SITUATION
A mill using 100% recycled MOW and ONP pulp was experiencing runnability problems. Coated boxboard grades were being produced at a neutral pH. Contaminants from the secondary fiber were filling the press fabric, leading to a reduction in fabric life and poor dewatering in the press section. This situation also caused the board to drop off of the long fabric. Several of the cylinder wires were also coated with contaminants and production had to be periodically stopped to clean the cylinders. Chemical analysis of the used fabric sample identified the contaminants as primarily organic stickies, pitch, ash and alkaline soluble material from coatings.

PROGRAM
The existing press fabric cleaning/conditioning program was performed infrequently and using an alkaline cleaner for batch-down washings only. However, the large quantities of contaminants from the recycled pulp could not be removed by either an occasional cleaning or the alkaline chemistry alone.

After a complete system survey of the press and vacuum systems, a new press fabric cleaning/conditioning program was designed to manage machine contamination. NALSTRIP 2634 technology, a blend of surfactants, solvent and alkaline cleaners, was added to the shower water prior to the Uhle box via Batch-On-The-Fly (BOTF) methodology. Product concentrations of 1–2% were dosed to all five felt positions in a sequential manner. Cleaning frequency was once per shift for a period of 15 minutes followed by a 20-minute water rinse to ensure removal of the residual cleaning agent and to flush the chemical lines to ensure safe operation. The NALSTRIP 2634 technology program was also sprayed on the cylinders as needed to maintain clean forming wires.

2 Doctor with integral stationary fan-type shower for deposit removal
4 Oscillating high pressure needle shower, intermittent operation
5 Oscillating fan-type shower for chemical application and uhle box lubrication
6 Double slot uhle box

Cleaning Schematic on Short Press

(Continued on Reverse Side)
RESULTS
The BOTF program kept the press fabrics open by removing troublesome contaminants. This then reduced the frequency of breaks as the fabrics were able to more effectively remove water. Fabric life was extended by 14 days, which decreased downtime for fabric changes. This resulted in an additional 3 tons/day of production. The net result of the press fabric cleaning/conditioning program was a 112% return on investment. Further, deposits on the cylinder were reduced so more consistent board formation was achieved.