



CENTER OF EXCELLENCE LIQUID PACKAGING BOARD BillerudKorsnäs Gävle

2013-11-15 | Ulf Eliasson, Mill Director BillerudKorsnäs Gävle



WE CHALLENGE CONVENTIONAL PACKAGING FOR A SUSTAINABLE FUTURE





BOARD TO EVERY FIFTH ASEPTIC LIQUID PACK GLOBALLY COMES FROM BILLERUDKORSNÄS GÄVLE

- Liquid packaging board the dominating product
- The largest production unit globally for aseptic portion liquid pack
- White top liner also produced
- The largest production unit in BillerudKorsnäs
 - 700 kton of annual production capacity
- 730 employees





BILLERUDKORSNÄS

EVERY 24H BOARD TO ~200 MILLION PORTION PACKS PRODUCED





VALUE CHAIN LIQUID PACKAGING BOARD





VERY HIGH DEMANDS ON LIQUID PACKAGING BOARD

EXAMPLE OF DEMANDS

Consumers

- Product safety
- Environmental profile
- Recyclable
- Grip stiffness
- No leakages
- Attractive print

Retailers

- Printability – attractive package
- Efficient handling

Dairy, beverage & food companies

- Runability in filling machines at high speed
- Formability
- Resistance to various liquids

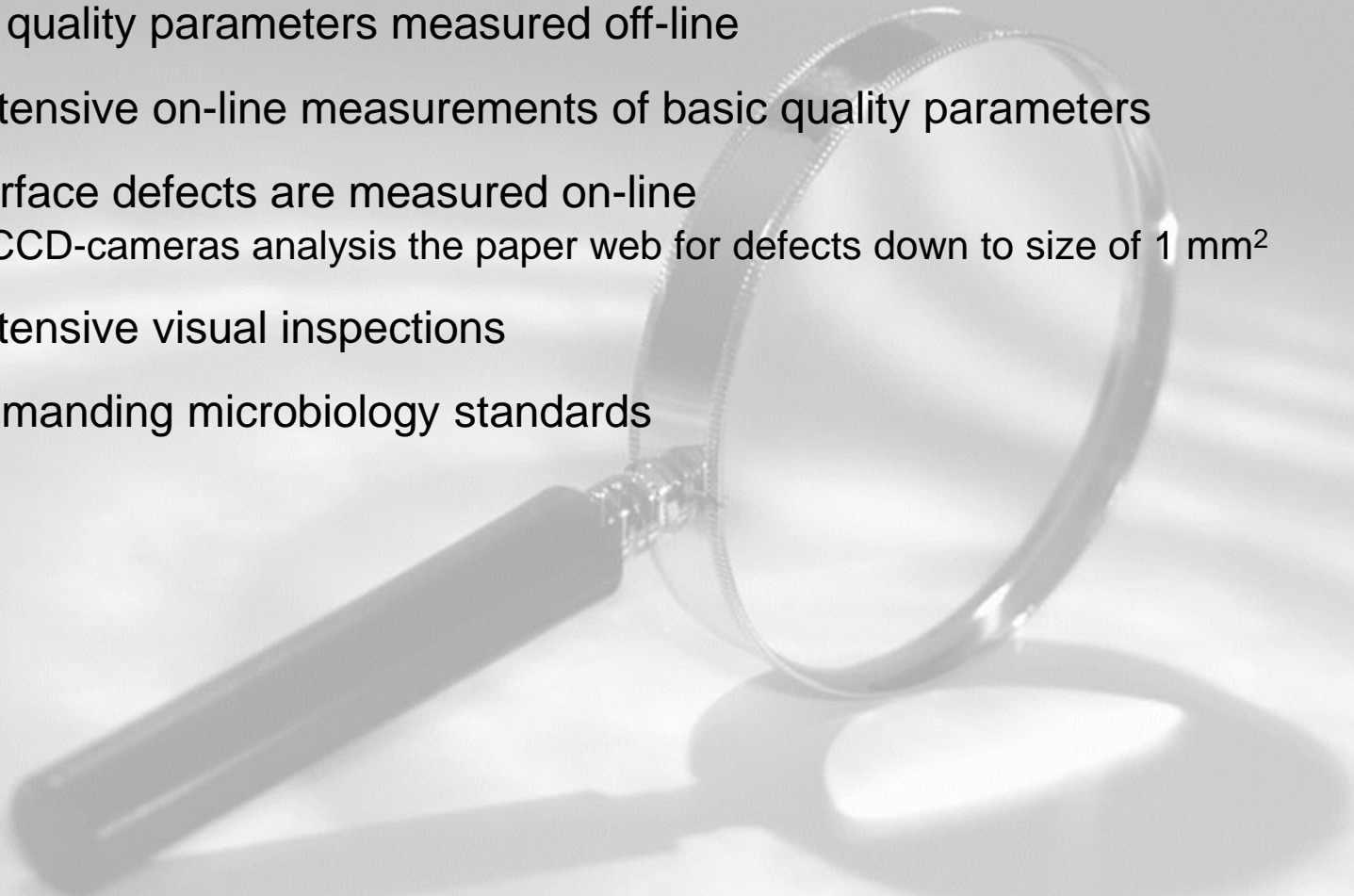
Packaging manufacturers

- Printability
- PE-adhesion
- Creaseability



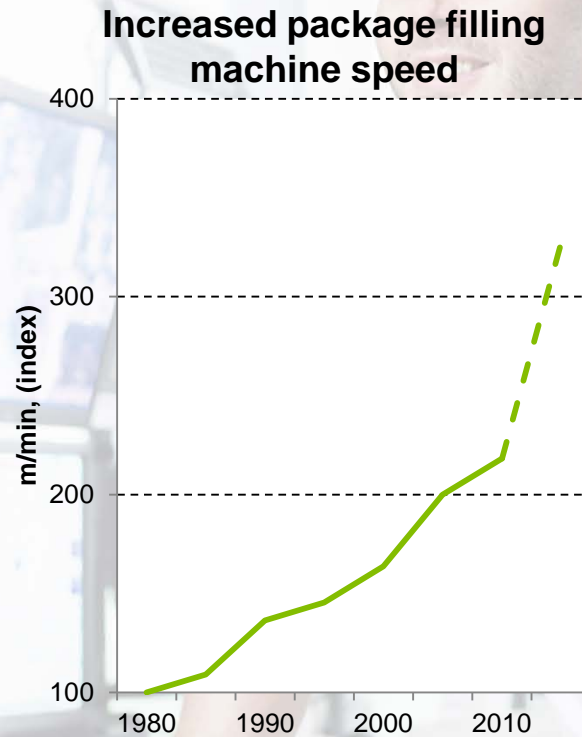
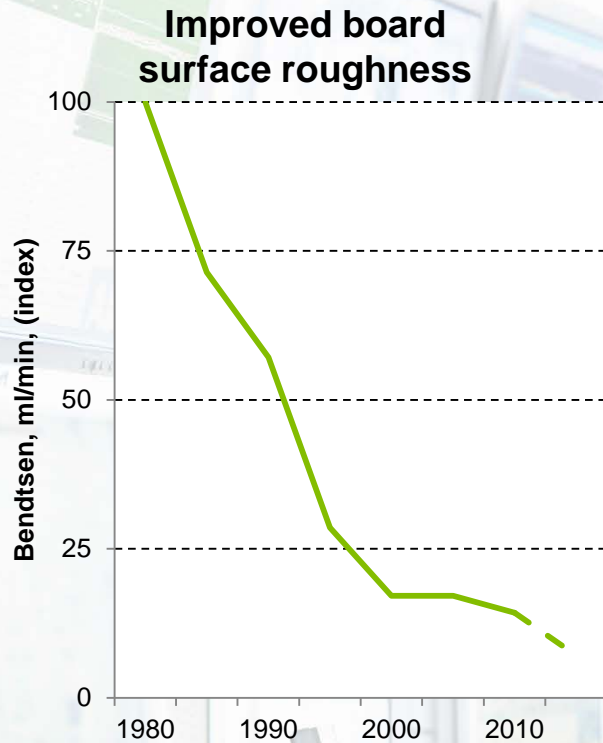
WE MEET EXTENSIVE QUALITY REQUIREMENTS...

- 35 quality parameters measured off-line
- Extensive on-line measurements of basic quality parameters
- Surface defects are measured on-line
 - CCD-cameras analysis the paper web for defects down to size of 1 mm²
- Extensive visual inspections
- Demanding microbiology standards





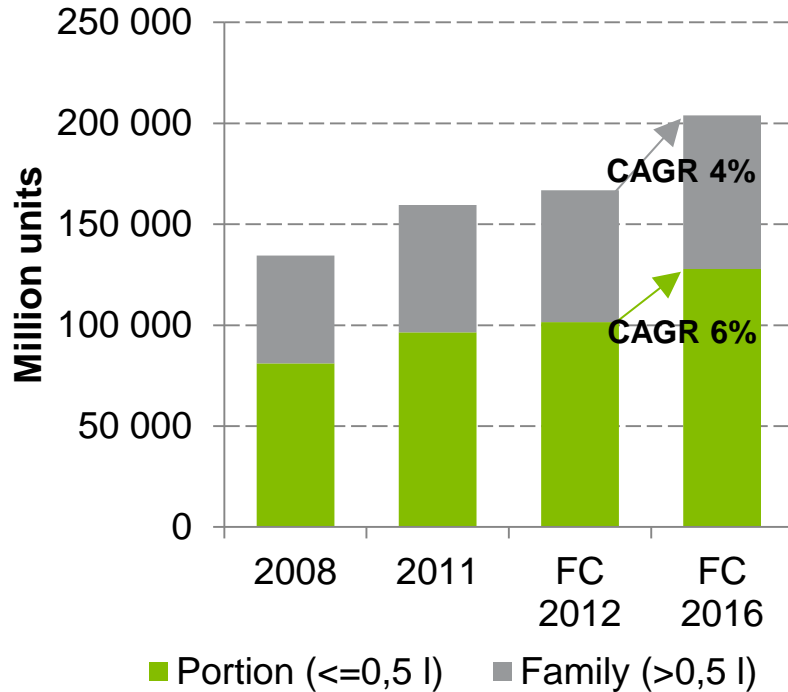
... AND HIGHER REQUIREMENTS FROM CUSTOMERS



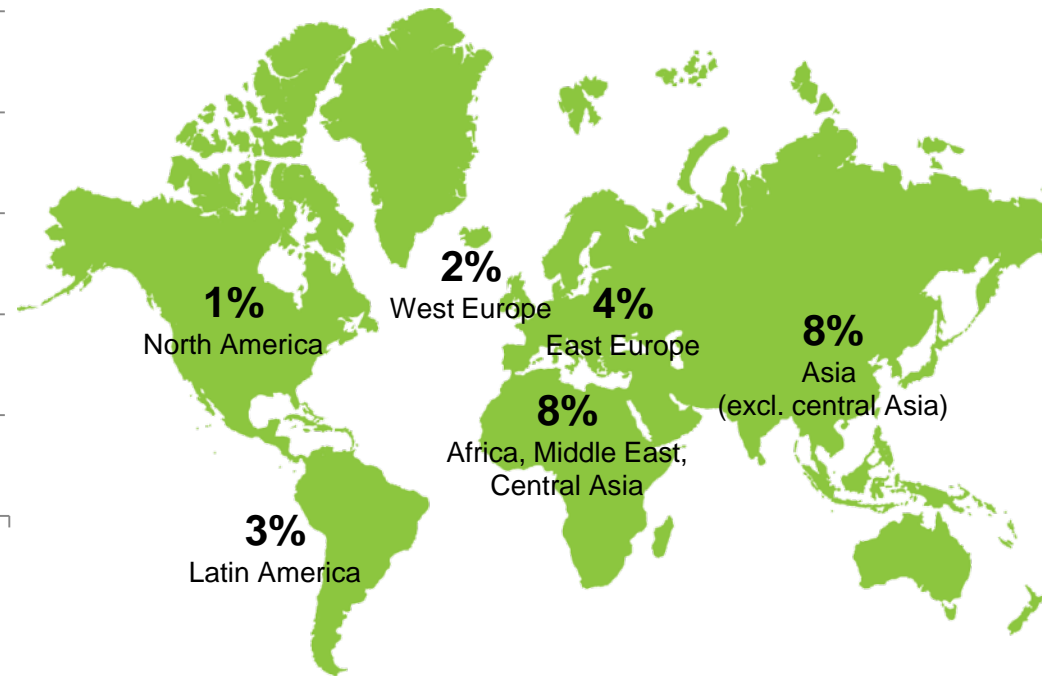


PORTION PACKS EXPECTED TO GROW BY 6%

Global aseptic liquid packaging board market



Portion packs annual growth (2012-2016)





OUR MACHINES ARE WELL POSITIONED FOR PORTION PACKS

- Both machines in Gävle are designed to produce portion packs with high productivity
- PM4 – two ply concept for packages from 100ml to 500ml
- PM5 – three ply concept for packages from 250ml to 500ml
 - Also production of board for packages from 500ml to 1000ml





DEBOTTLENECKING INCREASING CAPACITY SHORT-TERM

2015 VS 2011

- +70 ktonne to 660 ktonne (annual)
 - PM5 investment in 2012 (MSEK ~270)
 - PM4 investment in 2014 (MSEK ~220)
 - Continuous capacity improvements
- Improved quality (mainly print surface)

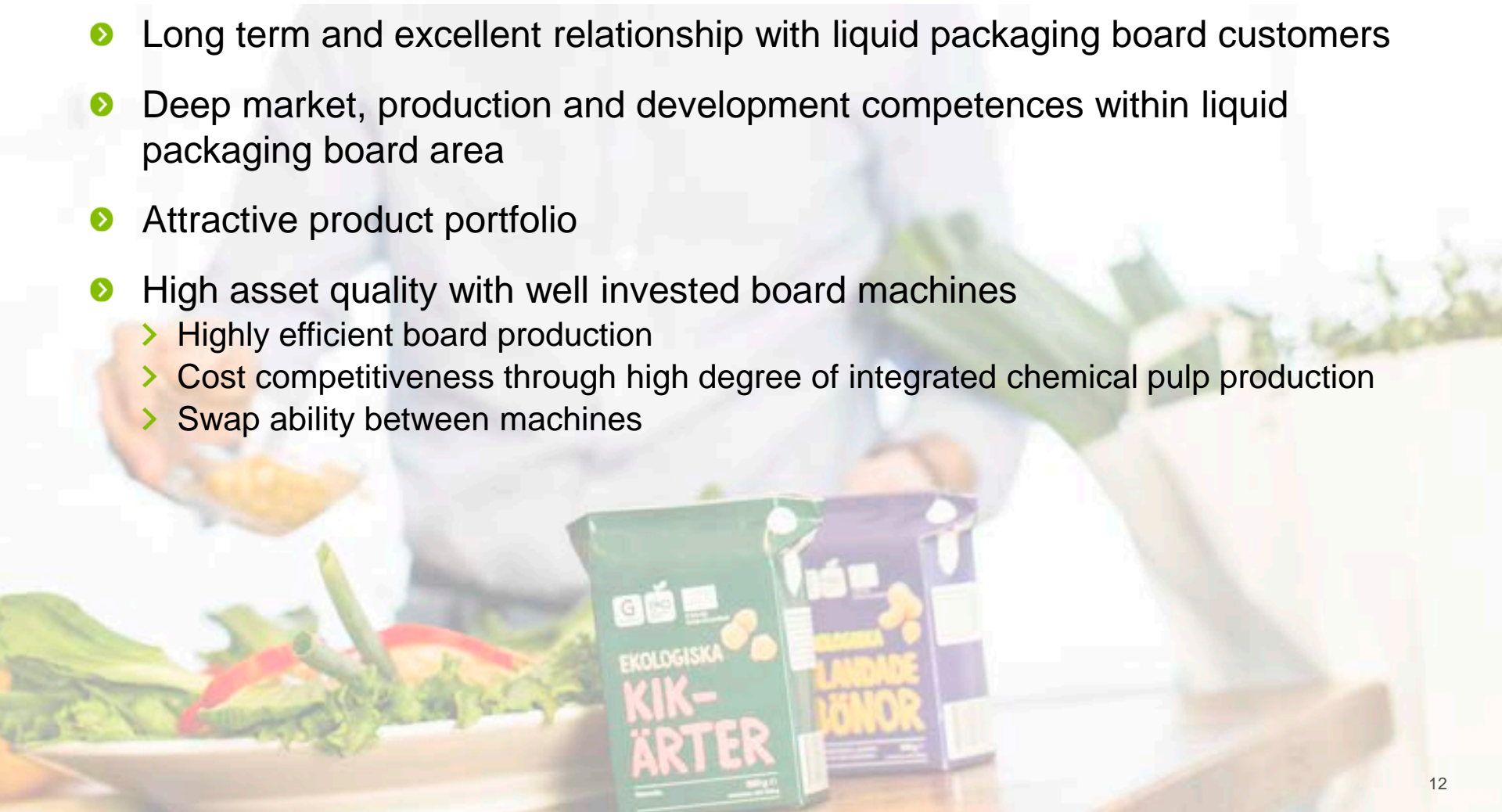
+12%

in annual
production capacity
(2015 vs 2011)



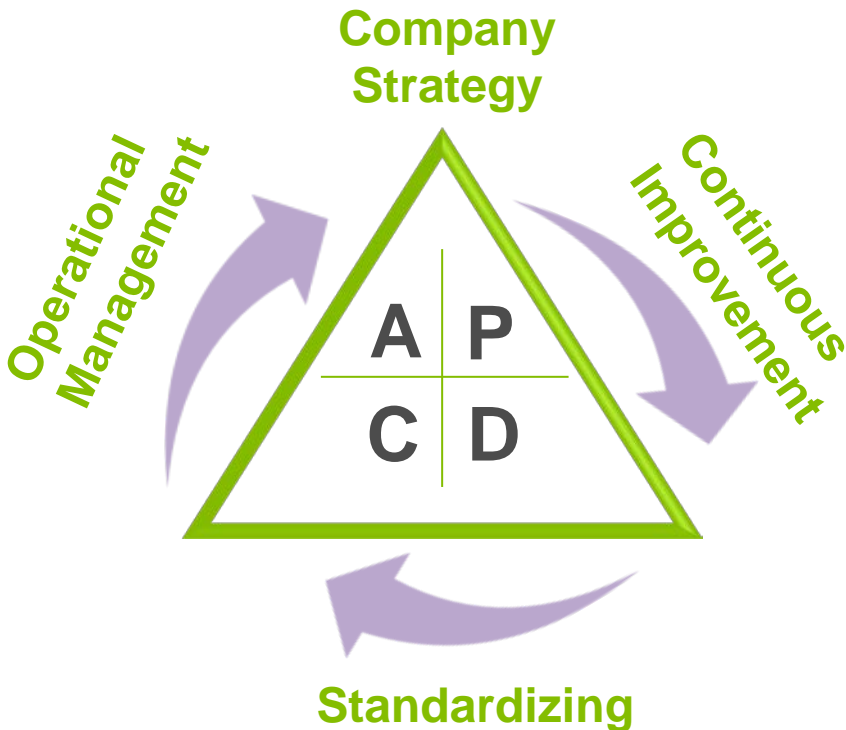
OUR COMPETITIVE ADVANTAGES

- Long term and excellent relationship with liquid packaging board customers
- Deep market, production and development competences within liquid packaging board area
- Attractive product portfolio
- High asset quality with well invested board machines
 - Highly efficient board production
 - Cost competitiveness through high degree of integrated chemical pulp production
 - Swap ability between machines



BKOM (BILLERUDKORSNÄS OPERATIONAL MANAGEMENT)

A STRUCTURED AND CONTINUOUS APPROACH TO ERADICATE BUSINESS LOSSES AND MAXIMIZE PERFORMANCE



Improvement Team:
Reduction in pulley breakdowns

The Route for breakdown reduction: the activities

Define preventive maintenance plans	<ol style="list-style-type: none"> 1. Summarise causes & countermeasures from breakdown analysis 2. Implement actions and countermeasures 3. Set the planned maintenance system 4. Set the Machine Board 	<ol style="list-style-type: none"> 1. Introduce a new breakdown definition improve the data collection system 2. Introduce the breakdown analysis 3. Define the system to support it 4. Train all the relevant operators and maintenance technicians 5. Implement the system & continue follow up analyses and results
Highlight the causes of sporadic breakdowns	<ol style="list-style-type: none"> 1. Define the failure modes in important areas 2. Carry out 5why analysis on failure modes 3. Define countermeasures 4. Implement countermeasures 5. Establish a monitoring system for recurrences 	
Attack repetitive breakdowns	<ol style="list-style-type: none"> 1. Define the failure modes in important areas 2. Carry out 5why analysis on failure modes 3. Define countermeasures 4. Implement countermeasures 5. Establish a monitoring system for recurrences 	<ol style="list-style-type: none"> 1. Identify critical areas 2. Perform Initial Cleaning and Tagging 3. Manage the Tags 4. Define and Implement Cleaning, Inspection and Lubrication standards 5. Restore all the Operating Standards
Restore basic condition in critical areas and set standards	<ol style="list-style-type: none"> 1. Set up a data collection system 2. Analyse historical data & set performance indicators 3. Deploy breakdowns and carry out a Pareto Analysis 	
Identify breakdown types	<ol style="list-style-type: none"> 1. Set up a data collection system 2. Analyse historical data & set performance indicators 3. Deploy breakdowns and carry out a Pareto Analysis 	

Overview Solving Efeso © 1999 - 2013



EXPANDING FOOTPRINT IN CONSUMER PACKAGING

LIQUID PACKAGING BOARD

- ✓ Challenging and complex product
- ✓ Attractive growth opportunities
- ✓ BillerudKorsnäs well positioned to capture growth



BILLERUDKORSNÄS

