

Stepfoil Forming Blade for Optimizing Table Drainage and Tests

Challenge A medium and linerboard packaging grade facility in the U.S. wanted to meet paper tests and maintain standard speed without having to increase basis weight.

Solution Kadant Solutions conducted a Durwear™ Htb polyethylene stepfoil blade trial on four existing lovac boxes that were operating with standard poly turbo-v style activity blades and no applied vacuum (similar to a standard gravity foil box). Vacuum control valves were used to set the optimum vacuum level for the four lovac boxes during the trial.

Results On the 35 lb. high-performance medium sheet headbox, flow increased, sheet activity and formation improved, and the basis weight was reduced by 1.5 lbs. while maintaining the Concora strength test at the standard machine speed of 2500 fpm. Based on the trial results, an order was placed for permanent Ultrasert™ F ceramic-tipped stepfoil blades.

Highlights

- Increased headbox flow
- Improved sheet activity and formation
- Reduced basis weight
- Met target tests at standard machine speed

