



PROCESS MAP FOR

1 Pre-filtered Water

Water from municipal or well sources is typically used to feed steam boilers, provide cooling for heat exchangers, and clean process lines. Contaminants from these sources will shorten the life and reliability of process systems. Coarse filtration, which is used to purify any water entering these systems, extends the life of the system by removing dirt, rust, and scale, which corrode and clog it. When temperatures are below 82°C, use a PF-EG or P-PT housing (depending on flow rate) with a PP-TF-TN filter. For high-temperature condensate returns, use the P-SWM 25 micron.

2 Ingredient & Process Water

To remove yogurt residue and bacteria that build up in process lines during production, water can be used as an ingredient or as part of the cleaning process in conjunction with a liquid propelled product recovery cleaning system. Water that contacts surfaces and enters the product will be clean and free of microorganisms and particulates thanks to a PF-EG housing and PES 0.2 micron element.

3 Pre-Filtration for Reverse Osmosis System

A Reverse Osmosis (RO) system can also be used to provide ingredient water. By removing larger containments that cause additional wear to the RO system, pre-filtered water improves the system's longevity and efficiency. The RO system will last longer and perform better if the incoming water is pre-filtered through a P-FG housing with PP100 1 micron elements.

4 Steam Pre-Filter

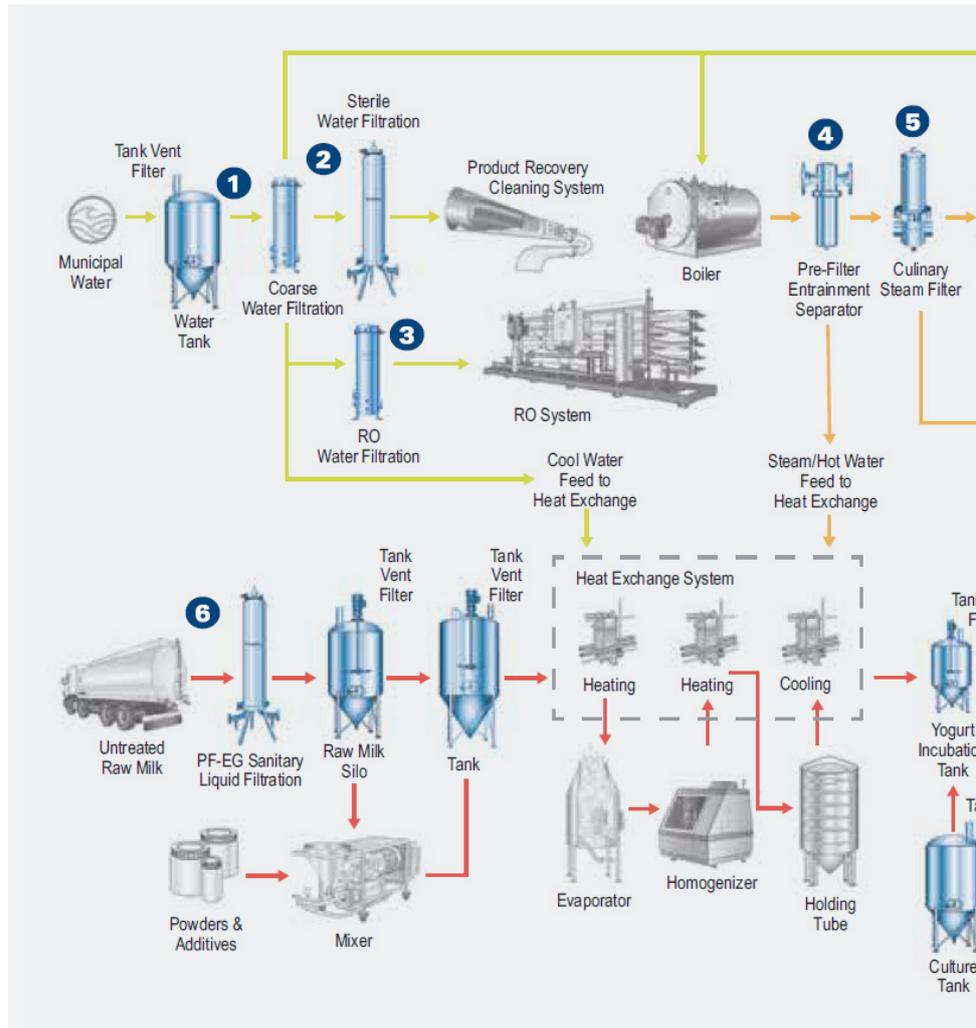
Steam's heat energy accelerates the deterioration of system components like carbon steel pipes, sealing elastomers, and mechanical components like pressure reducing valves. As an entrainment separator and pre filter, a P-EG housing and P-SWM micron filter can provide initial protection for heat exchangers and other systems that require steam.

5 Culinary Steam Filter

Boiler contamination can be particularly problematic for steam-based cleaning processes. Because contaminants clog CIP wands and spray balls, making them ineffective, even the smallest amounts of contamination can cause problems for Clean-In-Place (CIP) and Sterilization-In-Place (SIP) systems. To make culinary-grade steam, combine a P-EG housing with a P-GS 5 micron filter. To evacuate condensate, stainless drains should be installed on all steam filter housings.

6 Raw Milk Filter

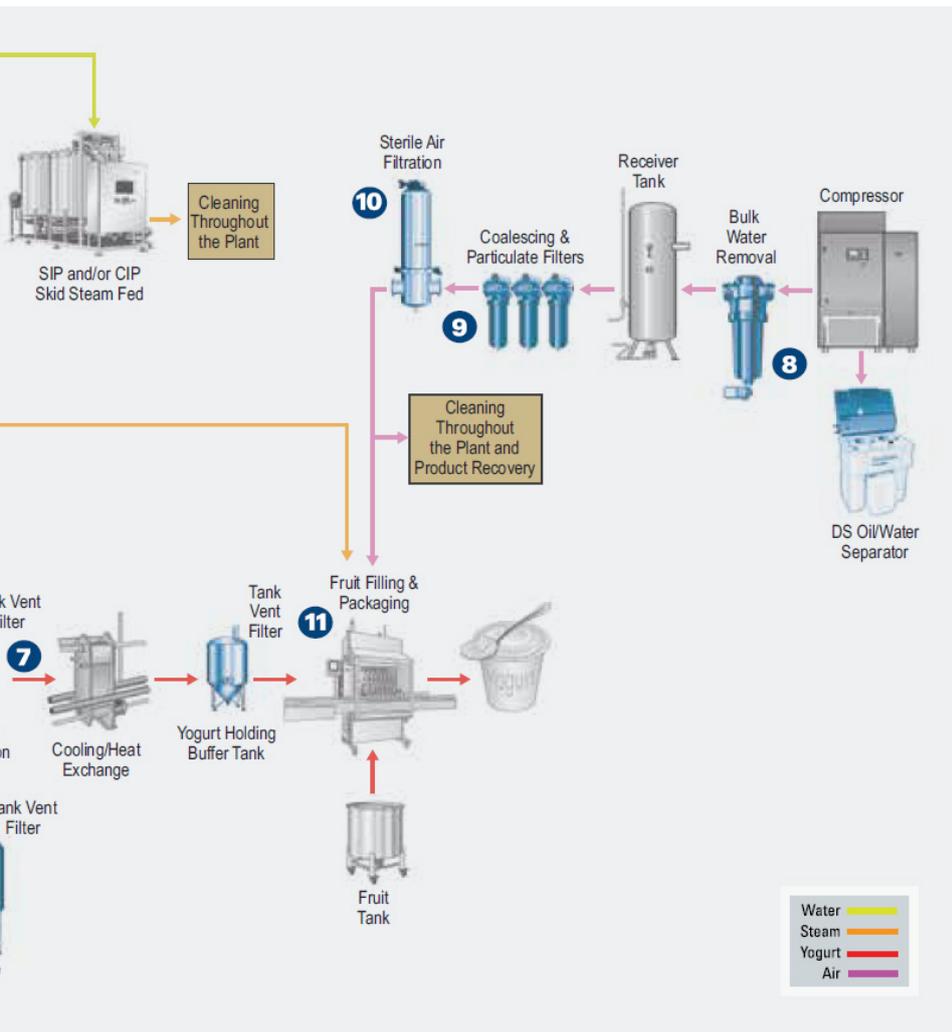
Raw milk comes from a variety of places, with varying levels of contamination as a result of supplier handling and transportation. Contamination can include dirt, rust and grime from shipping containers, as well as organic and inorganic particulates of various sizes. Particulates can degrade the quality of milk and contaminate the manufacturing process if left unchecked. To ensure a cleaner process and product, use a sanitary PF-EG housing with a PP N filter to remove particulates from bulk raw milk.



THE YOGURT INDUSTRY

7 Tank Vent

Makeup air is required as yogurt ingredients or cleaning liquids are added, mixed, or pumped out of holding tanks to keep the tank from collapsing. When steam condenses or the temperature changes during sanitation or sterilization, makeup air is required. Use a P-BE tank vent housing with P-SRF V element to ensure that the makeup air is safe and sterile.



8 Compressed Air Condensate

An aftercooler or refrigerated air dryer cools the hot air leaving the air compressor, causing water vapor to condense. To prevent rust from forming, use a UltraPure cyclone separator to remove the water and keep the storage tanks clean and dry. Connect all compressed air equipment's condensate drains to an oil-water separator, which will ensure that the wastewater discharge stream is clean and in compliance with environmental and safety regulations.

9 Plant Compressed Air

Airveyors, packagers, palletizers, and other pneumatic equipment should all be supplied with clean, dry compressed air to avoid malfunction. To protect equipment, the UltraPure filter housings and elements can remove both dirt and oil as well as water aerosols. To meet SQF compressed air regulations, connect three UltraPure housings in series with FF, MF, and SMF filter elements.

10 Sterile Air Supply

After a liquid cleaning rinse, sterile air is used to remove moisture from processing equipment and process lines. In both cases, sterile air is required to ensure that the final product is free of contamination. The use of a PG-EG housing with a PF-PT 0.2 micron filter will ensure that the sterile air used for product contact surfaces is free of microorganisms and particulates.

11 Fruit Filling & Packaging

During normal operation, modern yogurt filling and packaging lines require a high level of cleanliness. To form the cups in a sterile open-air environment and to counter-fill sealed yogurt tanks as they are emptied, sterile air is required. To ensure that no contaminant

is introduced before the cups are sealed by the foil, sanitary steam is used to sterilize foil wrappers.

SUPERIOR FILTRATION MAXIMUM PROTECTION

Hygienic Design according to EHEDG



- *Stainless steel end caps*



- *Binder Free*



- *FDA Compliant*



Cost Saving Energy Efficiency



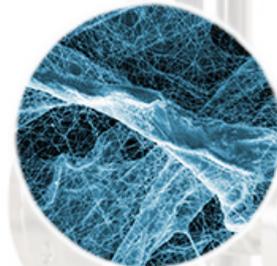
- *Nano Fiber filter medium*



- *70% more energy efficient*



- *Huge cost saving*



**NANO FIBER
FILTER MEDIUM**

QUALITY - RELIABILITY - EXPERIENCE

IMPORTANT NOTICE

Many factors beyond Ultrafilter's control can affect the use and performance of our products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, specifications, availability and data are subject to change without notice, and may vary by region or country.



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