

Process Temperature Control



Saint Clair Systems worked with Tata Motors to resolve recurring and unpredictable line stoppages experienced at the manufacturer's Pune Facility. With our patented technology and expertise, SCS delivered a customized approach to effectively control sealer temperature and produce stable and repeatable results.

INDUSTRY CASE STUDY

PROBLEM

The Pune facility was experiencing frequent and unpredictable line stoppages resulting from dispense pressure faults in their body shop sealer cells.

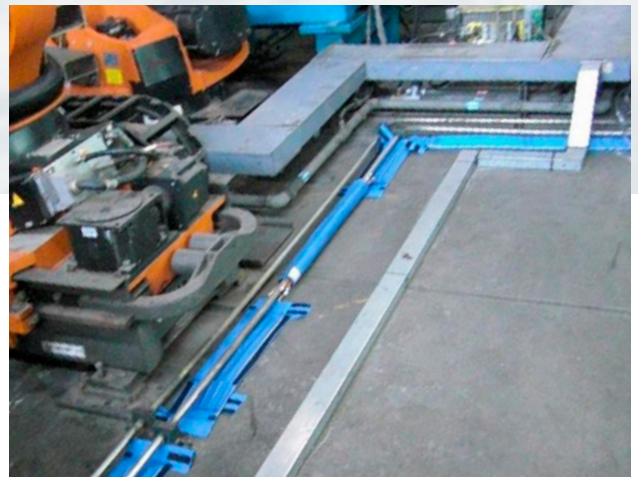


PROCESS TEMPERATURE CONTROL CASE STUDY



THE ANALYSIS

Analysis of their sealer system showed that the pressure drop in the distribution piping was varying due to temperature based changes in sealer viscosity. This was related to both day-to-night and season-to-season temperature fluctuations.



THE SOLUTION

Saint Clair Systems developed a system utilizing its patented Traced Cover and Coaxial Hose technologies to isolate the distribution piping from ambient influences and control the temperature of the sealer along its path, all the way to the point-of-dispense.



THE RESULTS

Controlling the temperature of the sealer at all points in the system resulted in a stable sealer viscosity. This provided multiple benefits:

- A stable pressure drop profile in the distribution system, which eliminated line stoppages due to pressure faults and provided a constant, repeatable pressure at the applicator.
- A stable viscosity at the applicator nozzle, which resulting in controlled, consistent, and repeatable dispense quality.
- Reliable system operation independent of environmental temperature fluctuations.

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.