

## Eka Facts

# Bleaching Services

We have a long history of providing innovative solutions for the bleaching of pulp. AkzoNobel Pulp and Performance Chemicals is one of the world's leading suppliers of bleaching and performance chemicals for the pulp and paper industry.

For over three decades, we have helped the industry navigate the changing landscape of bleaching technology from the generator to the final paper product.

### AkzoNobel Bleaching Services

- Our bleaching services team has extensive and varied experience in the pulp and paper industry.
- Our engineers have been active in more than 100 bleach plants worldwide.
  - Experts at troubleshooting pulp quality issues such as brightness, brightness reversion, fluorescence, strength, dirt and pitch. We have hands on knowledge of numerous species and raw materials.
  - Experienced professionals who understand furnish properties and what it takes to make grade adjustments.
  - Our team can also evaluate non-traditional uses for chlorine dioxide or peroxide such as breaking dyes or optical brighteners in broke and recycled furnishes.
- AkzoNobel Pulp and Performance Chemicals is able to respond to the unique needs of your individual site.



### Cost – Quality – Innovation

AkzoNobel understands that to remain competitive in the global market our customers must continuously improve their process and lower their operating costs while still maintaining consistent pulp quality.

We know that bleaching chemical costs can vary from \$40-70 per ton of pulp, about 10-25% of the variable cost to produce pulp. The chemical cost is closely intertwined with energy cost, cooking conditions and wood costs. So it is important to keep the big picture in mind.

The growing interest in the technology of biorefining signals changes for the pulp mill operations. A change in wood availability and cost is likely. For those mills looking at integrating a biorefinery at an existing location, pulp quality to the bleach plant could change dramatically.

The AkzoNobel team understands fiber line operations and has the “big picture” vision to engage in optimization that benefits the whole mill.

## What can AkzoNobel Bleaching Experts do for you?

### Optimization

Our team has access to a variety of tools for optimization. With a laboratory bleaching study we can simulate almost any stage or sequence. Whether it is optimizing a specific parameter or balancing an entire sequence, we have the capability. We use statistical design to get the most out of the data generated. These studies are great for answering “what if?” questions. We can use the data generated to create bleach plant models for further exploring operational changes including balancing wood, energy and chemical costs, determining brightness ceiling or answering “cost of brightness” questions.

We can perform a benchmark study at the mill site, testing pulp and filtrate samples. We analyze the results along with detailed operating data to come up with recommendations. We often identify actions resulting in \$100,000 to \$250,000 in annual savings.

We can evaluate and make observations of bleach plant washers. This kind of survey can lead to recommendations for improving carryover, quality, chemical and energy usage.

### Troubleshooting

With our team’s experiences and tools, we can engage in solving mill problems when they arise. We have experience solving brightness problems, scaling issues, paper machine/pulp mill interface problems and environmental concerns. Our team brings knowledge of kraft, mechanical and sulfite pulp bleaching and associated processes. We can consult with the mill, participate on problem solving teams or propose a study.



### Training

Customer-specific training on bleach plant operations is another service that is available. We present case studies and the necessary information for mill personnel to evaluate, troubleshoot and optimize their own process. Training is onsite and is beneficial to all personnel – operators, engineers and foremen.

For more information please call or email an AkzoNobel bleaching services expert.

**T: +1-800-241-3900**

**E: [bleaching\\_experts@akzonobel.com](mailto:bleaching_experts@akzonobel.com)**

Optimization – Troubleshooting – Training – Bleaching Knowledge  
[eka.akzonobel.com](http://eka.akzonobel.com)