

BIOFILMS REMAIN A PERSISTENT CHALLENGE TO THE DAIRY INDUSTRY

QualiTru Sampling Systems® helps to control process risk.

The formation of biofilms on the surfaces of dairy equipment is a critical factor that can cause severe and persistent contamination of finished products and constitutes a significant challenge to plant hygiene. Bacterial adhesion to stainless steel and other materials found in dairies is a complex biological process that is influenced by the physiology of the organisms, the physical chemistry properties of the surface, and the environmental conditions, such as pH, temperature, and nutrient availability.

Biofilms Hide Anywhere and Everywhere. Bacteria can attach to surfaces of dairy production or processing equipment and form biofilms. Teflon, rubber, stainless steel, glass, polypropylene, ceramic or other tiles, and most other materials will support biofilm formation. This allows biofilms to become established on environmental surfaces, such as walls, floors, and drains; in milking parlors or equipment; inline milk filters;



Mats of bacterial biofilm in a stainless steel dairy pipe.

surfaces of stainless steel equipment, such as milk storage tanks, pasteurizers, and piping; gaskets; valves; tools; milk handling devices; and more.

The widespread nature of biofilm-forming microbes in the dairy industry represents an

important source of bacterial contamination affecting raw and pasteurized liquid, dry, and processed dairy products. Persistent contamination from biofilms may result in foodborne disease, food spoilage, and economic loss.

Precise Monitoring Gives You Control Over Biofilms. Biofilms hiding in microenvironments are virtually impossible to uncover or eradicate. The only sure way to head off biofilms before they can become established and cause foodborne disease or damage quality is by careful and consistently applied process monitoring.

Since 1983, the dairy industry has relied on QualiTru Sampling Systems to provide fast, simple, safe, and accurate samples for bacterial and chemical quality analysis. A low cost per sample allows QualiTru's TruStream™ Septa and TruStream Ports to be used widely on the farm and at every step along the processing pathway to ensure the precise inline process monitoring needed in today's dairy processing environment.

Learn More. Scan this QR code to see how QualiTru Sampling Systems can help you consistently deliver safe, high-quality liquid food products. ■



FOR 40 YEARS THE DAIRY INDUSTRY HAS TRUSTED QUALITRU TO DELIVER FAST, SIMPLE, SAFE, AND ACCURATE SAMPLES FOR BACTERIAL AND CHEMICAL QUALITY ANALYSIS.