

Recent Trends and Developments in China's Coatings Market

Dr. Kai Pflug, Management Consulting - Chemicals (kai.pflug@mc-chemicals.com); Daniel Philip Senger, CDI Global (daniel.philip.senger@cdiglobal.com)

segments. Solvent-based coatings have

Similar to the situation for the chemical industry as a whole, China's coatings market is by far the largest globally, accounting for about 33% of the global market by value and an even higher share by volume. In addition, while growth of the Chinese market has slowed in recent years, it is still higher than the global average, resulting in further increases in China's global market position. However, future market development is not linear with a number of dynamic factors including tightened environmental regulation, shift towards higher-end products and increasing labor costs, pushing the industry towards consolidation.

Starting with environmental regulation, a factor that has affected the coatings segment more than most other chemical become less popular in the more developed cities and provinces. For example, in May 2018, Shanghai prohibited the use of solvent-based coatings for exterior walls and woodware in construction. On the same date, Shenzhen completely forbid the use of solvent-based coatings and solventbased adhesives. In Tianjin, solvent-based coatings were prohibited for use in vehicle maintenance in early 2019. Apart from these individual prohibitions, another driver for the replacement was the introduction of environmental taxes on VOCs including benzene and toluene. In fact, the Industrial Structure Adjustment Guidance Catalogue issued by the NDRC in April 2019 encourages low-VOC coatings in water-based woodware,

industry, marine coatings, functional exterior insulation coatings and other areas.

Individual companies have reacted accordingly, both by increasing their capacity for water-based coatings and by closing down capacity for solvent-based coatings. For example, Chongqing Three Gorges in May 2019 announced the construction of a water-based industrial coating production line with an annual capacity of 25 kt, replacing the existing 10 kt capacity of solvent-based coatings.

In addition, since the policy of relocating hazardous chemical production from urban areas to chemical parks was formulated, many coatings companies needed to relocate. For small coatings producers with low-end products and low investment



capabilities, a relocation will often be less likely than a complete shutdown of the plant, particularly as chemical parks become increasingly selective in their choice of tenants. Incidentally, this may also further push the coatings industry towards Western China. Sichuan is already the fourth-biggest coatings producer among the Chinese provinces, and while places such as Shanghai and Jiangsu suffer from very strict implementation of environmental regulation, chemical parks in Sichuan still are quite open to new entrants.

Overall, these phenomena will enhance the ongoing consolidation of the industry. In some way, it is long overdue. At the end of 2015, China had about 10 000 coatings producers, of which only about 2 000 reached annual sales above RMB20 million. Of the 8 000 smaller ones, about 4-5 000 closed down or suspended production in the last three years as a result of tightened environmental regulation. But even now, the top 100 Chinese coatings producers account for only 49% of Chinese sales. Similarly, while 8 of the top 80 global coatings companies are headquartered in China, they are quite small compared to the largest global players, with the two largest Chinese players (Shanghai Huayi Fine Chemicals

and Xinjiang Paint Group) only reaching 26th and 28th on the list. Also, none of the Chinese players so far have any substantial presence abroad.

Consolidation pressure also arises from the need to develop new, more environmentally friendly products. Those companies which cannot afford to invest in R&D will be pushed out of the market sooner or later, unless they manage to sell themselves to larger companies before being forced to shut down. In contrast, some of the larger domestic coatings companies have recently expanded their R&D activities and subsequently introduced a number of new products. For example, Bardese achieved three R&D successes related to wood coatings including achieving a transparent effect on solid wood, achieving a flat leveling effect, and achieving a coating mix of powder base + water-based surface. Zhanchen developed a water-based UV-curable wood coating that can be cured by conventional UV light sources or LED cold light sources.

Another indication of the ongoing consolidation are the continuous and substantial investments of the leading players in additional production capacity and new products, with examples including the following:

AkzoNobel is adding three new production lines at its Changzhou, Jiangsu based powder coatings plant

Asia Cuanon is constructing a new production base in Changsha, Hunan, an investment of RMB600 million which will provide an annual production capacity of 200 kt for architectural coatings

Axalta will focus on the high-end powder coating market, introducing new product lines and service models. Its flagship brands will be relaunched with new Chinese names

BASF will construct a new facility for automotive refinish coatings in Jiangmen, Guangdong that will start production in the first half of 2022

Carpoly will establish facilities for production of construction materials (500 kt/a) at the Anhui Mingguang Economic Development Zone, including coatings

Hempel will invest US\$170 million in Zhangjiagang, adding a total of 200 kt annual production capacity of marine coatings, industrial coatings and waterborne coatings

Keshun just held the foundation ceremony for the Fujian Keshun New Material Intelligent Production and Production Base Project in December 2019

Oriental Yuhong put several production lines in operation in September 2019,



including one with an annual output of 40 kt of water-based paint and one with an annual output of 100 kt of polyurethane waterproof coatings

PPG will construct a South China R&D and production base from 2020 to 2022, an investment of RMB620 million

Sankeshu (3trees) opened its Anhui Sankeshu Eco-industrial Park in April 2019, an investment of RMB686 million

Sherwin-Williams opened its new Asia headquarters in Shanghai in 2019, describing it as "a major bridgehead to drive growth in the region"

UV-ChemTech (Shenzhen) along with Yihua will invest RMB8 billion in Hubei province to construct what is said to be the world's largest UV curing material project. Products include raw materials for UV curing coatings as well as LED-curing coatings (100 kt/a)

As the industry landscape consolidates and labor costs rise, automation will also increase. Automated coatings production lines not only reduce operating costs but improve production efficiency and product quality. Upon the opening of the Baderse Zhongshan factory in February 2019, the company indeed stated that the introduction of the intelligent

manufacturing system aimed to improve production efficiency and the stability of product quality. Nippon Paint, Asia's largest paints and coatings manufacturer by sales revenue, plans to automate 28 of its China plants by the end of 2019, stating that this will boost productivity and save on labor costs. Again, automation is a trend that will favor large, consolidated producers over small ones.

Coatings companies are also already very actively looking for cooperation partners in order to strengthen their position. For example, Lanling Chemical aims to cooperate more closely with Sinopec while Oriental Yuhong signed a strategic cooperation agreement wit both Celanese and Yanshan Petrochemical. Coatings manufacturer Chenyang Group announced plans to collaborate more extensively with Dutch chemical company DSM to drive sustainable coating solutions in the Chinese market. Several coatings companies have reached longer-term agreements with real estate companies to supply them with wall coatings, for example Carpoly (with China Railway Real Estate Group) and Cosco. And Jotun has just renewed its joint venture with Cosco Shipping, a 50:50 joint venture that holds a leading position as China's marine coating supplier for the shipping industry.

Leading Chinese players may in the longer run want to reduce their dependence on the domestic market by targeting markets outside of China. An acquisition of an overseas coatings company is the most promising approach to achieve sales outside of China in a timely manner. A Japanese company, Nippon Paint, has taken a step in this direction in 2019 with the acquisition of Dulux, a move that is to reduce Nippon Paint's reliance on the Chinese coatings market from 57% of its sales to 47%.

In the long run, the current developments of China's coatings industry are likely to have a highly positive effect. Industry consolidation will be accompanied by a larger share of high-end, environmentally friendly products as well as better margins. However, only those coatings companies large and strong enough to survive the current consolidation phase will benefit. For many small players, consolidation will mean having to exit the market, unless they can find a strong partner or buyer for their company. Large companies may want to use this opportunity to acquire assets and brands, or to consider expansion abroad.