

CASE STUDY



50% REDUCTION IN CONVEYOR LUBRICANT CONSUMPTION

BIOSAFE CON 46/68 W

CHALLENGES

A lumber producer was looking to replace their mineral oil based conveyor oil with a solution that had less environmental impact. They were also looking for opportunities to increase overall efficiencies by:

- » Reducing consumption
- » Reducing down time
- » Increasing chain life

THE SOLUTION

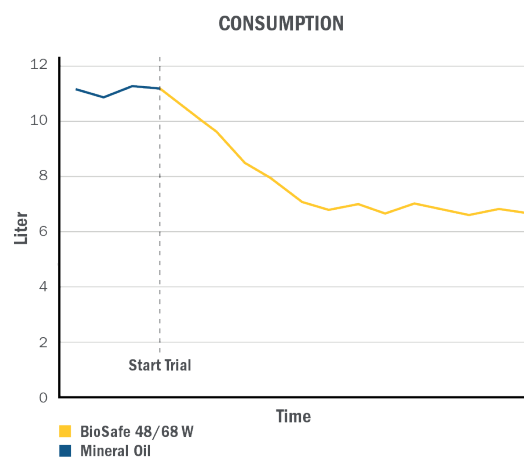
Quaker Chemical Corporation ("Quaker") reviewed the operations at the lumber producer and recommended BIOSAFE CON 46/68 W, a high-performance conveyor oil, based on the following:

- » Potential for cost reduction from decreased consumption
- » Decreased down time as reapplication is required less frequently
- » Environmentally friendly and improved operator acceptance over mineral oil

A trial started where consumption and maintenance costs were reviewed. The following benefits for the customer could be compiled:

- » **Reduced environmental impact by converting from a mineral oil based product to a biodegradable conveyor oil**
- » **Estimated 30-50% reduction in consumption**
- » **Reduction in downtime resulting in increased operation efficiency**

BIOSAFE CON 46/68 W provided better penetration and lubrication resulting in less wear on the conveyor chains, and an approximate annual cost savings of 2,500€ / per chain.



PROCESS AND EQUIPMENT

Material	Spruce lumber
Production	Construction timber
Lumber consumption	305,000 m ³
Production timber	170,000 m ³
Production planed	125,000 m ³





THE PRODUCT

BIOSAFE CON 46/68 W is a label free lubricant based on renewable rawmaterials. The product is readily biodegradable, nontoxic and not irritating to skin.

BIOSAFE CON 46/68 W is used as a lubricant for chains and conveyers within saw mills and the paper and pulp industry. It is made for use all year round. BIOSAFE CON 46/68 W has a natural positive polarity, which means that the oil will attach to the negative polarity of the metal surface. This results in a build-up of a lubricating film on the metal.

BIOSAFE CON 46/68 W has good lubricating, penetrating, and corrosion protection properties, under both dry and wet conditions, resulting in less friction and wear to the existing components.

Thanks to superior lubricating performance, oil consumption can be reduced without any risk for increased component wear, compared to mineral oils.

THE EXPERTISE

Through its Binol acquisition, Quaker has become a market leader in environmentally acceptable lubricants for Saw Mills in Scandinavia. With more than 20 years of proven performance, these saw mill lubricants are based on renewable, naturally occurring base stocks. The lubricants are readily biodegradable and have low aquatic toxicity, making them ideal for use where environmental protection is required. They can be made globally available and give outstanding performance in lubrication, and the increased life of saw blades and chains. Quaker's lubricants provide the highest performance without compromise, sharpening your competitive edge.