

# Process Temperature Control



## INDUSTRY CASE STUDY

### PROBLEM

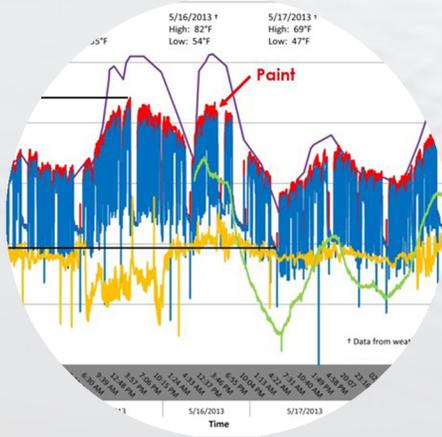
A Tier One Class A liquid finisher, applying prime coat, base coat, and clear coat to automotive exterior parts, was looking to control Orange Peel and DOI. Pressure from the OEM customer made it clear that the usual standards for acceptability were changing. The traditional methods of seasonal blends and operator adjustments were unable to generate consistent results without overwhelming the finesse department.



# PROCESS TEMPERATURE CONTROL CASE STUDY

## THE ANALYSIS

Wide variations in temperature from morning to night and from season to season were driving the company to make changes to formulations and required operators to adjust the process. For instance, when adjustments to viscosity were made with solvent/water, the formulation changed. While the adjustments fixed the spray pattern, the change to volume solids and rheology caused the finished product to change. The finesse department could not keep up.



## THE SOLUTION

Utilizing a small and simple Temperature Control Unit and our Patented Recorable Coaxial Hose, we were able to control the paint temperature to within  $\pm 1^\circ$  F at the point of application. This minimized both coating variation and operator adjustments.

## THE RESULTS

- Improved overall yield by **4.5%**
- Labor savings of **60 hours per week** in finesse and repair
- System paid for itself in **less than one month**



*Since 1990, Saint Clair Systems has supplied over 3,600 temperature control systems around the World. Our engineering team provides cost effective solutions to manufacturers that understand that quality and productivity are too important to leave to uncontrolled variables. If you are interested in controlling your process, please contact us or visit our website for additional information.*