

Process Temperature Control

A tier 1 automotive supplier improves painted surface finish resulting in additional luxury automotive business. The solution provided a return on investment in less than five months.



INDUSTRY CASE STUDY

CONTROLLING ORANGE PEEL

THE PROBLEM

Global supplier of painted parts to various automotive manufacturers was suffering a first pass yield of less than 40% due to surface appearance issues. ("Orange Peel")

Unable to support the requirements of luxury manufacturers, this prevented them from expanding their business.



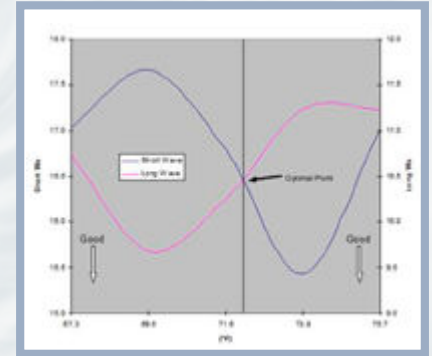
PROCESS TEMPERATURE CONTROL CASE STUDY

THE ANALYSIS

Thermal analysis of the painting process revealed that the paint being applied could range from 65° to 95°F.

Wave-scan analysis of finished parts showed the application temperature required to get the ideal surface finish was in a 3°F window.

For more detail on the case study and others, visit www.viscosity.com



THE SOLUTION

Using our patented equipment and processes, we controlled the paint temperature to within

+/- 1°F at the point of use.

We used our capability to determine the paint application temperature required to achieve the surface finish specified by each automotive customer.

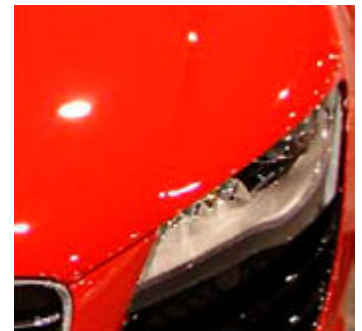
Our solution added no additional paint volume to the system and required no additional cleaning time or solvent.

THE RESULTS

Upon implementation, the desired finish was established for each paint color and each part supplied, and the plant's first pass yield increased to over 90%.

The luxury car manufacturer accepted 100% of the next shipment and agreed to additional business with the stipulation that Saint Clair Systems Temperature Control was part of the process.

The ROI was less than 5 months



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.