

# Specialty Chemical Technologies for Chemical Pulp Production

*BIM Kemi is a world class manufacturer of chemical technologies for production processes of cellulose pulp / chemical pulp. For already 50 years on the market, we have acquired the extensive knowledge and experience needed to develop an optimal composition of specialty chemistry.*

## Why BIM Kemi?

Changing global market conditions require pulp producers to manufacture pulp of a higher quality while lowering overall operating costs. Together with variable fibre supplies, sources and qualities, the need to meet regulatory goals and quality improvements at lower capital cost, can create a challenging situation.

With these environmental, quality and economical requirements in pulp production constantly increasing, mill and supplier business partnerships are required.

With BIM Kemi at your side, you have access to our chemical expertise that can help you in analysing and optimising your chemical processes to deliver savings for your mill operations. All the way from wood preparation to pulping, while maintaining a sustainable profile.

Our dedicated team of experts, BIM Pulp Market Segment Team, focus on every customer need, making BIM Kemi a perfect partner for developing sustainable solutions for chemical pulp mills.

## Our Way of Working

At BIM Kemi we are with you every step of the way – we provide not only chemistry but also professional supervision and

technical support to our partners / customers producing chemical pulp.

Our R&D activities have been concentrated on tailored-made solutions in co-operation with our customers to meet their requirements. BIM Kemi is flexible and react quickly to our customer demands.

## Product portfolio

Our pulp product portfolio has grown rapidly in recent years responding to pulp mills' need to find solutions to increasing demands on the market. Our chemistry meets increased expectations to improve pulp line runnability and final pulp quality.

Our Pulp application programme offers an integrated approach to pulp process improvement including:

- Antifoam - pulp defoamer/drainage
- Antipitch - pitch control
- Fibre protection & improvement
- Metal Sequestering
- Tall oil and Soap Improvement
- Scale removal and inhibition

## About BIM

BIM is a family-owned, entrepreneurial chemical company founded 1973. With a customer-focused research and product development, we develop innovative specialty chemical concepts designed to improve products and processes in a cost-effective and sustainable way.

- Approx. 220 employees worldwide
- Certified according to ISO 9001 and ISO 14001
- Member of the UN Global Compact
- Gold rated by Ecovadis
- Associated with the Responsible Care Program

# Specialty Chemical Technologies for Chemical Pulp Production

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## BIM Antifoam (AF)

- pulp defoamer/drainage technology

BIM Kemi is a leading company in drainage/defoaming technology. We have always concentrated on offering the latest, most efficient and economical defoamer for our customers' needs.

BIM Kemi delivers different Antifoam (AF) applications, such as silicone emulsions, oil- and alcohol blends, for different customer needs:

- Brown stock washing (BSW)
- Evaporation
- Wood barking application
- Bleaching plant
- Effluent application
- Drying machine

BIM Antifoam (AF) increases washing yield, pulp quality and chemical recovery as well as decreases foaming, bleaching chemical usage, water usage, and energy need.

In our development, we have concentrated intensively on improving process efficiency, cleanliness and eliminating paper spottings. In our process, we have always concentrated on quality consistency, manufacturing cost yield and green energy with the target to offer our customers cost reduction in use.

## BIM ORGANIC PROGRAMME

### BIM Antipitch (AP)

- dispersing agents for organic pitch control

BIM Kemi has over 30 years of experience in solving customer pitch problems with our own developed technology:

- For BSW, bleaching and drying machine
- In acid, neutral, and alkaline conditions
- Gives cleaner process and pulp
- Lowers extractive amount in pulp
- Improves process runnability

### BIM Fibre (FP)

- cooking and ODL (EP) improvements

We have 20 years of experience in surface technology used in cooking and replacement of AQ:

- Improve cooking liquor penetration into wood chips for more uniform cooking
- H-factor reduction (alkali / steam / time)
- Extractives load reduction and stabilisation
- Reject amount reduction, gives possibility to increase Kappa target
- Improved pulp physical properties
- Reduced evaporation load
- Yield increase
- Reduced bleaching chemicals consumption
- Improve BSW

Our applications can be combined with other BIM concepts for synergy effects, for example our BIM FP, AP and CR programme to achieve talc-free production.

## BIM INORGANIC PROGRAMME

### BIM Scale Inhibition (SI)

- dispersing agents for inorganic scale

The idea of functionality is to avoid the formation of metal crystals scale. Our programme is available for:

- Barium sulphate
- Calcium oxalate
- Calcium carbonate
- Calcium sulphate
- Calcium phosphonate

### BIM Scale Removal (SC)

- cleaning chemicals for scale removal

Continuous treatment to remove inorganic deposits such as barium sulphate, calcium oxalate and carbonates.

### BIM Metal Sequestering (MS)

Programme to avoid harmful metal (Mn, Fe, Cu) reactions with pulp and bleaching chemicals:

- Green solution to replace EDTA and DTPA
- Phosphor free
- Replaces  $MgSO_4$  in oxygen delignification and peroxide bleaching.