LOADING & HANDLING OF ROLLED CELLULOSE

HOW DOES IT DIFFER FROM LOADING & HANDLING OF PAPER ROLLS?

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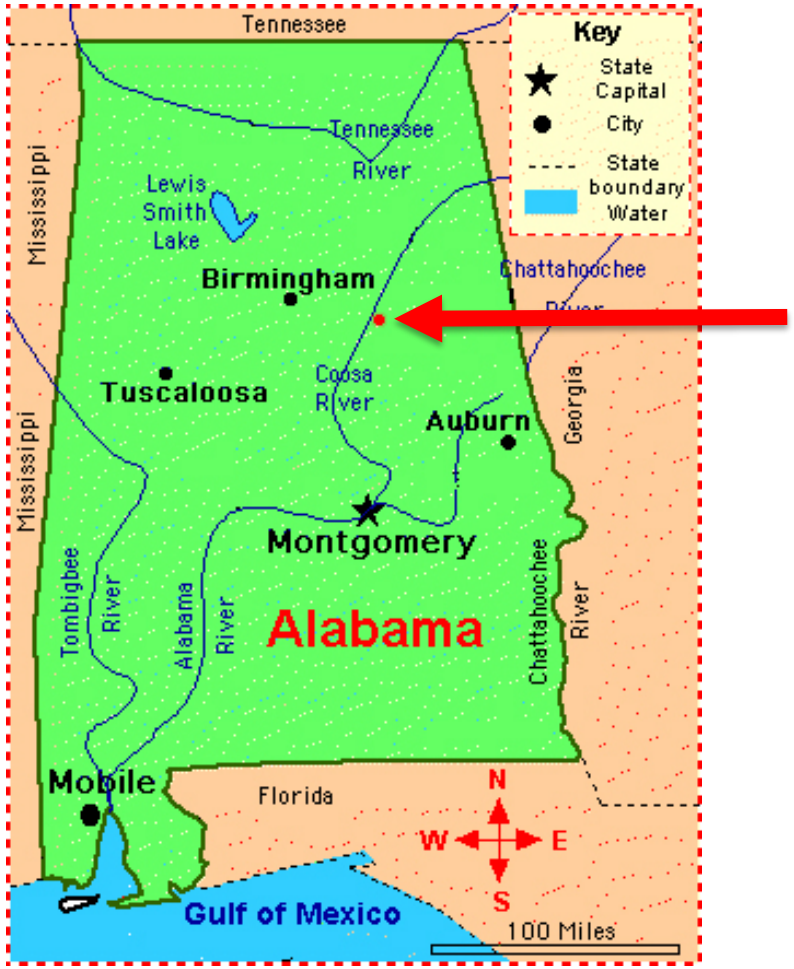
TECHNICAL SERVICES MANAGER – DAMAGE PREVENTION

Rolled Cellulose from Coosa Pines, AL.



Resolute Forest Products' Coosa Pines mill, located on Alabama's Coosa River, began operations in 1950 as a joint venture between Kimberly-Clark and newspaper publishers. The mill produced newsprint for publishers located predominantly in the Southeastern United States.

Fluff pulp was added to its product offering in 1976 with the installation of a new kraft line, recovery boiler and pulp dryer. In 2000, a $63 million "cluster rule" upgrade to the pulp mill was finalized.

The facility now produces kraft pulp used worldwide and is considered a leading manufacturer of pulp used in tissue and absorbent consumer products.

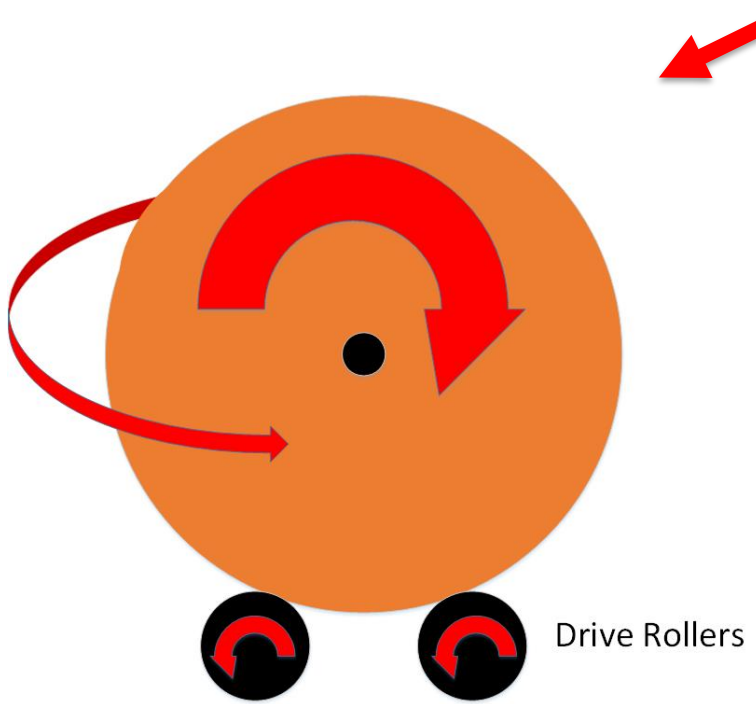
Differences in Packaging

Paper Grades
Wrapped in kraft / Vapo.
Depending on grade and size – up to 3 turns of wrap.
Inside/Outside headers.
One application of wrap.

Cellulose
Stretch wrapped.
Depending on the size of the roll – up to 34 turns of wrap.
No headers.
Two applications of wrap.

Premium Paper vs. Rolled Cellulose

Axial Wrapping & Radial Wrapping



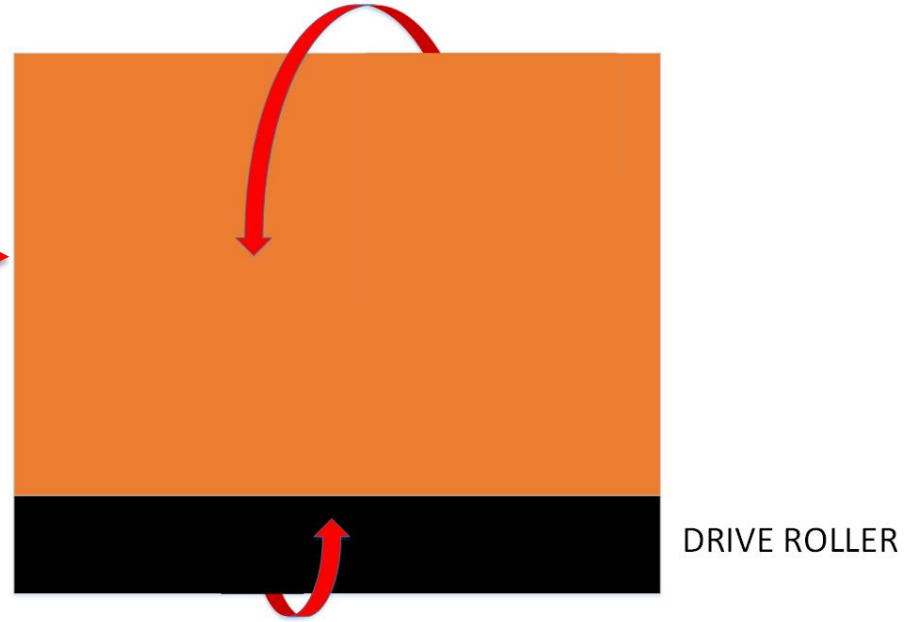
Axial Wrapping

The roll is being rotated radially as the stretch wrap is applied end to end by an orbital roll of stretch wrap.

Radial Wrapping

The roll is rotated on the bilge as the stretch wrap is applied around the belly of the roll as with paper rolls and kraft wrap.

Depending on size, a roll receives between 30 – 34 turns of stretch wrap.



Differences in Handling

Premium Paper

Roll weights are comparable.

- ✓ Similar lift trucks are used.
- ✓ Similar clamps are used.

Roll characteristics are different.

- ✓ Paper grades produce a relatively hard roll.
- ✓ Fluff pulp produces a relatively soft, compressible roll.

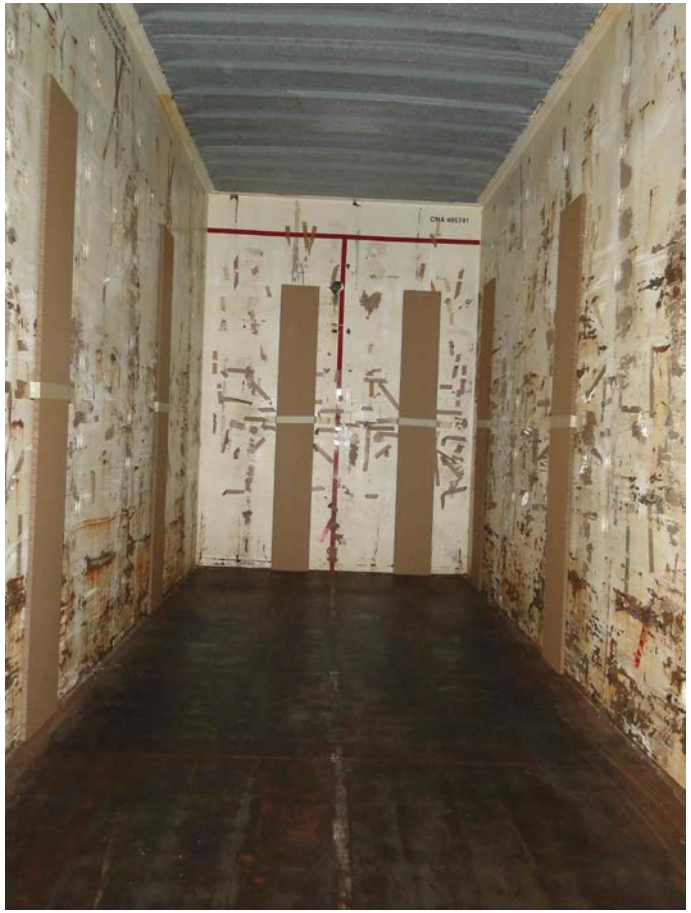
Wraps react differently.

- ✓ Kraft is relatively easy to damage.
- ✓ Kraft has a lower coefficient of friction.
- ✓ Stretch wrap is hard to damage.
- ✓ Stretch wrap has a high COF.

vs.

Rolled Cellulose

Differences in Railcar Loading – Vehicle Preparation



Premium Paper

Wall preparation

- ✓ Similarly, both use wall dunnage for product protection, not lengthwise void filler.
  - ✓ Paper cars – prevent damage that could result in linear footage loss.
    - ✓ Narrower/Thicker dunnage.
  - ✓ Pulp cars – prevent damage that could result in contamination.
    - ✓ Wider/Thinner dunnage.

Floor Preparation – After Cleaning

- ✓ Paper cars – None.
- ✓ Pulp cars – Application of one layer of fluff pulp.
  - ✓ Prevents bottom contamination.

Overall Preparation –

- ✓ No loose roof paint or rust

vs.

Rolled Cellulose

Premium Paper vs. Rolled Cellulose

Note the damage…

Which would you say is worse?

Customer Expectations

No Package Damages
No Out-of-Roundness
No Crushed Cores
No Wet Rolls
No Contamination
Physical or odors

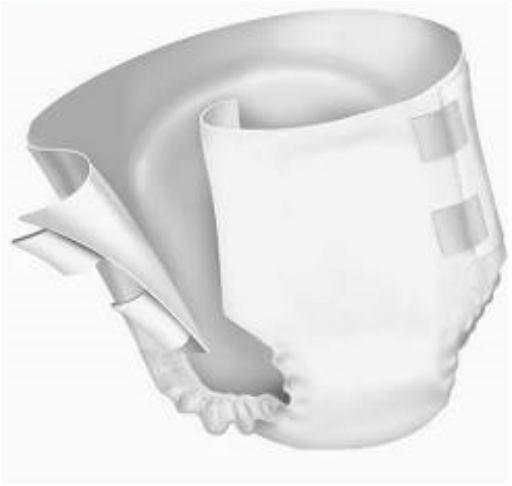
Why is Contamination Critical?

The End Uses

This product is not used in printing!

Hygiene Products

- Diapers
- Adult Incontinence
- FemCare
- Bed / Pet Pads

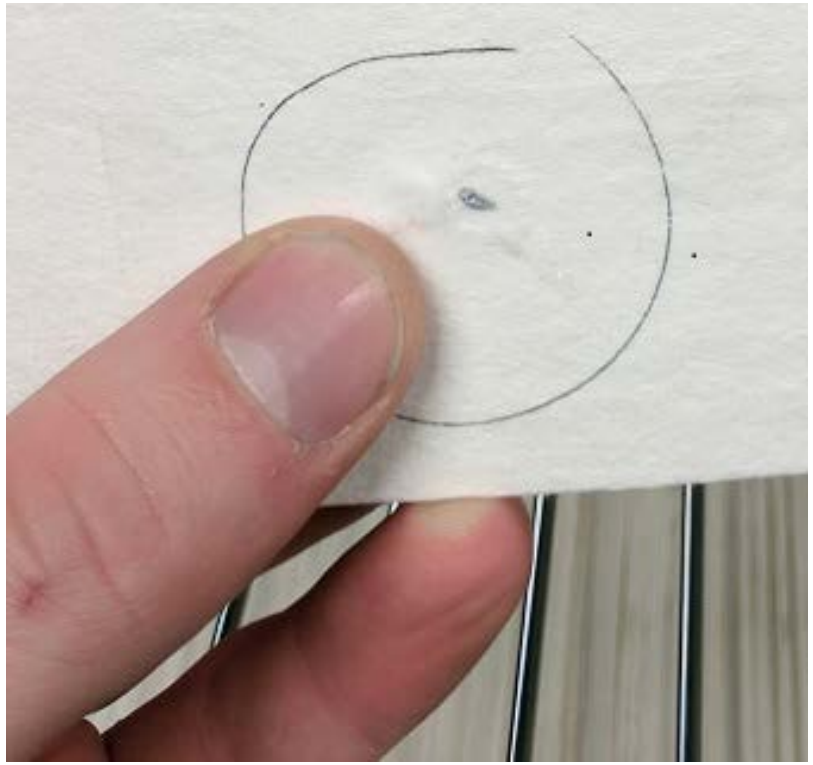


Airlaid Products

- Absorbent Hygiene
- Towel / Napkins / Table Cover
- Meat Pads

Food Additives

No Contamination

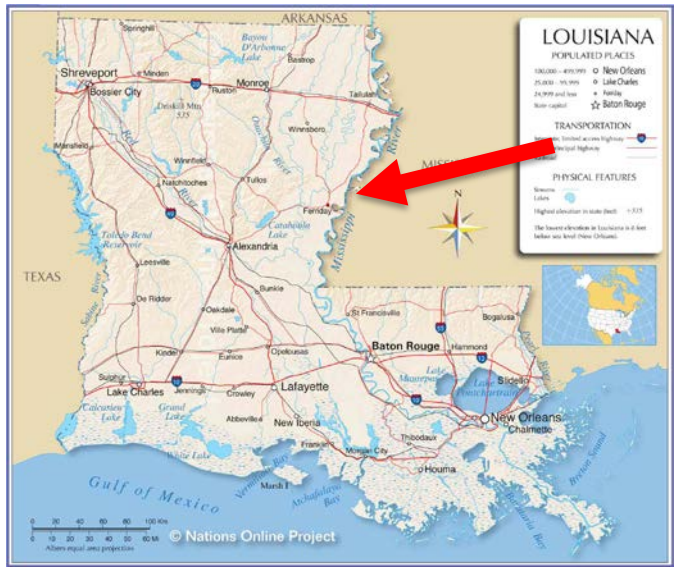


Contamination can be:

- A real safety risk for consumers
- A perceived risk for consumers

Either puts billion dollar brands at risk

Louisiana – The Sportsman's Paradise



Everyone in the Bayou State is an amateur herpetologist

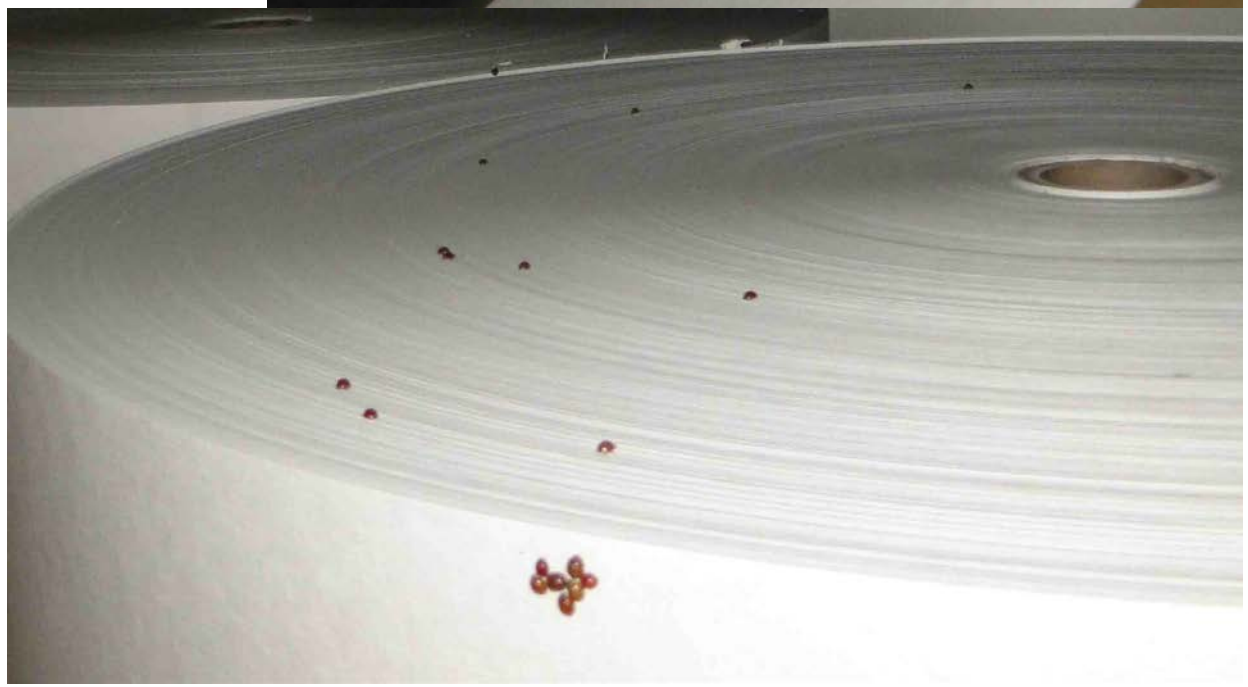
- More types of snakes than any other state in the union
- More alligators than all the other southern states combined
- Panthers, bears…you get the point.

The Denizen of Alabama

This creature strikes fear into the hearts of everyone at Coosa Pines from the mill manager to janitor.

Ladybugs

Perennial threat to rolled fluff pulp every fall in the Southern US. Must be manually exterminated from vehicles (vacuum cleaner). Stretch wrapped rolls can be cleaned if the pulp isn't contaminated.



Ladybugs

Plastic mesh has to be installed over any ventilation ports in containers and railcars to keep the ladybugs out.

Rolled Cellulose vs. Paper Rolls

So what is the take-away:

- ✓ Wrapping medium is different
- ✓ Wrapping application is different
- ✓ Handling equipment is similar
- ✓ Vehicle preparation is different
- ✓ Customer expectations are greater

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THANK YOU

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