Ultis™ Dry² Strength Technology

ADVANCING STRENGTH FOR RECYCLED PAPERBOARD & PACKAGING

IMPROVE product quality, efficiency & uptime with dry chemistry
Optimizing mill productivity has traditionally meant finding a balance between machine efficiency, fiber quality and paper strength

- Liquid agents improve strength but are low in solids and sensitive to environmental conditions
- Logistics and trucking are a common, troublesome and costly problem
- Profitability suffers due to energy and additive costs plus downtime

The industry needs a better option to meet performance demands while helping control manufacturing costs and energy usage.

Solution:

**Ultis™ Dry² Strength Technology:**
Achieve faster production to optimize your operations

Introducing an industry-leading innovation for strength in recycled paperboard and packaging from Nalco Water.

Dry is better. With its advanced dry polymer chemistry, Ultis Dry² Strength Technology can help mills achieve more consistent product quality, stronger output, increased manufacturing speed and operational savings.

**Regulatory Compliance:**
- Meets food safety and sustainability regulations (FDA, BfR, China GB, Ecolabel, Nordic Swan)
- Adheres to Responsible Care® guiding principles

**Savings with Ultis program:**
- **Reduces** TCO by $8-$15 per ton
- **Increases** speed of production
- **Lowers** energy usage
- **Improves** machine efficiency
- **Reduces** additives
Product Spotlight:

**Ultis Dry² Strength Technology sets a higher standard**

Take advantage of advanced dry product dry strength chemistry that can help improve both total cost of operations and product quality. Keep production lines running swiftly and smoothly.

**Product Strength**
- **Adds up to 10% strength** over traditional strength agents, allowing for lightweighting
- Helps enhance quality and offers opportunity for higher grades

**Innovative Technology**
- **Reduces frequency of product deliveries** due to dry, polymer based chemistry
- Tolerant to environmental changes and provides longer shelf life (1 year+)

**Efficient Performance**
- Increases production speed and on-machine efficiency
- Speeds drying from advanced chemistry providing enhanced drainage
- Saves on energy due to reduced drying
- Lowers total cost of production by $8-$15 per ton

**Expert Service**
- Backed by personal, local service experts and the Nalco Water Zero Defect Delivery Guarantee
- System Assurance Center enabled, offering plant surveillance 24/7/365 from chemistry and chemical engineering experts

**Contributing to your sustainability goals**

We are committed to helping you reach key sustainability metrics. **Ultis Dry² Strength Technology** is an environmentally responsible innovation that will contribute to your success.

- **90% fewer** product deliveries versus liquid agents
- **Reduced energy usage** due to decreased refining and steam consumption
- **Reduced BOD/COD** in wastewater through reduction or elimination of starch
With Nalco Water, you get expert service and peace of mind that the right water program will be customized to fit your operation’s unique needs.

Our solutions are designed to increase your operational efficiency, improve sustainability and maintain water safety. You can rest assured that we will deliver the highest quality water program to benefit your bottom line.

**SITUATION:**
A 100% recycled paperboard mill was producing paper at a heavier weight than target to meet their strength targets.

**SOLUTION:**
The mill implemented Ultis Dry² Strength Technology to meet their strength targets more efficiently.

**RESULTS:**
- **REDUCED** REFINER ENERGY by **2.2M kWs/yr**
- **INCREASED** PRODUCTION by **24K TONS/yr**
- **COST SAVINGS** of **$140,000/yr**
- **INCREASED** PROFITABILITY by **$4.9M/yr**

**Case Study**

**Ultis Dry² Strength Technology IN ACTION**

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- **Increase Operational Efficiency**
- **Maintain Product Quality**
- **Increase Water Sustainability**
- **Ensure Safe Operations**