

## How Can I Tell if Temperature is Negatively Impacting My Process?

# It's Too Cold for Blisters

### ISSUE: BLISTERS FORMING ON STANDARD COIL COATING JOB

A coil coating manufacturer was having blister issues on a product ran dozens of times in the past. By process of elimination, the manufacturer addressed nearly every variable that could impact the material's temperature.

The blisters persisted. Like most operations, the process is to check the viscosity of the coating and then adjust with solvent. Solvent dosing was then added to the process in order to reach target viscosity, yet the blisters persisted.

### ANALYSIS: THE MATERIAL'S PATH

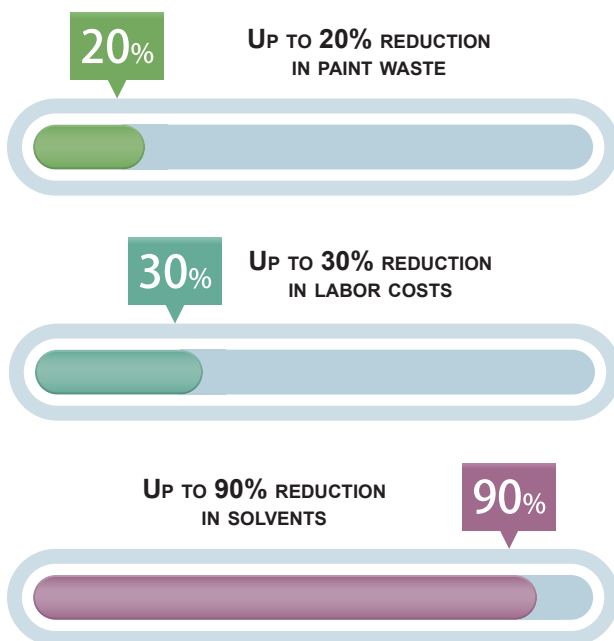
After evaluating the process from point-of-application backward, temperatures surrounding the material's path appeared to be controlled, up to the last step, the warehouse. Indoor heaters were at capacity, yet high-lo drivers were bundled-up in winter coats.

The large overhead doors were in constant motion allowing bitter cold air masses to settle on the floor and force the heated air from the "temperature-controlled area" upward.

The cold air surrounded the material drums and the paint acclimated to the bitter temperatures. This was how the paint was being delivered to the line, which triggered the excessive solvent dosing.

In the curing oven, as the solvent-dosed paint started to skin over, the excess solvent below its surface, attempting to escape, lifted the paint's skin and formed the blisters.

### SOLUTION: POINT-OF-APPLICATION TECHNOLOGY



**Synopsis:** Temperatures surrounding a material's path that are not within the supplier's recommended range (bitter cold) affect material viscosity (behavior) triggering inaccurate solvent additions, resulting in blistering while curing.

**Solution:** Implement a temperature and viscosity control solution that will precisely control temperature at the time it's needed most, *at the point-of-application*. The technology guarantees temperature and viscosity remain constant and deliver predictable and repeatable results that lead to:

- Repeatable line setup parameters
- Consistent film-build across web/strip
- Increased throughput
- Up to 20% reduction in paint waste
- Up to 30% reduction in labor costs
- Up to 90% reduction in solvents
- Up to 97% reduction in process variables



Learn more at:  
[viscosity.com/blogs](https://viscosity.com/blogs)

