

Control of Paper Machine Retention



Background

PM2 at Holmen Paper AB in Hallstavik Sweden was rebuilt in 1986 to twin wire and ten years later a new head box was installed. The need for continuous measurement of the paper machine retention was also gradually increasing. In the old days, with single wire, the operator could visually see the wet line and control accordingly. Today, with twin wire, this is not possible, says Anders Magnusson, a technician for PM2.

Application

Wooden fibers depolarize polarized light, but fillers do not. This phenomenon is utilized in Cerlic's new optical sensor CTXA which gives you both true total consistency as well as ash content. The sensor reacts both on the fibers through measurement of depolarization and fillers through measurement of transmission. With this sensor on the head box and the wire pit white water, the retention on the paper machine can be easily calculated. The CTXA sensors give the operators a retention value to control. High retention gives an unstable operation of the machine and a risk of flocky paper due to too much retention chemical.

Results

After a successful test installation with sensors on the head box and wire pit white water, the sensors were purchased in December 2006. The Cerlic sensors give us the possibility to improve paper quality and save retention chemicals, says Anders Magnusson.



PM2 produces MF-journal och book paper at low grammages