Spectrus* CT1300 provides effective macro-fouling control for seawater cooling

challenge

A major refinery in Bahrain was experiencing macrofouling proliferation in its seawater cooling system. Various sea creatures such as mussels were blocking the flow in strainers, causing reduced flow in the system and almost monthly downtime for cleaning. The plant had been using gas chlorination to prevent this growth. However, the shell creatures could detect chlorine and would retract into their shells, thus surviving the gas chlorination treatment. This issue had continued unabated for some time at the plant.

solution

SUEZ was able to provide a solution that was undetectable to the shell creatures. SUEZ’s proprietary product, Spectrus CT1300, which is a quaternary ammonium salt based biocide, is completely odourless. Hence, the shell creatures that were previously able to detect the treatment chemicals were now unable to detect the biocide and retract to their shells. This provides for a more effective control for the seawater system.

results

The results from SUEZ’s Spectrus CT1300 treatment were, robust and consistent macrofouling control of sea creatures. As seen in Figures 1 & 2, fouling was reduced considerably and has been kept at very low levels for over five years since this treatment has been in place at this plant site. This has resulted in considerable savings from reduced cleaning costs, reduced downtime associated with the new cleaning frequency of no more than twice a year, and greater flow of seawater through the strainers and exchangers, thus boosting productivity of the cooling system.