

### Monitoring Versus Controlling Viscosity

#### ISSUE:

### Corporate Mandate Automates Viscosity Control

A multinational, food packaging manufacturing company desired to upgrade their over-varnish, fluid dispensing system and wanted a leaner, more consistent and efficient process. Their corporate offices decided a fully integrated automated temperature and viscosity control system was in order for every one of their plants - over 100 in total.

They called on Saint Clair Systems to evaluate their current fluid dispensing system and recommend equipment that would improve productivity.



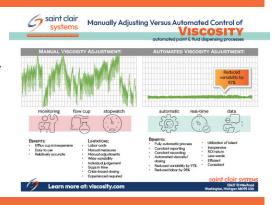
#### **A**NALYSIS:

#### Manual Measures Mask Actual Performance

Upon arrival, Saint Clair Systems set up to measure current viscosity to establish a baseline measure.

Operators "controlled" viscosity by comparing viscometer data to manual cup measures. Every two hours a manual water dosage occurred, (based on trial-by-error), seemed to place measures within range.

However, data collected during "manual control," indicated viscosity variations were unacceptable. Note that measures averaged 67.75 cup seconds, with a minimum of 22 cup seconds, to a maximum of 92 cup seconds. Optimal measure for this project was 30 cup seconds.



#### SOLUTION:

## Implementation of the VTS/ Viscometer and the VC4500 / Controller

With the need for tighter viscosity control evident, implementation of an inline, viscosity temperature sensor (VTS), as well as a fluid process controller, (VC4500) was initiated.

This equipment, along with the

customer's existing programmable logic controller (PLC), provided continuous real-time control.

The system engaged, self-corrected continuously around-the-clock. And continues to do so to this day.





### RESULTS & BLOG:

# Reduced Variability by Over 97 Percent!

The implementation of the VTS and VC4500 brought immediate results It reduced variability by over 97 percent, reduced rejects significantly, as well as the number of man hours required to measure every two hours and water dose manually.

To the human eye, a system may appear to be efficient, however, requesting a free process evaluation would reveal your "numbers" and get you on the road to profitability and productivity. Read more at: viscosity. com/free-process-evaluation.

