

# CASE STUDY

## Surface Finishing

## White Goods Manufacturer Saves Over \$300,000

HOUGHTO-CLEAN™ 8170 | HOUGHTO-PREP™ ZP-5 | HOUGHTO-SEAL™ ZG

### The Challenge

A leading manufacturer of internal components for household appliances, faced significant challenges in their pretreatment process, including:

- Excessive use of defoamers, costing over \$100,000 annually
- Frequent line spills leading to production downtime
- High operational costs in reaching control parameters

### The Solution

Quaker Houghton's expert team conducted a thorough analysis and, after noticing an inefficient compatibility between the competitor's own cleaners and lubricants, Quaker Houghton recommended our surface finishing package of HOUGHTO-CLEAN™ 8170, HOUGHTO-PREP™ ZP-5, and HOUGHTO-SEAL™ ZG.

#### Key outcomes for the customer included:

- 100% elimination of defoamer use
- 38% reduction in water consumption annually
- 8% savings in gas
- 81% reduction in overtime labor
- Customer saved over 180,000 USD annually with the above improvements

### Customer Testimonial

"I am delighted with Quaker Houghton's products and service, with all the savings you are giving our company. You are setting a precedent very difficult to match. It's too bad I didn't know of Quaker Houghton before, I have never been offered this kind of savings and technical service."

-Manufacture Engineer Manager

### The Benefits

- Optimized the pretreatment process by reducing from 6 to 5 steps, enhancing efficiency and minimizing resource usage
- Reduced energy consumption by lowering pretreatment control temperature from 140°F (60°C) to 115-120°F (46-49°C)
- Extended cleaning intervals from weekly to every 1.5 months, significantly decreasing labor demands and downtime
- Improved sustainability by reducing wastewater generation and environmental impact

### Process and Equipment

#### MANIFOLDS FOR STOVES AND OVENS

Parts	Manifolds for stoves and ovens
Materials	Carbon steel
Machine	6-step spray pretreatment machine
System size	4,400 gal
Water hardness	0 ppm
Concentration or Ratio	4% Defoamer: 400 l / mo to 0 l / mo with QH
Operations	Paint pretreatment



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### 500 hours of Saline Chamber Reference



Competitor's product



Quaker Houghton product

