



**BIRKO®**

**PROTECTION  
WITH PRECISION™**

## **Birko Elite 360® Case Study**

### **Pathogen Reduction in U.S. Turkey Plant**

#### **About the Study**

A large U.S. turkey processing facility conducted a study to determine the effectiveness of Peracetic acid, applied by the Birko Elite 360® electrostatic system, for reducing *Salmonella* and *Campylobacter*.

Turkey parts were spot inoculated with a cocktail of *Salmonella* (5 strains) or *Campylobacter* (2 strains) and 30 minutes allowed for attachment before the antimicrobial treatment was applied. Inoculated parts were treated with a high or moderate concentration of PAA, and untreated controls were treated with electrostatically applied water.

PAA solutions were prepared by manual dilution of a 22% concentrate in a reservoir that fed the electrostatic system. PAA was applied at moderate (1300 ppm) and high (1700 ppm) concentrations. During each control or treatment run, 18 pieces were treated. After treatment, each portion was sampled microbiologically via the standard rinsate method using BPW and bacterial levels enumerated by Campy Tempo and Hygenia Salmonella Quantification (SalQuant).

#### **Findings**

The PAA applied by Elite 360 was highly effective at reducing the microbial load on the turkey parts.

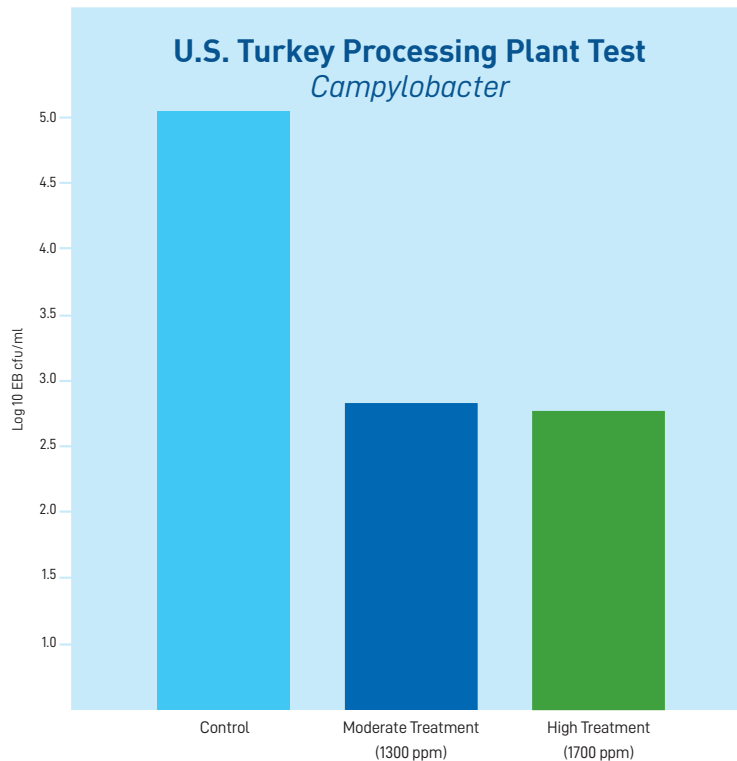
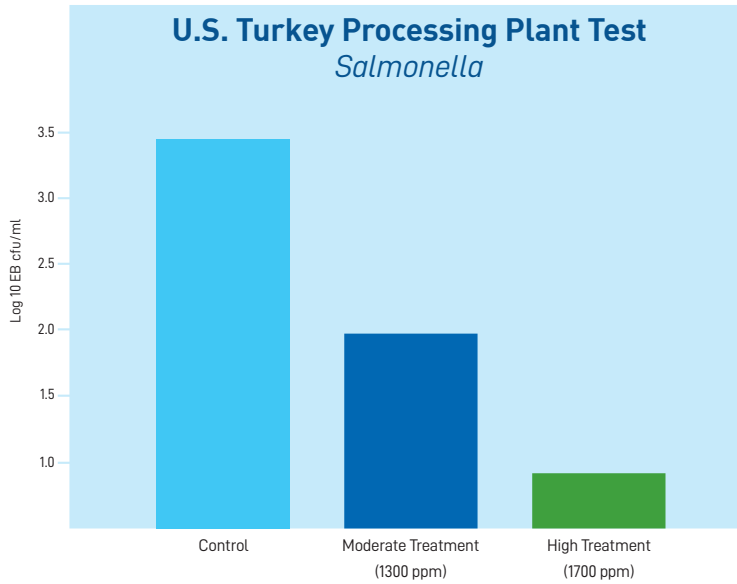
The 3.44 log pretreatment for *Salmonella* was reduced by up to 2.54 log post-treatment.

The 5.01 log pretreatment for *Campylobacter* was reduced by up to 2.20 log post-treatment.



# Elite 360<sup>®</sup> Case Study

## Real Results



## BIRKO SOLUTIONS

The U.S. Department of Agriculture (USDA) granted Birko a Letter of No Objection for PAA to be applied on poultry by the Elite 360<sup>®</sup>.

For best results, use with Birko's PAA solutions:

- BirkoSide 15
- BirkoSide 22

Birko continues to innovate food safety solutions, specializing in resource savings through precision application of antimicrobials and water.

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