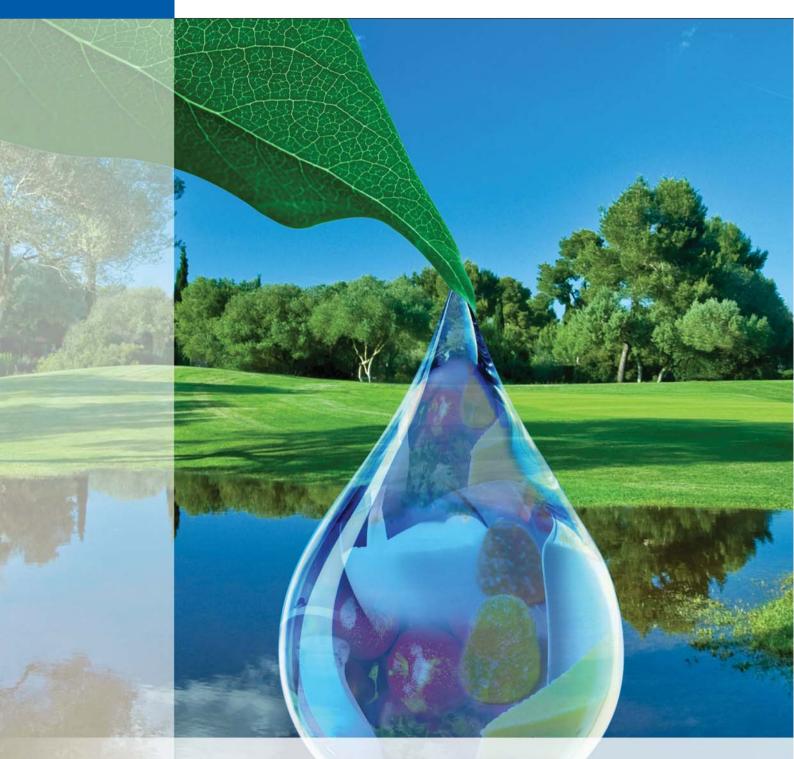


Food and Beverage



Utilities Filtration in the Food Industry



Utilities Filtration in the Food Industry

Back to Basics

Food manufacturers face many complex challenges on a daily basis and often, solutions for these can be traced back to basics. Utilities management in food plants represents one of the most elementary but underpinning determinants of success.

Utility fluids such as water, air, steam and other gases support all manufacturing processes and represent the basic building blocks which are used to create products or enable plant operations. Their quality and handling influences downstream applications and impacts overall smooth and economic plant performance.

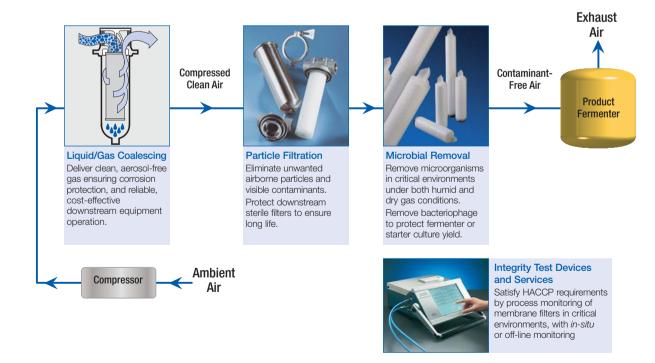
Securing the quality of utilities fluids based on their end use requirements is a good manufacturing approach which proactively eliminates problems, safeguards the process, and allows food manufacturers to focus on the larger challenges they face. Pall Corporation can help our customers with these basics.

Air / Gas Filtration in the Food Industry – Proven Performance

Pall's long and proven experience in satisfying general and critical air and gas applications in many industries translates to food product and process protection. We offer liquid/gas coalescers, activated carbon filters, particle filters and validated microbial and bacteriophage removal filters.

- Tank vent protection
- Oil and moisture removal from compressed air/gas
- Seed, propagation, and production fermenter protection
- Fermenter exhaust air filtration
- Fermenter sparging air filtration
- Microbial removal from pneumatic air for product push through pipelines
- Protection of starter culture tanks from microbial and bacteriophage contamination

- · Protection of drying or hot air
- Aseptic bulk storage tank and sterile filling environment protection
- Moisture removal from sampling air for analytical equipment protection
- Protection from contamination of food products which incorporate air or other gases (e.g. whipping)
- Integrity test equipment for critical membrane filters



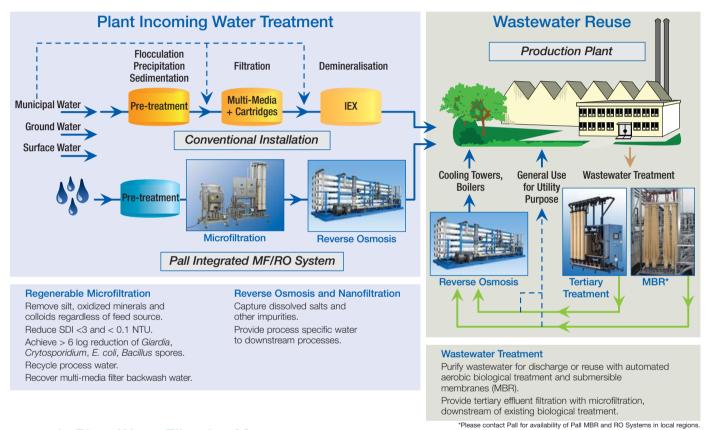


Utilities Filtration in the Food Industry

Water Filtration in the Food Industry - Solutions to Match Your Needs

With over 200 regenerable hollow fiber membrane systems installed in food plants globally, and thousands of water clarification, polishing and sterilizing applications in use, Pall's experience in handling food plant water is at your disposal. We tailor our solutions to our customers' unique technical and economic requirements.

- Plant incoming water treatment
- Process water treatment and monitoring
- Process water recycling
- Wastewater MBR or tertiary treatment



In Plant Water Filtration Management -Cost-Effective Treatment of Multiple Water Streams





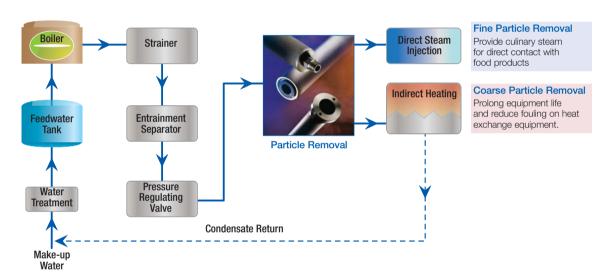
Utilities Filtration in the Food Industry

Steam Filtration in the Food Industry – Years of Protection at Minimal Cost

Rust and debris in steam lines should be removed by installing steam filters to achieve particle removal. Drawing on 60+ years of experience providing robust sintered metal filters to all industries, Pall steam filters in the food industry offer unmatched service life and cost-effective operation for many applications.

- Fruit and vegetable blanching
- Steam peeling
- Odor removal from compressed gas streams
- Aseptic equipment sterilization and steam tracing
- Can headspace flushing
- Direct steam injection for aseptic products
- Thermal processing of canned products
- Steam cleaning of equipment surfaces

- · Steam stripping for oils and flavor fractionation
- Reformed meat product processing
- Poultry and swine carcass treatment
- Proofing ovens
- Pre-conditioning and extrusion
- Steam tunnels for labeling equipment
- Indirect heat exchangers





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Pall Corporation has offices and plants throughout the world. For Pall representatives in your area, please go to www.pall.com/contact

Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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