# Process Temperature Control



Saint Clair Systems supplies an application solution to the Flex-n-Gate manufacturing plant in Evart Michigan. The resulting improvements in quality and material savings are dramatically better than the original estimates.

**INDUSTRY CASE STUDY** 

# **CLEAR COATING**

### THE EXPECTED BENEFIT

Flex-n-Gate, a progressive manufacturing company with 48 manufacturing facilities globally, maintains an aggressive continuous improvement program.

They were optimistic that an effective temperature control solution could provide them with significant productivity gains.



### PROCESS TEMPERATURE CONTROL CASE STUDY



#### THE ANALYSIS

Based on our analysis, we determined that we could provide Flex-in-Gate with the following four improvements:

- 1- Reduce clear coat usage by 3%-4%
- 2- Reduce the use of cutting solvents by 25%-30%
- **3- Reduce scrapped parts**
- 4- Increase first pass yield

## THE SOLUTION

Saint Clair Systems worked with Flex-n-Gate personnel to determine the optimum operating parameters, including temperature, to accomplish their desired results.





#### THE RESULTS

The following quote comes directly from Flex-n-Gate:

- "We have seen a real reduction in labor associated with problem solving and adjusting clear coat viscosity. There's a high level of consistency in our clear coat quality and we've seen a significant reduction in orange peel strictly due to temperature control."
- 5-7% reduction in material use to achieve production output
- 40-65% reduction in cutting solvent used to adjust viscosity of the clear coat
- Significant reduction in scrapped parts due to improved quality control
- Significant increase in first pass yield

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.