

BEVERAGE CASE STUDY

AREA OF CONCERN

Sterilex was contacted by a global beverage manufacturer with microbial concerns about their capper chucks across all lines.

ISSUE

For several years, the plant has encountered intermittent microbial counts outside of their internally established limits on line capper chucks. Current sanitation procedures did not yield consistent results. High microbial counts inside capper chucks may lead to product quality issues, downtime, and loss of product.

BACKGROUND

Capper chucks contain small harborage sites that make them difficult to thoroughly clean. Other chemistries were trialed after reinstalling the capper chucks but yielded inconsistent results. Sterilex was brought in as a more robust, repeatable addition to the current Sanitation Standard Operating Procedure (SSOP) to eliminate the challenges associated with capper chuck harborage sites.

RECOMMENDATIONS

Sterilex proposed the following actions:

1. Remove capper chucks from the line
2. Foam with an alkaline cleaner
3. Rinse
4. Soak in 12.8 oz each of Sterilex Ultra Disinfectant Cleaner Solution 1* and Sterilex Ultra Activator Solution per gallon of water for 10 minutes
5. Rinse
6. Re-install capper chucks to line
7. Swab capper chucks
8. Spray capper chucks with a final no-rinse sanitizer

*Sterilex Ultra Disinfectant Cleaner Solution 1 EPA Reg. # 63761-8

“ When used correctly and consistently, Sterilex products are the gold-standard when it comes to mitigating microbial issues. If there is an issue and the plant needs it to be resolved, this is my “kill it with fire” solution.

– Distribution partner

RESULTS

Prior to Treatment

VALVES/CAPPER	M-TGE	SAMPLE SIZE	DEFECT ACTION	Y&M	SAMPLE SIZE	DEFECT ACTION
Capper #1	TNTC	Swab	10 CFU	TNTC	Swab	10 CFU
Capper #2	TNTC	Swab	10 CFU	TNTC	Swab	10 CFU
Capper #3	TNTC	Swab	10 CFU	TNTC	Swab	10 CFU

The facility's action limit for bacteria, yeast and mold is 10 CFU. Prior to treatment with Sterilex Ultra Disinfectant Cleaner Solution 1 and Sterilex Ultra Activator Solution, capper chuck CFU results registered as TNTC (too numerous to count).

After using Sterilex

VALVES/CAPPER	M-TGE	SAMPLE SIZE	DEFECT ACTION	Y&M	SAMPLE SIZE	DEFECT ACTION
Capper #1	0	Swab	10 CFU	0	Swab	10 CFU
Capper #2	0	Swab	10 CFU	0	Swab	10 CFU
Capper #3	0	Swab	10 CFU	0	Swab	10 CFU

After modifying SSOPs to include Sterilex, yeast and mold counts fell to zero.

CONCLUSIONS

This case study suggests that by implementing Sterilex PerQuat® technology into their program, the plant was able to consistently hit yeast, mold and APC quality metrics, and longstanding microbial issues were successfully resolved.

Comparable results may be observed in plants that follow similar protocols for problematic equipment.

