

# Combining Zinc Phosphate Products, Control and Service Solves Coating Quality Problems While Reducing Chemical Usage

## Challenge

A major appliance manufacturer was experiencing variable zinc phosphate coatings that led to unpredictable quality performance. In addition, they were having particular difficulty coating one type of metal with their prepaint zinc phosphate process.

## Solution

Working with the wastewater treatment team that already had business in this plant, the GE Water & Process Technologies team selected a Guardian prepaint zinc phosphate process that would meet the customers coating requirements. AccuTrak controllers were then installed on the chemical process and rinse tanks to ensure consistent treatment results. By combining their efforts, the GE teams were also able to provide extra in-plant time for increased coverage, improved technical services and support, and more extensive problem-solving activities.

## Results

Implementation of the Guardian chemical treatment program and AccuTrak controllers resulted in an immediate improvement in finishing line performance, with more uniform coatings, increased reliability and fewer rejects. Examination of the problem metal showed that it would not accept a zinc phosphate coating because it was already passivated. In addition, GE was able to eliminate one chemical from the pretreatment program, simplifying the process, minimizing sludge generation and reducing operating costs.



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