

## The dragon has awakened

The Chinese packaging industry is on the march and no one can stop it.

Christian Rommel, expert in Chinese packaging, reports from Hong Kong on the status quo and upcoming trends in the Middle Kingdom.



For more than a decade, the Chinese packaging industry has recorded a very high level of steady growth, 11% to 16% per year. Output is currently valued at around 410 billion Chinese Yuan (RMB), or just over EUR 37 billion. With this level of production, China has worked its way up to third in the world, behind the US and Japan. This article presents a range of examples to illustrate the potential of this barely conceivable market size.

## Economy still booming at a high level

Prime Minister Wen Jiabao and Head of State Hu Jintao have set the course for China's continued economic development with the new five-year plan, the country's 11th (2006–2010). The plan is to instigate fundamental change of course, but achieving this objective will be just as ambitious as the challenge itself. The policy makers aim to carefully channel the unfettered economic boom and make way for more balanced growth. Closing the dramatic gap between rich and poor on the one hand and the urban and rural population on the other in order to achieve a fairer distribution of wealth is the government's top priority. Quality, not quantity is now the order of the day, in all branches of industry and the economy. The result of this strategy is and has been systematic reform as far as the eye can see – including in the packaging industry. Specifically, this means innovative high-tech products instead of cheap mass production. Although China currently appears to be in a phase of consolidation, a further push is expected for the next five-year plan, the 12th, from 2011 to 2015 and the output of the Chinese packaging industry could cross the RMB 600 billion mark.

## Changes in consumer habits call for new packaging solutions

The packaging industry's rapid development is in complete harmony with the constant growth in the national economy and the universal rise in the standard of living. In parallel, the traditional forms of retail have evolved – supermarkets and convenience stores now dominate in urban areas – just as the needs of the Chinese population have changed with respect to what they want their packaging to do and what their consumer habits are. Frozen and microwave packaging, small portions to reflect smaller households and take-away products for an increasingly mobile society are growing in popularity. These trends in the food sector are benefiting international brand manufacturers, who are going to great advertising lengths to fill the market full of new packaging concepts and solutions. In hard figures, this equates to an expected production volume in the packaging sector estimated at 36 million tons in the year 2015. This enormous amount will comprise 9.46 million tons of plastic packaging, 4.91 million tons of metal packaging and 15.5 million tons of glass packaging. Flexible packaging has seen the highest growth of all food packaging in recent years. The growing influence of Western consumer habits in the way certain foods are used and prepared is exacting its toll.

This is particularly true when it comes to meat products, pastries and confectionery, preserved foods, fresh or deep-frozen products, sauces, impulse-purchase items like potato chips and snacks, and milk products. Examples of the latter include powdered milk and single-portion ice-creams.

Daily consumption in the low-price segment has seen double-digit percentage rises in recent years in many areas, such as milk straws. The constant development and application of the latest foil composites with combined barrier characteristics – thinking of the major differences in temperature and humidity in China's different provinces – bring home the extent of the technical challenges that China has to face with respect to packaging. Composites combining aluminum with paper or plastic as sealing foil for flat-bottomed pouches or low-cost refill packs for hard packs like detergents are more in demand from the industry than ever before.

But it's not only Western corporations that have spotted these trends and are reacting with concentrated marketing power to sell their products in China. All of China's big, local producers have also expanded their product portfolio to distinguish themselves from their Western counterparts with attractive packaging. All of a sudden, cookies are no longer available only in the traditional folding box, but in pouches as well and even in different pack sizes. This variety did not exist just a few short years ago. Well-off customers from Guangzhou to Beijing are suddenly spoiled for choice at the POS and are relishing the chance to choose.

In the year 2007 alone, the value of Chinese pharmaceuticals packaging reached USD 1.5 billion, which is more than 12% of the value of all packaging. This proportion is far greater than the size of the Chinese pharmaceuticals industry in relation to China's gross national product. It is therefore easy to see the qualitative value of packaging in this sector. Pharmaceuticals packaging „made in China“ is expected to rank number 2 in the world within the next five years. Unmistakable identification, seals of origin and anti-tamper features will be absolute requirements and will further boost the demand for high-quality packaging machines.

### **Label market still holds substantial potential**

China is undoubtedly one of the most interesting markets for labels. The segment is enjoying the kind of growth not seen anywhere else in the world, up to 15% a year. Demand for the very latest quality and variety in terms of machines, material composites, as well as printing and finishing technology is rising constantly. China is already responsible for 14% of the world's label consumption! The Chinese are particularly fascinated by sophisticated finishing technologies with optical gimmicks. If you consider not only the continued growth in domestic demand but also the as-yet underrepresented export market, you can see what unimagined possibilities may lurk in the label segment, even for small and medium-sized producers of packaging solutions.

In the last ten years, the paper processing industry has developed extremely positively. China now counts as one of the world's leading paper manufacturers, not least thanks to the millions' worth of investments in ultramodern technology. And still, the country cannot satisfy its appetite for ever more paper, cardboard and corrugated board from its own resources. With an output of over 25 billion square meters of corrugated board alone, China is already second only to the US, but with annual growth in excess of 16%. However, China also consumes about 42 million tons of recycled paper and cardboard in all its variants at present, and this is expected to rise to over 70 million tons by 2012.

In order to meet this demand, it is not enough for the leading nations like Japan to have increased their exports of corrugated board to China up to two million tons in the first half of 2007. More and more new countries, including even Poland, suddenly find themselves able to rise to the status of important trading partners for recycled paper for China. However, Africa is still treated as a hidden reserve, being a place where China has already bought in all of the main raw materials markets. Following in the footsteps of ore and wood, paper, too, is soon to be shipped from the Dark Continent to the Far East by the container load. Yet even this will not help meet the growing demand for quality, folding boxboard packaging and China itself does not have the capacity to do so. Consequently, the Chinese market is one of the most lucrative for all of the world's leading cellulose producers.

And the end of the flagpole is far from near – quite the opposite. Higher purchasing power, constant urbanization and falling illiteracy levels are just some of the reasons for the growth in per capita paper consumption, which in China is currently almost negligible compared with other nations. Germany's citizens consume around 230 kg a year, whereas the figure in China is currently a little over 30 kilos per person. The economic future in the entire paper and cardboard producing and processing industry is therefore more than rosy.

The packaging industry's development is closely linked to the printing industry. And in China this sector, in turn, is one of the most dynamic in the world. It has grown rapidly in recent years, at an average of 14.6% per year. The directly resulting products and services represent more than 2% of the entire country's gross national product, valued at around USD 39 billion. The sum is set to rise to more than USD 60 billion within the next five years. These impressive figures were generated by more than three million employees in all of the graphic industry's companies, numbering almost 100,000, although there are „only“ a little over 10,000 printers as such. Most of these are located in the Pearl River delta in the south Chinese province of Guangdong and the Yangtze delta east of Shanghai. This concentration is down to the better infrastructure, the higher standard of education, a Western-oriented quality mentality and the traditional export orientation in these regions.

### **Printing industry flourishing**

The packaging printing segment is at the forefront, with annual growth in excess of 9.5% and output worth more than USD 14 billion. At about 34%, it represents the largest sector in the Chinese printing industry, with the paper, cardboard and corrugated board segment in turn accounting for 44%.

74% of printing companies are nowadays privately financed, although things are still very difficult for foreign investors. For example, in 2005, only six new companies were registered in the capital Beijing, representing less than 5% of all new entrants. However, these six companies represent 43% of the total investment, with working capital of almost USD 20 million. So you can see that the foreigners certainly „think big“.

China is one of the world's most important export markets for all Western manufacturers of printing machines. That is why companies like Heidelberg, MAN Roland and KBA spend so much on marketing, presenting themselves at the relevant printing trade fairs and in trade journals in an effort to impress themselves on the memory of industry buyers.

China is by far the most interesting sales market for machines in the food, beverage and tobacco industry. Forecasts by the China Food and Packaging Machinery Industry Association indicate that the annual value of machinery technology for food processing and packaging will be worth USD 17.6 billion in 2010. The association identifies convenience food, meat and drinks as the biggest areas of potential. But China will not be able to meet this demand under its own steam, neither from a know-how perspective nor with its current machinery production capacities. So here we have another example of an import business with considerable future promise. In 2006 alone, China imported two billion US dollars worth of machines of this type. Across all segments of the packaging industry, this equates to a demand for more than 1.2 million packaging machines within the next five years.

### **Quality reaches Western levels**

The quality of packaging on the market no longer differs significantly from Western standards, unlike a few years ago. It is particularly apparent here how quickly China has made the difficult transition from a developing nation in the packaging sphere, with inferior materials, a low standard of processing and poor-quality images, to an industrialized nation that demands to be taken seriously. Not only has China gone through this process of change, it has even coped admirably in many areas. The shelves are constantly being filled with new combinations of materials and innovative pack forms and sizes. Convenience functions in packaging, such as integrated dosing systems, spoons as on-pack attachments, and resealable packs, are appreciated by well-to-do consumers from Guangzhou in the south to Beijing in the north of the kingdom. A distinct group of shoppers has been identified for premium products, and it is one that is constantly growing and demands to be served.

Drinking yoghurt is hard to find in traditional ceramic or glass bottles these days. It now comes in PET or HDPE containers that are as elegant as they are thin. These materials are also used in their millions for making the packaging for high-demand products like vegetable oil. In spite of rising manufacturing costs and possible environmental concerns relating to their disposal, there is still no end in sight to this trend.

The government's objective is clear. They are looking for a way to turn from a greedy waster of resources into a responsible ecological economy in the medium term. But this balancing act is proving to be a tricky one to pull off, and all their plans, such as the drastic reduction in energy consumption, have failed so far. Whether it will help to have China's motorists pay a soon-to-be-introduced fuel tax and people who fail to protect the environment be slapped with fines is debatable. The trend toward renewable energies and a new environmental awareness is nothing more than theory at the present time. After all, a good will and a nice plan is one thing, but the reality is something else altogether. For instance, the Chinese government is still saying – as it has done for years – that experts are working on environmentally friendly packaging concepts, closed material cycles and coherent recycling systems. There have been any number of meetings with those responsible for Germany's Dual System and the so-called Green Dot recycling principle in an effort to profit from the positive experience of the Germans. In the everyday life of the Chinese there is not much sign of a more conscious approach to packaging as a material – neither in its manufacturing nor in its use, not to mention its recycling. So it will be interesting to see how such solutions eventually turn out. One thing is for sure: the German concept of the „Yellow Sack“ for household recycling is unlikely to prove popular in China.

## **Rosy outlook conceals considerable risk**

Since China began to open up at the end of the 1980s and the country began to reform, Western companies have kept their eye permanently fixed on China in the hope of reaping substantial profits. But focusing on the overwhelming figures alone harbors many dangers. All too often, European and American companies allow themselves to be seduced by the temptations and lose sight of the essentials. China always wants the latest equipment, but only a very small number of companies can actually afford it. China always wants high-tech, but only a very small segment of the market really needs it. China wants to develop and grow and learn, but few Western companies have the resources and the patience to account for this over many long years without ever being able to account for it in the books. China is probably the market that is at once the most overestimated and the most underestimated in the world. What is overestimated is the possibility of profiting from the boom and making a fast buck, and what is dramatically underestimated are the laws of the Chinese market, which follow different rules to the ones we are used to.

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