# CASE STUDY

**PROJECT** OYSTER FARM WASH WATER RECYCLING

**PRODUCT** Ultrafiltration - Basic and UV Disinfection

**INDUSTRY** Food & Beverage

LOCATION New South Wales

### BACKGROUND



One of the largest producers of Oysters on the south coast of NSW was using a large volume of potable water for the washing and shucking of their Oysters. This water made just a single pass over the Oysters before it made its way to sewer. To reduce water consumption and minimise impact on the environment, the customer decided they wanted to recycle this water back to the front of their process. To achieve this, they needed a system that could remove sediment from the waste water and provide protection from bacterial build up.

## SOLUTION

Based on the volume of water being used and the types of contaminants, an Ultrafiltration system with UV disinfection was chosen to produce water suitable for reuse in their process. The Ultrafiltration system provides removal of suspended solids as well as bacterial rejection. A UV disinfection system on the discharge back to the beginning of the process plant meant that further disinfection could be achieved.

## MAK WATER KEY SOLUTIONS

- Ultrafiltration Basic system sized to provide up to 20kL of treated water per day
- UV Disinfection system designed to deliver a UV dose > 40 mJ/cm<sup>2</sup> @ 95% Ultra Violet Transmittance (UVT)

## **RESULTS AND BENEFITS**

- Environment. Up to 20,000L of water recycled per 24 hours
- Safety. Log reduction of pathogens in water by the Ultrafiltration membranes and UV disinfection
- Inexpensive. Low capital and operational costs
- Proven reliability. MAK Water has delivered dozens of similar units.

