

Advantages of lubricant optimisation

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Niederauer Mühle produces 340.000 tons of white-top corrugated medium paper in grammages of 120 – 200 g/m² on 2 paper machines.

One of the two paper machines is lubricated with circulating lubrication system in the wet-end section and dryer section.

The second paper machine is lubricated with grease lubrication in the wet-end and dryer section. The drying cylinders are equipped with oil sump lubrication.

Several problems and issues within the process have been considered by extensive examination of the subject. During the improvement and problem solving process lubricants played a key role.

The main topics were:

- water absorption and demulsibility (water separation) of the paper machine oil in the wet-end section of PM3
- stabilisation of the paper machine oil quality by selective increase of additive concentration in the circulation lubrication of the dryer section of PM3
- optimisation of greases used in the wet-end section of PM2
- optimisation of greases used in the dryer section of PM2

In addition a concept for the storage, availability and service has been introduced considering the legal requirements acc. to VAWs in order to relieve the production site Niederauer Mühle.

In cooperation with the maintenance team of Niederauer Mühle the equipment of lubricant application has been adapted to the special requirements of the production plant.