OptiSea*
maximizing operational efficiency and environmental conservation in seawater cooling applications
innovative solutions for managing seawater cooling systems

The use of seawater for cooling presents unique complexities. Seawater around the world widely varies in chemical makeup and traditional indices used in cooling water treatment, such as LSI, can be misleading. A deeper understanding of high ionic strength, water chemistry characteristics, and new monitoring equipment is required to treat, control, and optimize these systems to ensure performance and reduce thermal pollution.

SUEZ understands the unique challenges seawater presents in a cooling system and has developed OptiSea technology to meet the needs of customers operating cooling systems on seawater water sources.

your key objectives:

- maximize environmental conservation
- increase operational efficiency
- extend life of assets
- monitor to reduce risk

modeling and system visualization

SatEQ* saturation modeling replaces ineffective calculated indices with a customized algorithm that compares more than 100 potential deposits simultaneously. With changing conditions able to be modeling in a matter of seconds, you can be assured that your product, dosage, and system performance are truly optimized.

chemical feed control

As technology has advanced, so has chemical feed and control. OptiSea recognizes how much chemical product is in your system with advanced warning of underfeed or overfeed, pump wear, and potential failure.

performance monitoring

Typical treatment approaches using fluorescent tracers can be challenging to manage due to degradation and loss of the tracer in seawater conditions. OptiSea uses MonitAll* technology and InSight*, to measure and monitor actual performance, not tracers, to maintain performance, prevent deposition, and avoid the high cost of product overfeed.

chemistry

OptiSea includes the most advanced chemistry for seawater cooling applications, including patented chemistry you can only find at SUEZ. Regardless of the potential deposit (calcium carbonate, calcium sulfate, agglomerated suspended solids, etc.), SUEZ has a program to meet your needs.

one package, one solution, everything included.
Middle East seawater was used to benchmark chemistry performance in high-stress applications such as the hydrocarbon and petrochemical production processes. These same chemistry benefits extend directly to other seawater compositions around the globe and are effectively modeled using SUEZ’s SatEQ program.