THE NEXT GENERATION OF RECYCLED LINERBOARD

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NOVEMBER 2016
THE NEXT GENERATION
OF RECYCLED LINERBOARD
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CHANGE OF MENTALITY
ACCESS TO NEW TECHNOLOGY
SUSTAINABILITY
WHAT IS NEEDED TO ACHIEVE THE GOAL?

END USER:
What is the end user looking for?

BOX MANUFACTURER:
To produce at lowest cost while maintaining the quality to perform.

TO FIND SUBSTRATE THAT CAN OPTIMIZE THE PERFORMANCE OF THE BOX THROUGH A NEW CONCEPT CALLED: RIGHTWEIGHTING
WHAT IS RIGHTWEIGHTING?
WHAT IS RIGHTWEIGHTING?

It’s about continued FIBER REDUCTION WITHOUT DIMINISHING STRENGTH.

Takes new technology to deliver IMPROVED PRODUCTION OPTIONS.

It’s about FORWARD THINKING to create new linerboard grades for a proliferation of newer flute types.

It’s about meeting the need for SMART PACKAGING ALTERNATIVES for e-commerce, retail and shelf ready packaging and for design cartons.
WHAT IS RIGHTWEIGHTING?

It’s about **MONITORING ADDITIONAL PHYSICAL PROPERTIES** of linerboard.

Corrugated technology, zero crush converting and digital imaging have been waiting for **ADVANCED CONTAINERBOARD PRODUCTS** to fill the need for right weight packaging.
RIGHTWEIGHTING: ITS ORIGIN

In the early 2000s, EUROPEAN CONTAINERBOARD PRODUCERS invested in new technology to produce lightweight linerboard. Over 30 new machines have been built in Europe since.

The NORTH AMERICAN CONTAINERBOARD INDUSTRY did not follow the trend and very few investments were made to adapt paper machines to offer lightweight containerboard grades.
EASY TO UNDERSTAND...

North America has 143 containerboard machines
Median age: 41 YEARS OLD
Median technology age: 19 YEARS OLD

WHY WOULD THEY PUSH FOR LIGHTWEIGHT?
WHAT IS THAT NEW TECHNOLOGY?

The new generation of linerboard paper machines are designed to build compressive strength to obtain the highest STFI (SCT) per basis weight.
BUILDING COMPRESSIVE STRENGTH

- HIGH QUALITY OCC
- REFINING DEGREE
- PULP ANALYZER
- FIBER FRACTIONATION
- FINES CONTENT

FURNISH
BUILDING COMPRESSIVE STRENGTH

FOURDRINIER OR GAP FORMER

FORMER

DILUTION HEAD BOX

MAXIMIZE FIBER SQUARENESS
BUILDING COMPRESSIVE STRENGTH
BUILDING
COMPRESSIVE
STRENGTH

A UNIQUE
TOOL TO
INCREASE
STRENGTH
UP TO 35%
MORE ECT

STARCH

SIZE PRESS
(add starch
to the sheet
to increase
strength)
BUILDING COMPRESSIVE STRENGTH

NEW TECHNOLOGY ENSURES LOW SHRINKAGE (dimensional stability)

DRYING
BUILDING
COMPRESSIVE
STRENGTH

CALENDER

IMPROVE SMOOTHNESS FOR BETTER PRINTABILITY

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BUILDING COMPRESSIVE STRENGTH

MORE ACCURATE AUTOLINE TESTING

SCANNING

IMPROVED SCANNING TECHNOLOGY
BOX PRODUCER BENEFITS
BOX PRODUCER BENEFITS

NORTH AMERICA: 26/23/26
EUROPE: 20/23/20

19% SAVINGS FOR EUROPE
FIBER REDUCTION

NORTH AMERICA
LINERBOARD: 31/35 lbs
MEDIUM: 33 lbs

EUROPE
LINERBOARD: 20.5 lbs
MEDIUM: 18 lbs
WHAT’S CHANGING?

NEW TECHNOLOGY:
FIBER STOCK PREP, PAPER MACHINES
AND CORRUGATORS
INTRODUCTION OF NEW FLUTES AND PROFILES
PROCESS CONTROLS
NEW ZERO CRUSH FLEXOS
DIGITAL PRINTING
TAKE-AWAYS

EMPLOY
THE NEWEST TECHNOLOGY

FOCUS
ON FIBER REDUCTION NOT LESS STRENGTH

MATCH
LINERBOARDS TO NEWEST FLUTE PROFILES

ACKNOWLEDGE
THAT PACKAGING IS CHANGING

RECOGNIZE
THE DIFFERENCE IN PHYSICAL PROPERTIES

HAVE FUN!
YOU SNOOZE, YOU LOSE
LIGHTER.
STRONGER.
THE COST BENEFITS REALLY STACK UP