

Ultrasound based UltraEdge fabric positioning solution by Metso

UltraEdge is Metso's new non-contacting fabric edget racking solution, providing

precision and reliability in fabric control on paper and board machines. Problems with fabric control have direct financial effects, such as loss of felts or dryer fabrics and machine downtime needed to replace them.

Operation and technology

The operation of UltraEdge is based on ultrasound technology, which eliminates all tracking related abrasion and wear at the fabric edges. The sensor transmits high frequency ultrasonic sound bursts, with the help of which the distance of the fabric edge from the sensor can be calculated. Compared to other optical fabric positioning solutions, fabric color and composition have no effect on measurement.

Application

UltraEdge is designed for both press and dryer section fabric control on all paper and board machines. It can be used for edge tracking with both pneumatic and electromechanical guides. The dryer section application is designed for the challenging dryer hood conditions.

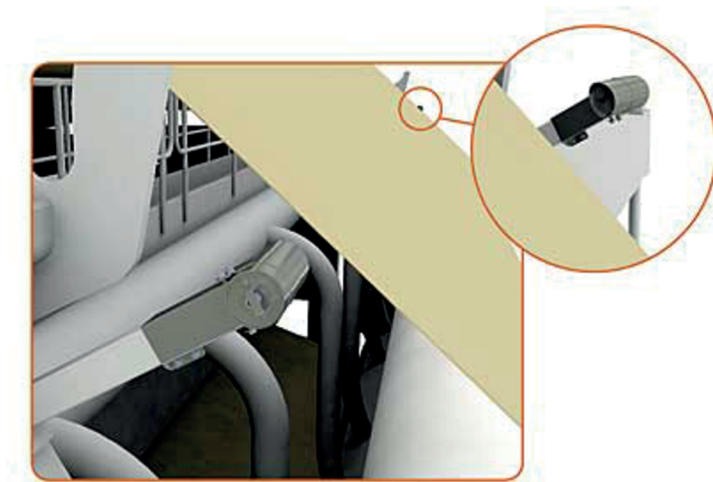
Press felt centering with UltraEdge for improved press operation

UltraEdge provides accurate felt width and shrinkage behavior information during production. When UltraEdge units are installed on both the tending and drive side of the machine, the felt width data can be obtained and the felt can be centered automatically. Centering the UltraEdge is an excellent tool for troubleshooting the root cause of problems thanks to the felt width data and accurate felt edge positioning in connection with felt damage, for example.

Benefits of UltraEdge fabric positioning solution:

- Provides effective and reliable fabric control – eliminates speed and runnability bottlenecks
- Reduced scheduled and unscheduled downtime
- Fewer sheet breaks
- Non contacting – eliminates all tracking related abrasion and wear at the fabric edges
- Extends the service life of fabrics
- Enables felt centering at the press section
- Faster starts with new felts Optimization of felt service life and operation

The Paper Industry Technical Association (ATIP) in France awarded its Bronze Palmward to the UltraEdge fabric positioning solution in its "Palmes de l'Innovation" competition arranged in connection with the ATIP Congress in October.



UltraEdge is an ultrasound based contactless fabric positioning solution. It improves fabric control on both press and dryer sections.