China - More than a potential market

Since the beginning of the 20th century, the paint and coatings industry in China has evolved into a major and vital sector of the national economy. The number of paint and coatings manufacturers has grown from less than 50 companies in 1949 to currently more than 10,000, and output has increased from below 10,000 t/a to 2.98 million tons in 2004. Figures released by the National Bureau of Statistics for China show that output of coatings there in 2004 totalled 2.98 million tons, representing growth of 23.45% on the previous year (2.41 million tons in 2003). This suggests that the Chinese coatings industry has entered a new phase. More especially, such was the magnitude of this increase that it even surpassed the 2 million ton milestone achieved in 2002; growth of this kind in the coatings industry in just two years is unprecedented elsewhere in the world.

In 2004, the Chinese coatings industry had to contend with energy sources. Consequently, the already narrow profit margins decreased further and led to even stiffer competition than ever before.

Rapid development of key industries

Chinese GDP in 2004 came to 3,651.5 billion RMB (1 RMB = 0.10 EUR), up 9.5% on the previous year. Growth in 2005 GDP is expected to be controlled at 8%. China’s GDP has been growing rapidly at an average of 8% over the past 15 years. The rapid development of the key industries, including construction, automobile, petrochemical and machinery, enables coatings-related industries to also develop rapidly. In recent years, the architectural coatings sector has grown at an annual average rate of 20%, automotive coatings, at 20%; anticorrosive coatings, at 17%; powder coatings, at 16%; furniture coatings (i.e. coatings for wood and metal furniture) and coil coatings, at 5%. In 2004, domestic output of steel increased to 310 million tons while that of pre-coated steel sheet was 1.04 million tons, driving further developments in the protective coatings sector. Per capita coatings consumption in the developed countries is running at 20 kg/a. This compares with average global per capita consumption of 4 kg/a. In China, however, per capita coatings consumption in 2004 was 2.3 kg/a. China is a vast potential market offering the most dynamic performance in the world. In its forecast for 2020, PCI (China) has analysed four elements, including GDP growth rate, steel production and its related sectors development, key industry development (i.e. construction, automobile, petrochemical and machinery) and per capita coatings consumption. In addition, PCI has taken a close look at the structure of the Chinese coatings market and made its predictions (Table 1).

Reforming of coatings enterprises in China

The coatings statistics for 2004 issued by the National Bureau of Statistics of China excluded data for small-scale enterprises valued at less than 5 million RMB. When all enterprises are taken into account, output would have been more than 3.6 million tons. This figure assumes that there are more than 10,000 enterprises nationwide. Figure 1 shows the figures as issued by the relevant national authorities. At present, five reforming patterns are emerging:

(1) Stiff competition is creating strong enterprises but eliminating weak ones. In 2004, due to increases in raw material prices, and end-users’ higher demands for cost-effective coatings products, many small-scale enterprises were forced to transform or close. In the region of south Jiangsu province, one-fifth of the affected enterprises were architectural coatings manufacturers.

(2) Leading enterprises are emerging as they strive to develop well-known coatings brands based on specialties. For instance, Shanghai Coatings Co., Ltd., Nippon Paint (China) Co., Ltd., Hempel Paint (Kunshan) Co., Ltd., Guangzhou Pearl River Chemical Group Ltd., and Huarun Paint Holdings Co., Ltd., play a leading domestic role in coil coatings, architectural coatings, industrial anticorrosive coatings and wood coatings respectively. Furthermore, they continue to grow. (3) Win-win consolidation, cross-region, multi-industry and international cooperation. A typical example is that Hunan Xiangjiang Paint Co., Ltd. had acquired Zhengzhou Twin Tower Coatings Co., Ltd. (former name: Zhengzhou Paint Mfg., Plant) at the beginning of last year. (4) Coexistence of diversified ownership, and non-governmental enterprises are tending to play a leading role. For instance, Shanghai Coatings Co., Ltd., Nippon Paint (China) Holdings Co., Ltd., play a leading domestic role in coil coatings, and Shandong Lehua Group is a large non-governmental player in North China. (5) National macro-control is being deployed to devise policies for technical development and eliminate obsolescent products.

Top coatings enterprises

Most of the top coatings enterprises are foreign-owned. The Singapore-based coatings manufacturers operating under the flag of Nippon Paint, which includes Nippon Paint (China) Co., Ltd., Nippon Paint (Langfang) Coatings, Co., Ltd., Nippon Paint (Guangdong) Coatings, Co., Ltd., and Suzhou Nippon Yashili Co., Ltd., have a total output of 200,000 tons and are evolving into the largest coatings manufacturer in China. Two companies affiliated to ICI Dulux ranked among the Top 15 coatings enterprises. In 2004, The Sherwin-Williams Company acquired Shanghai SW KNT Coatings Co., Ltd. while PPG invested 27 million USD in a new plant in Zhangjiagang city, Jiangsu province. Akzo Nobel also built two new plants in China. Nippon Paint expanded its capacity in Guangdong province to 500,000 tons per year. Rising foreign investment in China has taken domestic coatings companies by surprise. The leading international companies are engaging in a new round of strategic competition in the Chinese market. As a Chinese saying goes, “The wolf is coming”. China National Paint & Coatings Industry Information Center Co., Ltd., BASF, SKK, ACC, and VABC Group are planning to make huge investments in the Chinese coatings market. In recent years, the leading international coatings companies had been growing in the Chinese market mainly by product localization rather than product introduction. For this, local, non-governmental enterprise, is a major force in South China, and Shandong Lehua Group is a large non-governmental player in North China. (5) National macro-control is being deployed to devise policies for technical development and eliminate obsolescent products. Great efforts will be made to suppress counterfeits, check the quality of coatings products in the market and retain legal and fair competition. In addition, efforts will also be made to enforce environmental protection rules and to raise the market entry level so as to provide sufficient development space for the large coatings enterprises.
concepts are also generating slow growth in exports. The intrinsic characteristics of coatings are such that the optimised geographic marketing radius is 500 km. Most of the imports are of high quality while most of the exports are of medium-to-low quality. Import volumes are 1.89 times export volumes. Imports are 1.75 times as expensive as exports; accordingly, the value of imports is 3.25 times that of exports. While there is great scope for the Chinese coatings export channel, it is urgently vital to raise the standard of domestic coatings and to help the coatings industry prosper.

Lower profits in 2004

The Chinese economy enjoyed a good phase in 2004, as all industrial sectors kept growing rapidly. The coatings sector, especially, reaped an unprecedented harvest but, unfortunately, profits were down. Statistics on more than 1,200 coatings manufacturers in 2004 show that these manufacturers posted sales of 54 billion RMB, which is a 26% increase on the prior-year figure. Otherwise, total profits amounted to around 3.2 billion RMB, an 8% decrease over the prior-year figure. It was the first time in this century that the coatings sector suffered a drop in profit. In 2001, these coatings manufacturers experienced sales growth of 11.2% relative to the prior-year figure, and 15% higher profit over the previous year. In 2002, sales grew 17.4% and profits rose 31.8%. In 2003, sales came in at 26% while profits grew 21.8%. Essentially, the Chinese coatings industry suffered a dramatic decline in profits in 2004 despite a sharp rise in sales. This was directly due to an astonishing increase in the price of crude oil on the international markets. This in turn led to a sharp rise in the price of coatings raw materials. Some products even jumped over 100% in price. Additionally, it led to cost increases in the related sector of transportation and energy. National macro-control over the overheated real estate and steel sectors also partly hindered the development of the coatings industry. At present, most domestic coatings enterprises position their products in the medium or low-cost market. The profits are therefore very low. Consequently, some coatings manufacturers are being forced to close, while others who have survived these trying times are struggling to recover. For this reason, there is an urgent need to readjust the product structure, to enforce R&D, and to upgrade products and value-added quality. Of course, there is a direct countermeasure to cost increases. That is, to raise prices commensurately. In fact, statistics from China National Paint & Coatings Industry Information Center show that most coatings producers nationwide raised their prices successively in 2004. Some of them in particular raised prices by 50% in just a few months. However, this countermeasure was uncommon because of severe competition in the medium-to-low-cost market. In addition, it was resisted to some extent by sales agents, and it will hinder end-users' consumption. It is therefore not having much of an impact.

R&D: Long-term issues

Coatings R&D in China is in line with international trends (i.e. the trends towards decorativeness, high durability, high performance and low pollution). Resource conservation, energy-saving, and environmental protection are the long-term issues of this century (see Figure 3).

Production needs to be closely linked to innovation

More than twenty years since China's reform and opening up to the outside world, China is now outdoing Japan in coatings volume and becoming the second largest country for the production and sale of coatings. The corresponding technologies lag somewhat behind, however. Therefore, China needs to learn from the developed countries and to focus on product and technological innovation. Universities, if conditions were conducive, should engage in fundamental coatings research. Specialist research institutes should focus on the study and application of the novel resins, new process and new equipments, with the goal of devising innovative products. Enterprises should turn their attention to the practical aspects of company operation and regional economy, and focus on upgrading existing products and production equipment. Innovations should strike a balance in the following areas: between price, performance and environmental impact; between raw materials advantages, between quality of novel products and variable market factors; and between price, performance and rules/regulations. To achieve a country with a strong coatings industry, production needs to be closely linked to research and innovation, with the goal of cooperating on a win-win basis.

For more information, please contact National Paint & Coatings Industry, Information Center, Jichang Road, Changzhou, Jiangsu 213016, China, Email: park@asiacoat.com, www.asiacoat.com

This article is a part of "Paint & Coatings Industry Annual Industry Report 2004, China" published by PCI (China)
Figure 1: Growth in Chinese coatings output
Figure 2: Chinese coatings in terms of sales value and profit
Figure 3: China Coatings Technology Research and Development

Table 1: Main Coatings Output, Share (2002-2004), Market Forecast by 2020*

<table>
<thead>
<tr>
<th>Item</th>
<th>2002</th>
<th></th>
<th>2003</th>
<th></th>
<th>2008</th>
<th></th>
<th>2020</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Output</td>
<td>Share</td>
<td>Output</td>
<td>Share</td>
<td>Output</td>
<td>Share</td>
<td>Output</td>
<td>Share</td>
</tr>
<tr>
<td></td>
<td>Million t</td>
<td>%</td>
<td>million t</td>
<td>%</td>
<td>million t</td>
<td>%</td>
<td>million t</td>
<td>%</td>
</tr>
<tr>
<td>Architectural coatings</td>
<td>1.00</td>
<td>45.2</td>
<td>1.50</td>
<td>48.7</td>
<td>1.80</td>
<td>49.7</td>
<td>3.00</td>
<td>50.0</td>
</tr>
<tr>
<td>Automotive Coatings**</td>
<td>0.14</td>
<td>6.3</td>
<td>0.19</td>
<td>6.2</td>
<td>0.23</td>
<td>6.3</td>
<td>0.30</td>
<td>5.0</td>
</tr>
<tr>
<td>Industrial Protective Coatings***</td>
<td>0.25</td>
<td>11.3</td>
<td>0.45</td>
<td>14.6</td>
<td>0.53</td>
<td>14.6</td>
<td>1.00</td>
<td>16.7</td>
</tr>
<tr>
<td>Furniture coatings</td>
<td>0.41</td>
<td>18.6</td>
<td>0.425</td>
<td>13.8</td>
<td>0.48</td>
<td>13.3</td>
<td>0.50</td>
<td>8.3</td>
</tr>
<tr>
<td>Coil Coatings</td>
<td>0.066</td>
<td>3.0</td>
<td>0.08</td>
<td>2.6</td>
<td>0.08</td>
<td>2.2</td>
<td>0.15</td>
<td>2.5</td>
</tr>
<tr>
<td>Powder Coatings</td>
<td>0.27</td>
<td>12.2</td>
<td>0.34</td>
<td>11.0</td>
<td>0.40</td>
<td>11.0</td>
<td>0.50</td>
<td>8.3</td>
</tr>
<tr>
<td>Other Coatings</td>
<td>0.074</td>
<td>3.4</td>
<td>0.095</td>
<td>3.1</td>
<td>0.10</td>
<td>2.9</td>
<td>0.55</td>
<td>9.2</td>
</tr>
<tr>
<td>Total</td>
<td>2.21</td>
<td>100.0</td>
<td>3.08</td>
<td>100.0</td>
<td>3.62</td>
<td>100.0</td>
<td>6.00</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note:
* The output data in this table is derived from database analyses of China National Paint & Coatings Industry Information Center. The output data in this report otherwise is derived from the annual statistics (exclusive of statistics on small-scale manufacturers) issued by National Bureau of Statistics of China. The general output of coatings in 2002 was 2.045 million tons (including 0.631 million tons of architectural coatings), and 2.445 million tons for the year 2003 (including 0.773 million tons of architectural coatings), 2.978 million tons for the year 2004 (including 1.134 million tons of architectural coatings).** Including coatings for automotive, motorbike and farm vehicles (OEM + Refinish). *** Including container coatings, marine coatings and other heavy-duty anticorrosive coatings.