

CASE STUDY RO PLANT MEMBRANE OPTIMISATION



SITUATION

A leading Kenyan producer of high-quality Roses flower farm, with a total installed capacity of 100 m³/hr. reverse osmosis Plant, experienced tremendous down time in operation of the RO Plant due to

- Frequent Membrane CIP Cleaning
- Reduced Membrane permeate flux.
- High energy & Power Consumption due to long operating pumping hours of the plant to meet water demand due to clogged, blocked, or fouled membranes.

HYDROLINK – BIMAKS SOLUTION

Hydrolink carried out an assessment of the feed water quality to determine the root cause of frequent deposition and took the data of their system and subjected it in a simulation Bimaks antiscalant software to determine the best antiscalant and dosage rates for this system.

Hydrolink Proposed the use of MAK 400P Reverse Osmosis antiscalant. Which the customer agreed to replace the previously used antiscalant from a different competitor's Brand.

RESULTS

- Reduced Frequency for CIP Membrane cleaning
- Optimum permeate flux maintained constantly.
- Reduced power consumption due to optimum flux achieved hence less hours of operation.

ROI QUANTIFYING AND MONETIZING OUR VALUE

- Massive savings from Membrane cleaning Chemicals and Power costs, and increased life span of Membrane elements, since frequent membrane cleaning shortens life span of membranes.

