

# Process Temperature Control



*Saint Clair Systems collaborates with a global manufacturer of wind turbine blades to overcome the combination of variations in temperature and a paint formulation they were not allowed to alter.*

## INDUSTRY CASE STUDY

# PAINT VISCOSITY ISSUES

## THE PROBLEM

A wind turbine blade manufacturer had to idle their automated paint equipment due to fluctuations in paint viscosity.

Product standards prevented them from changing the paint formulation by adding solvents and turned to a manual spray method. This slowed their turn-over time and added cost overruns in production.



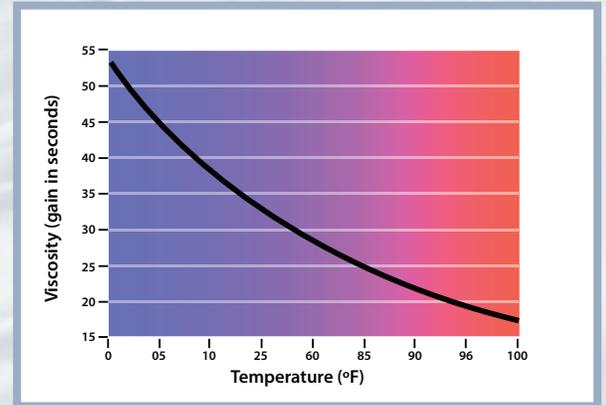
# PROCESS TEMPERATURE CONTROL CASE STUDY

## THE ANALYSIS

The paint they required to use was very sensitive to normal changes in ambient temperatures and they were prohibited from making changes to the paint formulation

Temperature variations caused viscosity changes that created surface finish issues including paint build-up and voids

Inconsistency in manual spray applications was causing abnormal paint coverage and labor costs.



## THE SOLUTION

- Employ patented **point-of-use solution** to hold temperature consistent at the 77°F temperature (determined optimal)
- Provide a demonstration unit to support proof of effectiveness
- Use the idled automated spray system to improve consistency while reducing cost and labor

## THE RESULTS

- Reimplementation of the automated spray equipment immediately **reduced labor costs by 50%**
- Improving viscosity through automation generated an **immediate 4% reduction** in wasted paint volume
- Elimination of surface defects helped them support their 30 year warranty requirement and bring additional business to their U.S. facilities



*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.*