



POSITEK™ 4G

Exponential Improvement in Microparticle Performance

NALCO Water
An Ecolab Company

POSITEK™ 4G 9000

Exponential Improvement in Microparticle Performance

Nalco Water's POSITEK 4G

9000 is a colloidal silica dispersion specifically formulated to allow paper makers to attain important **On-Machine-Efficiency (OME), Sheet Quality** and **gains** by enhancing retention and drainage in a cost-competitive manner.

This high-performance Microparticle functions as one component of a comprehensive POSITEK papermaking performance package that could be preferably fed through PARETO Mixing Technology and can be translated into the following potential benefits:

Optimized Costs

- Increased filler loadings and the subsequent reduction in fiber costs due to improved small particle retention in both acid and alkaline systems
- Reduced usage of wet-end additives such as wet strength, clay, titanium dioxide, dry strength, size, starch, defoamers and dyes due to improved first pass retention

Increased OME and Production Rates

- Improved runnability and wet-end stability by avoiding excess fillers and fines recirculating in the wet-end system that generates deposits which lead to breaks and downtime

Improved Sheet Quality

- As a result of reduced two-sidedness, improved formation and increased strength
- Optical and printing properties improved through more uniform distribution of filler and fines within the sheet

Energy Savings

- Improved water removal, due to reduced headbox and tray solids, which result in more efficient sheet pressing and drying

Environment

- An efficient retention program offers a gradually cleaner system and a positive impact in terms of COD/BOD reduction of the backwater
- Reduced sewer losses and lower effluent treatment costs as a result of improved first-pass fiber and filler retention
- Environmental friendliness, no contribution to VOC

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