1 (860) 872-2920 or sales@controlstation.com.