New Technology Enables Towel Producer to Significantly Reduce TAD Fabric Release Usage

Rezosol™ 5451 Release Agent

Customer Overview:
- Segment: Tissue and Towel
- Product(s): Premium Towel
- Location: Southern United States

Application Overview:
- Type: TAD Fabric Release
- Equipment: TAD Towel Machine
- Capacity: 200 tons/day

Existing Treatment:
- Rezosol™ 1749 release agent, fed at 50 mgms/M2

Problem Summary:
Rezosol 1749 release agent had been used on this large TAD machine since startup. Although the program performed well, the increased demand for towel and a new grade structure required that the mill find new ways to reduce costs and increase speed.

Customer Objectives:
- Reduce overall usage of fabric release by more than 30 percent
- Improve Yankee Coating by using less fabric release
- Maintain current sheet properties for wet and dry tensile and sheet stretch

Solenis Solution:
Solenis recommended the use of Rezosol 5451 release agent as laboratory testing indicated that the product was 30% more effective than the existing release agent. During a 48-hour machine trial, fabric release usage was reduced by 40 percent with Rezosol 5451 release agent.

Customer Benefits:
- Reduced fabric release usage
- Improved Yankee coating
- Reduced sheet defects
- Increased uptime

Conclusion:
Rezosol 5451 release agent was part of a two-step program to improve this customer's operation. By reducing the TAD release usage, less oil is transferred to the Yankee dryer. This improved the Yankee coating and allowed the coating to build up better on the dryer. An improved coating reduces potential sheet defects and increases uptime.

Step two in the program will be a newer Solenis Yankee coating technology that will help increase production and allow the machine to run at higher post TAD moisture.