

SCALE-GUARD™

Scale Control Solutions for Mineral Processing

Nalco Water's SCALE-GUARD program delivers proprietary chemistry and digital innovations for improved response to onsite scale problems and prolonged asset life.

The SCALE-GUARD Program includes:

- Products uniquely formulated to provide maximum scale protection in a variety of mineral processing units
- Computer-based thermodynamic modeling software to predict water speciation, including alkalinity correction in the presence of cyanide in precious metal process water
- Scale-deposit monitoring for actionable insights on antiscalant dosage control
- Comprehensive consultative approach to guide product selection, dosage philosophy, performance monitoring and continuous process optimization work
- Global network of in-house technical experts to deliver best-practice scale control

Where it matters

SCALE-GUARD controls carbonate and sulfate scale in a variety of flotation and leaching applications in base metal and precious metal operations:

- Process water, fresh water, and reclaim water lines
- Mine water treatment
- Gold strip circuits
- Quench tank units
- Boilers and Heat Exchangers
- Gold and copper leaching circuits

Local Sales & Service Support
Continuous process monitoring and process improvement support from our dedicated service team to address dynamic environments and conditions

Global Technical Experts
Our industry experts work in partnership with local field personnel to deliver optimized solutions backed by more than 100 years of industry experience



Innovative Chemistry
Product offerings to treat a wide range of site conditions and various process units

Digital Innovation
Scientifically based solutions and advanced process monitoring with Mining Optimizer thermodynamic modeling software and Remote Deposit Monitor

SCALE-GUARD—Nalco Water’s Comprehensive Approach to Scale Control

Because no two operations are alike, Nalco Water’s 6-step process allows our experts to understand your unique challenges, then build and deliver a customized program of solutions designed to optimize performance.



1. Detailed system survey and evaluation of process, water chemistry and current scale conditions



2. Thermodynamic modeling of system condition using Mining Optimizer



3. Chemistry selection, application and dosage selection



4. Customer training on best practices in process water management



5. Scale deposit monitoring for actionable insights



6. Continuous process water analysis, regular site visits and service reporting

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