

Projects - Machinery - Engineering - Process Automation and Controls

50,000 GPD Produce Container Washing Water Recovery

Our scope of work is to recycle the water effluent from several lines of pallet washing. The clean sanitized pallets are used to transport produce (fresh fruits and vegetables) from farm distribution points to supermarkets. The recycling water system is designed to treat city water used in the washing process collected in a sump pit, with a moderately high content of organic & inorganic debris and detergent and common hardness of soluble ion sources.

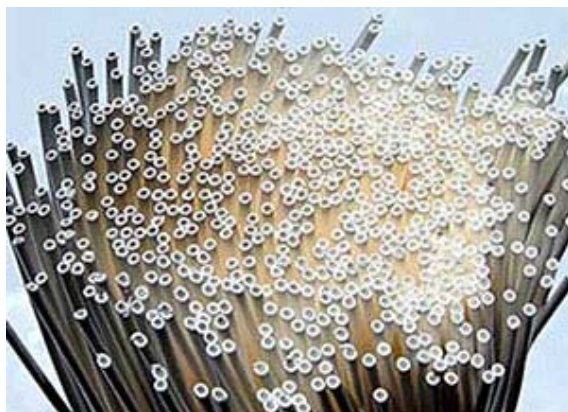
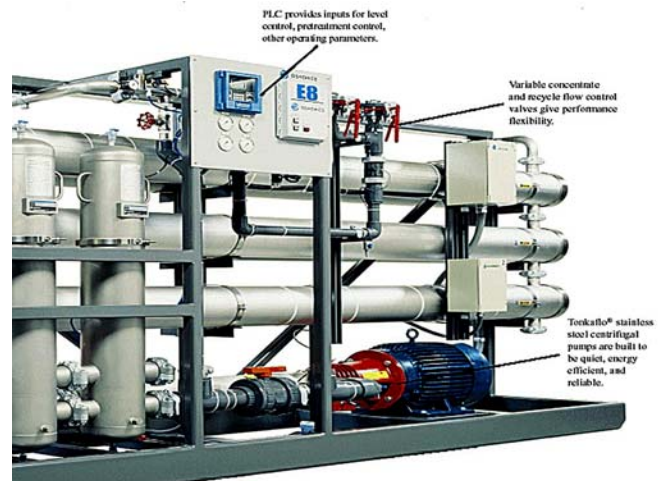
**Fresh produce . . .**

The location is in a prime industrial park area. The scarcity of water in the area and the demands of the process require the production of high quality recycled water, the maximizing of water recovery and minimizing of waste.

The relatively high temperatures of the effluent created additional design and construction challenges.

To optimize results, we designed a pre-treatment system with special screens to remove large contaminants (such as plastic tags, napkins, labels, etc) followed by a depth filter, an ultra filtration stage and a high efficiency reverse osmosis system.

A series of high precision metering pumps were also provided to optimize reagent control.

**Hollow fiber Ultra-filtration****GE Reverse Osmosis Skid**

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Integrated Skid showing filters, UF + RO



Easy Access HMI Interface



The entire system is highly automated. Continuous process monitoring and alarm surveillance was achieved through the use of electronic controls, careful selection of best instrumentation as well as a PLC control.

Indagro also supplied engineering design, installation and start-up services. The careful planning and support of our highly qualified engineers had the system up and running in less than 3 days.

