



Fibre Box Association  
Independent Sheet Plant Operators  
Workshop

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March 1, 2011

Sources: RISI Lightweight Containerboard Study  
RISI Global Containerboard Cost Benchmarking



# Light Weight Containerboard Discussion

- Containerboard Stats You Already Know
- Mill Perspective
- Converting Approaches
- Conclusions and Discussion

# Containerboard Getting Lighter

## Light Weighting NOT Light Weight

- Driven by ECT Performance Standards

## Basis Weight Trends

- 1990 48.5 lbs. MSF
- 2009 45.8 lbs. MSF

## Medium

- 1990 26# 60%  
23# 2%
- 2009 26# 20%  
23# 40%

1990 Basis Wt	% of Use
42	50%
69	21%
33	11%
38	7%
26	5%
90	4%
Other	2%

2008 Basis Wt	% of Use
34 - 37	25%
55-61	20%
42	19%
27 - 33	12%
69	10%
< 26	5%
Other	9%

# Mill Perspective

## RISI Forecasts

End of 2010 – Reduction of 2.8 Million Tons since 2008

End of 2014 – Net Change of + 828,000 tons since 2008

140 Containerboard Machines in North America

14 Machines produce Grades 23# or lower

Equal to approx. 3.3 Million ton of capacity annually

5 machines have been built since 2000 – 1/3 of capacity of lightweights

Greenfield: Pratt and New Forest

Conversions: International Paper – Uncoated Free sheet

Renew/KPAQ – Coated sheet

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# Light Weight Containerboard Mills

Company	Location	Lowest B/W # MSF	Highest B/W # MSF	Products
International Paper	Cantonment, Fl	18	30	KLB
KapStone	Roanoke Rapids, NC	20	31	KLB
<b>Renew / KPAQ</b>	<b>St. Francisville, La</b>	<b>22</b>	<b>35</b>	<b>KLB</b>
International Paper	Savannah, Ga	23	42	KLB
Georgia Pacific	Toledo, Or	23	42	KLB
Greif	Massillon, Oh	18	36	RCM
International Paper	Henderson, Ky	23	42	Recycled LB
<b>Abitibi Bowater</b>	<b>Coosa Pines, Al</b>	<b>17</b>	<b>23</b>	<b>Recycled LB / RCM</b>
Pratt	Shreveport, La	18	30	Recycled LB / RCM
Atlantic / New Forest	Scarborough, Ont	21	69	Recycled LB / RCM
Pratt	Staten Island, NY	23	40	Recycled LB / RCM
SSCC	Jacksonville, Fl	23	42	Recycled LB / RCM
Norampac	Burnaby, BC	23	56	Recycled LB / RCM
Jackson Paper	Slyva, NC	23	45	Recycled LB / RCM

# Independent Converting Perspective

- Integrated Producers Have Little Incentive to Manufacture LW Containerboard.
- Does Your Market Want It?
- The Trap of Grade Standardization in a Commodity Market or What do We Stamp It?
- Performance Liability at Your Customer
- A New Sales Cycle
- Economic Opportunity, the Yield versus the Performance

# The Challenge: Goals & Purpose

- North America continues to over package vs. Europe and Asia
- Opportunity for increased fiber utilization and design creativity
- Gain a competitive advantage in product offering backed by solid test data
- Create a market strategy to effectively present to key customers
- Improve margins at our sheet plant customers

# New Containerboard Grades

- Collecting data on lightweight liners and medium
- Newsprint mills converting to liner for 18#, 20#, 23#
- Medium mills running 18# and 20#
- Massillon ran 20# trial last month
- Conventional liner machines running 26#, 31#, and 33# high ring grades

# New Flute Profiles

- EB Double Wall replacing heavy single wall grades
- EE Double Wall performing well in display applications
- BB Double Wall?
- Any variation of what CorrChoice has that can be translated into a market advantage

# Trials, Testing and Data

- Standardize trial procedure and data collection
- Accurate data in one spot so clear comparison and analysis can be done
- Baseline data updated on conventional grades included to position new combinations
- Critical to have raw material, combined board, and finished box test data

# Conclusion - Discussion

Containerboard Machines are available

In 2013 – 2014

+15% of containerboard capacity will be less 23# basis wt.

16% linerboard capacity      14% medium capacity

Question -

Today, is there a compelling value proposition advantage in North America Independents to use lightweight substrates?

How do you do it / What are examples?