DAIRY BULLETIN

Common Build-up Issues

DD 2-410

Fats

Heavy fat deposits can be identified as a soft yellow film. Light buildup of fats can dull surfaces of equipment and cause water to bead. These buildups can cause equipment to feel greasy.

Fat deposits may be caused by pre-rinsing with cold water and the use of weak alkaline detergents. Fat deposits can also result from the failure to wash equipment after each milking, as well as using only acid washes.

**Fat deposits can be removed by washing equipment with an alkaline detergent mix at twice the recommended dosage. This ensures proper pH and detergent concentration. Water temperature should be 160 degrees F and maintained above 120 degrees F for the duration of the wash cycle. Following the wash, administer an acid rinse at twice the recommended dosage.

To prevent fat deposits check water and detergent concentrations. Confirm that the proper pH and temperatures are maintained during wash cycles. Check proper wash volume, velocity, contact time and drainage.

Make sure that proper water temperatures are maintained during the pre-wash rinse (95 F to 110 F).

Protein

Light protein buildup will give a blue or rainbow hue to stainless steel equipment. Heavier buildups often result in a slimy gelatinous film similar to applesauce. Improper cleaning commonly causes protein buildups. Improper techniques include using nonchlorinated cleaners, inadequate pre-rinse or improper initial cleanup. Buildup can also be caused by only rinsing following milking.

**Protein deposits can be removed by mixing a chlorinated alkaline detergent at twice the recommended dosage and adding liquid or powdered chlorine at 1 oz. for each 5 gallons of wash solution. *NOTE: Chlorine attacks rubber, so be sure to inspect gaskets and other rubber pieces.*

To prevent protein build-ups, producers should always make sure that detergent is being used at the proper concentration. Proper pH, solution temperature, volume, velocity, contact time and drainage are also critical. The pre-wash rinse should always be performed with the correct water temperature (95 F to 110 F).

***specific concentrations and temperatures may not work in all cases.**

Notes

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