
Cutting Edge Technology for Savings on multi-layer Paper Machines

F. Jung, Smurfit Kappa C. D. Haupt Papier- und Pappenfabrik GmbH, Wrexen / Germany

M. Lochno, Voith Paper GmbH & Co. KG, Heidenheim / Germany

On multilayer machines, the edge cut usually takes place only after couching of the individual layers. However, these mixed cut remnants can only be put back into a lower-quality circuit. Especially in the case of paper with a high-quality virgin fiber layer, valuable fibers are lost in the process. By contrast, EdgeSaver from Voith uses an innovative concept that performs the edge cut of the higher-quality layer directly at the headbox. Thus these fibers can be optimally put back into the stock circuit and raw material costs can be reduced. Unlike to other products, EdgeSaver also offers flexible installation, simple setting options and extremely low water consumption.

Its unprecedented cutting technique is among other things based on the unique blade geometry that was specifically designed for turbulence-free cutting of the suspension jet. The blade's distinctive configuration combined with separate cleaning nozzles efficiently prevents fiber debris.

Since the edge cut takes place directly after discharge from the headbox, the higher fiber quality can be recycled separately. That reduces fiber consumption and lowers production costs. Thus EdgeSaver is often amortized after only a few months.

Along with the clear cost advantages, EdgeSaver also facilitates an improvement in paper quality. Thanks to the adjustable Teflon side plate, ridge formation at the edges of the paper web is prevented and a more uniform CD profile is created. Another positive effect is the lowered contamination of the fabric edges due to straight edge limiting in combination with a cleaning system.

While other systems usually have restrictions and are very complex to set, EdgeSaver offers simple and reproducible setting options. Since mounting is possible on modern headboxes from all manufacturers, existing machines also profit from an upgrade. In addition, the desired edge cut can be set between 0 and 120 mm with a few turns and on both sides independently.

EdgeSaver can be mounted on both sides of the web easily in just a few hours, during a shutdown. Changing the wire is also no obstacle: the clever swivel device makes it simple to comfortably replace the forming fabric.
