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| <b>Mandrel Cleaning SSOP</b>      | <b>Equipment: N-8 and other gable top fillers</b> | <b>DOC#: xx<br/>REV: 0</b>       |
| <b>Effective Date: xx/xx/xxxx</b> | <b>Supersedes: xx/xx/xxxx</b>                     | <b>Subject: General Cleaning</b> |
| <b>Issued by:</b>                 | <b>Approved by:</b>                               |                                  |
| <b>Plant Number:</b>              |   |                                  |

## 1.0 PURPOSE and SCOPE

Sanitation Standard Operating Procedure for carton forming mandrels on N-8 or similar fluid milk fillers.

## 2.0 SCOPE

Applies specifically to cleaning and sanitation of carton forming mandrels on N-8 or similar fluid milk fillers.

However, this SSOP could be adjusted to include other food contact surfaces on fluid milk fillers that need to be hand cleaned.

## 3.0 SAFETY & ENVIRONMENTAL CONSIDERATIONS

Powerful chemicals are used for cleaning and sanitizing equipment and area. Always take the time to read the label and follow use guidelines posted on chemical containers. Wear protective equipment as needed (i.e. gloves, goggles, aprons). Protect yourself from hot water used during cleaning.

## 4.0 FREQUENCY

Cleaning is performed immediately after production. Additional cleaning is performed when verification tests (e.g., ATP) fail.

## 5.0 RESPONSIBILITY

- **TASK**

Cleaning will be completed by the designated employee(s) for cleaning and sanitation of the N-8 filler(s).

- **VERIFICATION**

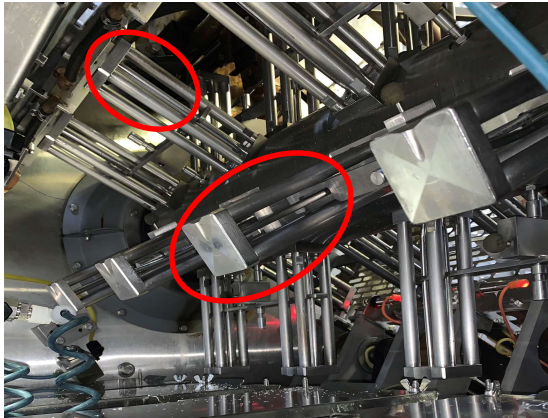
Quality manager uses ATP swabs to verify mandrels are thoroughly cleaned.

- **PAPERWORK REVIEW**

Chemicals are used at recommended rates by the chemical company (posted in plant). Sanitizer solutions are tested each time created to ensure proper concentration and recorded on Chemical Concentration Verification Log. Log is validated by quality, sanitation, or plant manager.

## 6.0 PROCEDURE

- 1) First, rinse mandrels with a **low-pressure** hose to remove large pieces of debris and loosen soil.
- 2) Fill correct color-coded pail (ask supervisor to clarify if you do not know what this means) with hot (160-degree F) water and the appropriate amount of concentrated sanitizer. Then, stir bucket with appropriate color-coded tool. **Verify water temperature with a thermometer.**
- 3) With the sanitizer prepared in step 3, use a **white scour pad** to scrub each mandrel by hand, coming into contact on the inside and outer parts of the mandrels, and ensuring removal of all soil. Spend at least **1 minute** on each mandrel. The area from the top to the middle of the mandrel (where the carton meets the mandrel) should be cleaned. Refer to the picture below for where hand cleaning on the mandrel should occur. Dump remaining cleaning solution down drain.



- 4) Rinse equipment well with a **low-pressure** hose.
- 5) If mineral deposits or other hard build-up is observed an acid wash can be performed. Fill an appropriately labeled/colored pail with hot (160-degree F) water and correct amount of acid cleaner. **Verify water temperature with a thermometer.** Scrub with a **white scour pad for 1 minute** and thoroughly rinse with a **low-pressure** hose. Dump remaining acid solution down the drain.
- 6) Notify your supervisor when cleaning is complete so **ATP verification** can be performed.
- 7) Supervisor should perform an ATP verification test on 1 mandrel from **EACH** lane of the filler. Do a different lane each day.
- 8) If ATP verification fails on **ANY** mandrel, repeat steps 5-10 on ALL mandrels.

### Recordkeeping

Record all pre- and post-processing cleaning and sanitizing on the appropriate documentation. This will be reviewed by the quality team as they inspect the plant to ensure cleaning has been done appropriately.