



Deposit Control Technologies For Tissue and Towel Machines

DuBois Deposit Control Technologies

DuBois provides unique chemistries and patented solutions for tissue and towel machine cleaning and deposit control. DuBois technologies are designed for use with forming wires, press felts, TAD fabrics, and ATMOS fabrics. Our programs generally provide an ROI many times higher than the program cost.

DuBois technologies are designed to solve deposit control problems caused by recycled fiber, wet strength resins, creping/release/debonding chemistries, wood pitch, CMC, fines and other troublesome soils. Our cleaning solutions go beyond the limitations of traditional down-time cleaning and provide more stable machine operation.

Benefits of Improved Press Fabric Performance

- Improved runnability
- More stable operation
- Improved product quality/uniformity
- Better efficiency, particularly at the end of the fabric's life
- Ability to use different or more economic additives without impacting fabric performance
- Longer fabric operating life and extended time between scheduled outages
- Less need for downtime batch washes, increasing uptime
- Eco-efficiency, water and energy savings

Results from Using DuBois Technology

Felt Cleaning Case Studies

Away-from-home towel, recycled fiber machine:

Problem: Batch washing as many as 12 times each month

Results: Eliminated eight downtime batch washes per month, resulting in \$1.01 million in increased production and reduced downtime

Away-from-home towel, recycled fiber machine:

Problem: Desired to reduce wet strength cost by adding CMC; unsuccessful due to uncontrollable press fabric filling

Results: Savings well in excess of \$1 million annually using more CMC. The flooded nip showers were also eliminated, saving water and energy

Consumer bath and restaurant napkin, recycled fiber machine:

Problem: Short press felt life and down-time due to recycle contaminants

Results: Felt life was extended to six weeks. Production increased substantially with improved runnability. The flooded nip shower was eliminated, saving water and energy

Structured towel and napkin, recycled fiber machine:

Problem: New start-up machine experienced short felt life and down-time

Results: Felt life increased from two to four weeks. Sheet breaks were reduced and production increased



Fabric Treatment Case Studies

Consumer bath and napkin, recycled fiber crescent former machine:

Problem: Wires removed from the machine sometimes in less than one week

Results: Wire changes were extended to 4-6 weeks and clothing costs were reduced. Uptime increased.

Consumer tissue and towel, virgin fiber crescent former machine:

Problem: Stickies outbreaks on the wire from labels contaminating the repulped broke

Results: Reduced the outbreaks from 2 per month to about 0.6 per month, resulting in a significant ROI from uptime gained

Cleaning Technologies

DuPulse®

DuPulse is a patented, press fabric cleaning method and equipment platform. This method of cleaning has allowed tissue machines to increase average speed, reduce drying energy, improve overall runnability, and extend fabric life. DuPulse cleaning can be done during production with no impact on the Yankee coating and release package.

DuTherm™

DuTherm is a complete solution that provides high temperature and pressure shower water to substantially enhance the efficiency of DuBois cleaning chemistry. The DuTherm system is more flexible and has lower maintenance requirements than comparable systems.

Deposit Control Chemistries

Neutra Shield™

Neutra Shield is a novel surface modification chemistry which can prevent recycled fiber “stickies” and other contaminants from depositing on forming wires and other fabrics. Unlike traditional cationic barrier chemistries, this non-ionic product will not build-up and impact drainage and does not need to be stripped from the fabric. Neutra Shield can be applied using filtered whitewater showers without negatively impacting the product’s effectiveness.

Nexus® DC 2440

Effective and economical cationic barrier chemistry for use on forming wires and press fabrics, Nexus DC 2440 prevents deposition from recycled fiber “stickies” and other contaminants from depositing on forming wires and other fabrics.

Nexus® N 5000 Series

Nexus N 5000 series is a unique line of nonionic polymer chemistries used to prevent troublesome deposits, such as recycled fiber “stickies” and pitch. These products can be used as stock treatments or applied directly to machine fabrics. The Nexus N 5000 series will not plug fabrics like traditional barrier treatments and never require stripping.

Cleaning Chemistries

Altrox®

Altrox is a patented cleaning line that is effective in removing wet strength resins, CMC, creping and releasing chemistries, and recycled fiber contaminants. Because of its effectiveness on wet strength resins, Altrox has been used to eliminate sodium hypochlorite batch washing of machine fabrics. Altrox can increase fabric life and allow a wider range of functional additives to be used without losing machine clothing effectiveness.

Neutra Solve™

Neutra Solve is a unique, patent pending cleaning line engineered specially to remove paper mill “stickies” and other organic soil deposition. This product has significant advantages over kerosene, mineral spirits, or other hydrocarbon-based solvent which are chemically inefficient at cleaning these types of soils. It can provide cost savings, reduced VOC use, and a better flammability rating than alternative products.

Div-O-Kleen™

Div-O-Kleen is a solventized, alkaline cleaning line developed for recycled fiber, tissue machine fabrics. By using solvent, alkali and a special blend of surfactants, the Div-O-Kleen line cleans the most persistent secondary fiber soils including stickies, pitch, and inks.

Accel

Accel products are a line of fabric cleaners specifically designed to clean at high machine speeds. These products are highly concentrated and are effective even at low concentrations. Most importantly, they are built with extremely quick wetting to maximize cleaning, even with short dwell times.

Products covered under one or more of the following: U.S. Patents 7,101,832; 7,597,78; 7,850,824 and/or Canadian Patents 2,750,186; 2,666,324.

Planning a Tissue Machine Start-up or Rebuild?

DuBois has worked with a number of companies on new machine start-ups. DuBois partners with the companies and works with the machine designers, engineering, and clothing suppliers to plan the chemistries, shower specifications, and chemical feed and control equipment.

Contact your local DuBois representative today or visit www.dubois-paper.com.





DuBois Chemicals

3630 East Kemper Road
Sharonville, OH 45241-2011
800 438 2647

In Canada

1155 North Service Road West, Unit 11
Oakville, ON L6M 3E3
866 861 3603

www.duboischemicals.com
www.dubois-paper.com

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