CASE HISTORY

Mineral Processing



RECORDED BENEFITS

- Underflow density increased from 36.8% to 38.1%
- Downstream costs reduced by \$1.2 Million
- Flocculant consumption reduced by 20%
- Thickener operations were stabilized
- Excellent efficiency even with changing ore quality
- Visit our <u>mineral</u>
 <u>processing aids</u> page to explore our latest innovations.

Flocculant Program Provides Significant Benefits to a Nickel Processing Plant Dealing with Difficult to Process Ores

Praestol[™] 855 BS Flocculant

Customer Challenge

A large nickel processing plant was experiencing inefficient flocculation and was not meeting production targets when dealing with difficult to process laterite ores. Processing ores with varying composition was an important overall production goal of the mine requiring consistent high underflow density solids to maximize solids throughput and recovery.

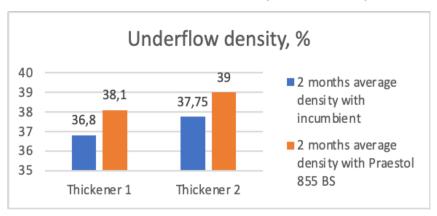
Recommended Solution

Solenis experts visited the mine routinely to evaluate the efficiencies of unit operations and provide recommendations for continuous improvement. After careful evaluation, the experts identified a product already in use at the mine in an upstream processing plant. Praestol 855 BS was evaluated on the thickeners.

Results Achieved

Praestol 855 BS exceeded the customer's expectations. The mine was able to significantly increase its ability to process different ore grades in a shorter period. Praestol 855 BS gave consistent high underflow solids density. Not only did the mine meet production targets, but maximized solids throughput, optimized recovery, and reduced cost of operation. Flocculant consumption was reduced by up to 20% compared to incumbent product.

On thickener one the average underflow density was increased from 36.8% to 38.1% leading to downstream process reagent savings. Every 1%-point increase resulted in \$1 million reagent cost savings.



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