

TISSUE TECHNOLOGY

**Bringing the right products and people
to your papermaking**



Solenis is dedicated to helping pulp and paper mills operate more efficiently and profitably. We offer a state-of-the-art product portfolio that addresses nearly every aspect of papermaking. Our highly skilled team of field sales representatives, applications engineers, and research scientists ensure our products work in your specific mill environment. By bringing together the best of both worlds — innovative chemistries and innovative people — Solenis is setting the standard in papermaking excellence.

Tissue Technology

Tissue makers have to face consumer demands every day — demands for softer, stronger and more absorbent products at no extra cost. Whether producing premium brands or value brands for consumers or the away-from-home market, the need to improve product quality and machine productivity never ends.

Sometimes these conflicting demands seem impossible to reconcile. You can reduce cost by increasing machine speed and substituting lower-cost fibers, but this can come at the expense of product quality. Slowing down can improve product softness, but can result in a higher cost.

As the world leader of creping technology to the tissue industry, Solenis understands that one product or approach does not apply to all situations. We continue to develop and introduce new innovative technologies to help our customers meet their ever changing needs.



Creping Adhesive Technology

Our technology controls adhesion between the tissue and the Yankee cylinder under variable operating conditions, including the extremes of high or low moisture and high temperatures.

Key benefits include:

- Surface protection for the cylinder
- Increased production speed
- Improved creping uniformity
- Improved doctor blade life
- Improved heat transfer to reduce energy costs
- Improved softness and hand-feel

New patented fully crosslinked creping adhesives open up the operating window on the machine, allowing improved machine efficiencies and reduced energy consumption on any Yankee surface.

Coating Modifier Technology

To control rewettability, coating development, rheology, and uniformity, our technology modifies the adhesive coating. Key benefits include:

- Controlled adhesion
- Bulk/caliper improvements
- Increased stretch
- Coating uniformity

Yankee Cylinder Conditioning Technology

You can extend the operational life of the Yankee cylinder with our specifically developed conditioning products that provide exceptional protection. Other key benefits are:

- Longer run times and higher production potential
- Overall improvement of the coating film formation
- Prolonged doctor blade life
- Easier start-up after regrinds

Release Technology

This technology provides you with a consistent and uniform coating film to aid in the release of the sheet from the Yankee cylinder. Benefits include:

- Increased doctor blade life
- Control of coating buildup
- Improved ply bonding in converting
- Yankee cylinder edge control

New multifunctional release agents change the technology curve to add additional sheet properties, such as improved softness or increased absorbency.

Debonder and Softener Technology

These products are specifically formulated to ensure and enhance surface smoothness, bulk softness, and hand-feel of tissue products. Other benefits are:

- Increased sheet flexibility
- Enhanced creping efficiency

Through research and application experience in all stages of the tissue production process, we ensure that our tissue technology meets all of your expectations. Superior performance has resulted in:

- Uniform adhesion
- High wet tack
- Cylinder surface protection
- Longer doctor blade life
- Improved heat transfer
- Less sheet transfer problems
- Increased softness and bulk
- Improved machine efficiency

Converting Technologies

Solenis recently introduced a new topical treatment portfolio designed to help customers enhance the quality of their base sheet in a cost effective manner. The application can provide various benefits from fiber substitution to avoiding significant capital investment required to gain desired quality improvements.

Tissue Technology Before the Cylinder

Chemicals in other areas also affect tissue quality. With our mill-wide understanding of systems and applications, we can recommend a complete program with a broad array of technology to improve tissue and runnability. Technologies included are:

- Wet strength
- Dry strength
- Microbiological control
- Contaminant control
- Foam control
- Boiler water treatment/internal cylinder treatment
- Cooling water treatment

Total Tissue Application Systems

Having the right products is only part of your complete solution. Feed system design is also critical. To ensure total optimization of our tissue technology, Solenis has developed an application-specific feed system, which consists of three components:

- Computerized feed technology and data collection system
- Windows*-based data management software
- Monitoring and control sensors





Solenis

Strong Bonds. Trusted Solutions.

Solenis supplies specialty chemicals for water-intensive industries, including the pulp and paper, oil and gas, chemical processing, mining, biorefining and power markets. Whether you want to increase production, develop new products, reduce costs or simply do more with less, we can help. With our innovative technologies, passionate people and unrivaled experience, Solenis is ready to deliver the solutions you need.

To learn more, contact your technical sales representative or visit us online.

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