RESULTS Flash

Calcoil 4000 and FastBack Break Recovery Improve Caliper Profile in 15 Minutes

Excellent caliper profiles were achieved 15 minutes after a calender break at a leading fine printing and writing mill in the United States with the TotalPlant Calcoil 4000 and FastBack Caliper Recovery controller.

Caliper Control System
Following a break while changing from 76 to 90 g/m² (51 to 61 lbs/3300 ft²), the calender stacks were adjusted, the Calcoil 4000 was brought back on-line and the FastBack Caliper Recovery Controller was enabled. Unfiltered, high-resolution scan-to-scan profile data was collected and spectral analysis completed. The analysis shows a significant improvement in caliper profiles within minutes of recovering from a calender break while utilizing the TotalPlant Calcoil and caliper controls.

CD Caliper Profile Improvement
The cross direction caliper 2-sigma was reduced 76%, from 5.9 to 1.4 microns (0.235 to 0.056 mils), within 15 minutes after a 100-minute calender break. Peak-to-peak profile variation was reduced from 14.2 to 5.2 microns (0.57 to 0.21 mils) or 63% in the same time period. The flat caliper profile within minutes after the break notably improved the overall paper quality.

Key Operational Information

**Grade - Fine**
- Basis Weight: 76-90 g/m² (51-61 lb/3300 ft²)
- Product: Printing & writing

**Process**
- Machine Speed: 729 m/min (2392 feet/min)
- Machine Width: 6.1 m (241 inches)

**Calcoil 4000**
- Zones: 90
- Zone width: 75 mm (3 inches)

**Benefits**
- Quality
- Production
  - Improved caliper profile
  - Reduced break recovery time