



## Scale Inhibitor Maximizes Evaporator Throughput and Reduces Costs

### *Infinity™ SL4369 Scale Inhibitor*

#### Customer Overview:

- Mill: Southern U.S. Pulp Mill
- Grade: Bleached Kraft
- Furnish: Low-Kappa Kraft Softwood, Low-Kappa Hardwood Pulp

#### Application Overview:

Chemical Processing Systems:

- Evaporator Sets: 2
- Production Rate: 1500 – 1650 gallons/minute
- Evaporator Type: Six (6) Effect HPD Falling Film

#### Existing Treatment:

Initially, scale was not being treated. The mill began using Infinity SL4490 scale inhibitor in late 2007 and continued to use the product until July 2009.

#### Problem Summary:

Although the current program was working, the mill and Solenis personnel felt that the treatment program could be further improved.

#### Customer Objectives:

- Reduce overall program costs.
- Reduce or eliminate the need to water blast and/or chemically clean the evaporator bodies.
- Continue to work toward annual boilout schedule without requiring system to be boiled.

#### Solenis Solution:

Solenis applications personnel conducted a system audit and recommended that the existing Infinity scale inhibitor product (SL4490) be upgraded to a newer Infinity scale inhibitor product (SL4369). This upgrade would provide additional scale control during all process conditions and reduce the overall cost of the program for the mill.

After converting to the Infinity SL4369 scale inhibitor, the mill recorded a number of benefits.

#### Customer Benefits:

- Reduced overall program costs by \$30,000 per year
- Maintained exceptional cleanliness in the treated bodies as evaluated during annual outage.
- Maintained differential temperature requirements across the treated bodies
- Potentially eliminated at least one acid cleaning per year and all water blasting, a savings of approximately \$100,000 per year.

#### Conclusion:

Infinity SL4369 scale inhibitor was extremely successful in meeting the pre-established mill success criteria and has provided the ability to maximize the evaporator throughput throughout the year with no degradation due to scale formation.



Before Infinity SL4369 Scale Inhibitor



After Infinity SL4369 Scale Inhibitor