

# SCA Containerboard launches Herculight

As announced in our last issue, the rebuild of our Aschaffenburg mill has been performed, and a new paper grade is born and named Herculight.

We at SCA are devoted to staying ahead in the game. That's why we constantly are developing new technologies/new products, not for the sake of innovation but to offer you, our customers, better box performance and higher productivity.

Herculight gives box-performance

## new punch

The clear trend within the corrugated market for lighter weight and higher performing papers was the driver for us to rebuild our paper machine in SCA Packaging Aschaffenburg in order to produce Herculight, a new fluting in the lower weight range.

Using the latest paper technology, this new grade, which has just come on to the market, has been designed to provide the optimum ratio between box strength and paper substance involved.

Herculight is a flexible solution for a wide range of packaging solutions such as presentation packaging, standard boxes or complex die cuts. It has an excellent runnability on all corrugators, from the traditional ones to the latest high-speed technologies.



With Herculight, SCA offers not only a paper but a complete package containing:

- the right combination between runnability and contribution to box strength
- the technical support needed to reach the fine-tuned application of this new product and thereby maximize the benefits of Herculight
- Stream, SCA's comprehensive vendor managed Inventory programme which assures you have adequate stocks at all time and cuts down your operational costs.

Your sales, technical customer service and supply chain sparring partners are ready to provide you the adequate support for you to succeed with Herculight and to share with you our reference list of examples where Herculight has contributed to provide the right box performances.



## Wrapping for Kraftliner White Top



In its continuous seek for top-class products and services, SCA Containerboard has decided to invest in a brand new wrapping line for the Kraftliner White Top production.

All "Nordliner White Top" reels produced in Munksund mill since end January are wrapped in a PE coated kraftliner paper. Material structure, grammage, and wrapping process have been designed to assure the maximum protection of the paper reels. The entire "packaging" is made

of a double paper wrapping, folded on corrugated board circles protecting the reel ends, while an outside paper circle is sealed over to close the packaging.

This wrapping will assure a higher protection against transit damages along the supply chain, and as a result will lead to significant savings, allowing you to start using the paper closer after stripping of the wrapping.

Nevertheless the main benefit comes from the resulting improved management of paper moisture. The relatively closed atmosphere created around the paper reel is a key tool to stabilise paper moisture content and thus provide you with an increased consistency in paper convertibility.

Runnability will be improved while phenomenon like piping will be drastically reduced.

With Nordliner White Top wrapping, SCA Containerboard offers you :

- **An optimised paper quality for your production process**
- **An increased runnability and regularity in the use of the paper**

SCA Containerboard is happy to provide you with these competitive advantages in your Presentation Packaging market !

# CTB Market Bulletin

## 1. General market situation

### Economic Situation

The eurozone headline is "small improvement". The economic sentiment indicator is the highest since mid 2001 and continues to improve, largely due to higher industrial confidence.

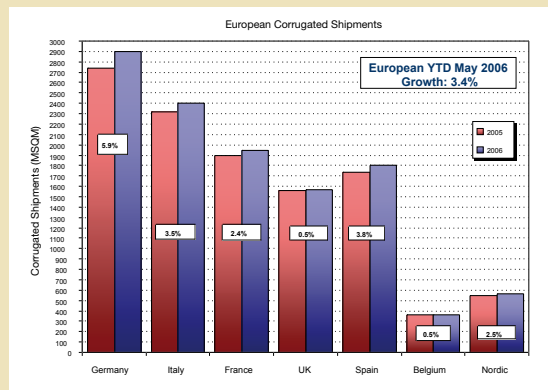
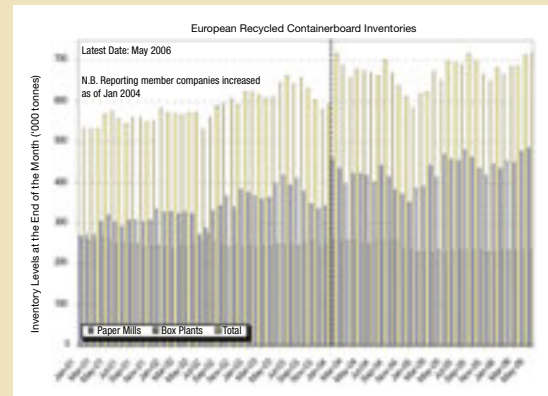
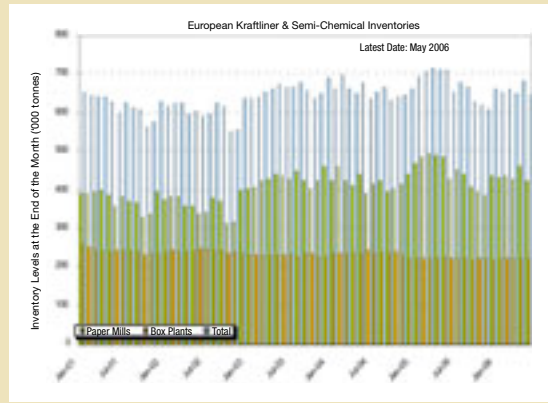
The PMI (Purchase Manufacturing Index) was again up in February and is at its highest since July 2004. The forecasted GDP growth and industrial production in 2006 has been revised upwards by 0,1%.

Headline for the US economy is "downwards adjustment". Final Q4 data turned out weaker than expected on the back of disruptions by the hurricanes and high oil prices. The economy grew at its slowest pace in three years during the last three months of the year. Investments fell and the outlook for 2006 has worsened somewhat, with GDP growth downgraded by -0,2%.

In 2005, the overall box shipments in Europe increased by 0,5 %. Germany has been by far the strongest market with a growth of 3 %. UK, France, Benelux and the Nordic markets showed a decrease, while Italy and Spain were stable compared to the previous year. Important is to remark that the last quarter was the most busy quarter of the year in all regions.

The 2006 box demand is showing a good growth in Germany, Italy, Spain and Nordic countries, while the increase is more moderate in Benelux and in the UK.

The expectations for 2006 are still strong, certainly compared to relatively slow months in 2005.



## 2. Virgin paper

The US market continues to be strong. Inventories in the supply chain are very low and operating rates are steady above 94%. In Europe there was no growth in virgin shipments during 2005, the full year ended at +/-0. This year, the demand for kraftliner is increasing and kraftliner producers have raised prices during Q1. The reasoning behind these increases is higher costs and coupled with lower prices, resulting in a critical earning situation.

The demand for kraftliner is expected to remain good and the market is getting tighter with lower imports. This trend is expected to continue in the coming months and further price increases are to be expected.

## 3. Recycled paper

The demand for recycled grades is good, but the production is also higher than last year. After an increase at the beginning of the year, the mill inventories are now decreasing.

The prices for recycled grades started to climb towards the end of 2005 and continued through spring 2006. The main reasoning behind the increases is the booming energy prices. Closure of capacity was numerous in 2005 and some further closures are announced in 2006. The capacity closures improve the demand and supply equation and even with a modest demand increase, the capacity utilisation rates are expected to be better than expected.



# Warped board and liner moisture

Warp in corrugated board is a rather well known phenomenon that may occur for many different reasons. Under normal conditions there are measures to take in order to prevent the warping behaviour of board, addressed by paper mills and corrugating plants. Among the more commonly known causes to warped board we find explanations such as:

- condition of the corrugator
- corrugator settings
- climate changes (if the two liners differ in dimensional changes the board will warp)
- paper properties (level and variation in anisotropy and moisture).

This article is about liner moisture, which has been addressed by paper mills and corrugated board plants for many years. Standardisation efforts by Groupement Ondulé, ECO and FEFCO, have resulted in a new standard published in the previous issue of INFORM@. Our development will continue keeping focus on the moisture specifications and how to effectively prevent problems with warp in corrugated board.

Paper is a biological material, which changes its moisture content with the climate. It expands when the relative humidity increases and shrinks when it decreases.

A sheet of corrugated board warps if the dimensional changes in the two liners differ, which happens if there is a difference in the moisture content between them when the sheet leaves the corrugator. This moisture difference is the main cause to warped board.

Preventing warp in corrugated board is to a large extent a matter of using the available corrugator controls together with a liner that is good enough.

But, what is a "good enough liner"?

A liner that is "good enough" is a liner that is possible to manufacture in a rational way and does not suffer from moisture variations that result in any significant degree of warped board. Finding clever balanced moisture specification criteria has been a major task. It is in principle a matter of preventing significant parts of the

liner from being too wet or too dry having in mind that:

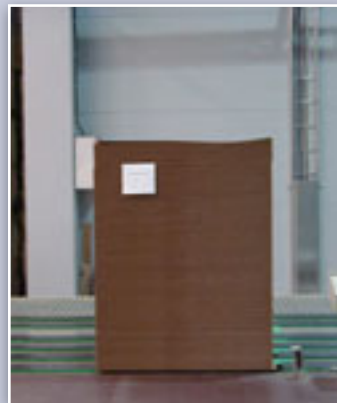
- There are no corrugator control means to correct for cross directional variations in moisture content of the liner
- All sheets in a pallet of sheets warp in about the same way – an individual sheet warps in the same way as the surrounding sheets
- Some minor long scale machine directional variations in moisture can be corrected by the corrugator control systems.
- The specification measures must be calculated in the same way in all containerboard mills
- The specification criteria must be implemented in the same way in all mills forcing all reels that do not meet the criteria to be rejected
- The specifications are understood by the operators in the containerboard mills meaning that they can trace what caused a rejection and to take relevant corrective actions.

Those criteria have been implemented with assistance from CPD in a newly developed computer system (MBS) that is to be installed in the containerboard mills. The system will give visual feedback to the operators enabling them to take corrective action to prevent reels from being rejected. This platform facilitates further improvements. The expected benefits of this investment are less rejected paper due to reduced moisture variations at the paper mill as well as less warped board in the corrugating plant.

Combined moisture variations



Cross directional moisture variations



The figures illustrate different degrees of warp, in this case caused by moisture variations in the liners. At the left example the warp was caused by combined variations in machine and cross direction of the liners. At the right example the variation was only in cross direction of the liners.

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