

China

# Qingdao Site Secures Additional Growth for Almatis

Independent ownership of the Chinese site has enabled fast investment decisions from the start. Further expansion is under way.



Fig. 1 Qingdao plant

## Introduction

With the introduction of the "socialist market economy system" in 1993 followed by a "state-owned enterprises reform" in 1997, successive, dynamic improvement was initiated in Chinese industry in general. Kicking off in the year 2000, the refractories sector has enjoyed the effects of a booming domestic steel industry, which has also adapted new technologies and demands purer, longer lasting refractory linings.

## Production facilities

The history of **Almatis'** business activities in China goes back to 1998 when the Huangdao plant was established by Alcoa Chemicals as a processing plant for the manufacture of crushed and sized tabular alumina products. In 2002 the **Qingdao Almatis Trading Co.** was founded with the aim of providing customers in China with a one-stop-service for all Almatis imported premium aluminas.

Following its separation from Alcoa in the year 2004, Almatis began trading exclusively in specialty aluminas. In the same year, it announced an investment of USD 18 mill. in a fully integrated tabular alumina facility at its established Qingdao plant (Phase 1), which had been started up in July 2000 as a processing centre for tabular CD and the whole range of Almatis premium tabular alumina products in the Shangdong province of China. This plant comprised a crusher, a ball mill and multiple screens. Phase 2 was inaugurated in June 2006 and has expanded the existing tabular capacity, supporting the installation with two shaft kilns



Fig.2 Administration building in Qingdao during inauguration ceremony of the Almatris plant



Fig. 3  
Packaging  
of products

for sintering tabular alumina. With the support of more than 20 Almatris experts from around the world, it was possible to complete Phase 2 in just fifteen months. This Qingdao

site covers a total area of 36 362 m<sup>2</sup> land. Under the terms of Almatris' long-term supply agreement, the Qingdao plant is supplied with calcined alumina feedstock from Australia. The Qingdao plant previously received

tabular alumina from Almatris' primary tabular alumina production facilities in Rotterdam/NL and Bauxite/Arkansas, USA. Calcined alumina, reactive alumina, spinel and calcium aluminat cement are still in high demand, supplied from Europe and the US, and sold as complementary products to Chinese refractory manufacturers. Qingdao Almatris is fully integrated in the global supply chain of the international Almatris network. For the supply of material into China, its location in easy reach of the Qingdao harbour facilities is a huge advantage.

The Qingdao facility now boasts a fully integrated production line for the manufacture of tabular alumina and more than double its initial crushing and screening capacity. The key equipment installed – kilns, crusher and screens and equipment for quality control – have been imported from leading international suppliers. The production process is controlled by DCS Systems. Quality management has been installed in compliance with ISO 9001 and 14001 respectively.

Today around 160 customers are supplied with a product portfolio of about 20 different products, which are automatically packed in 25-kg

paper bags or 1-tonne big bags. The independent ownership has allowed Almatris to invest in China on short notice to keep pace with the fast-growing market demands. Almatris is now planning to increase the converter capacities to meet the further rising demand in refractory and technical ceramic applications.

### Sales Network

China is the fastest-growing high-alumina refractory raw materials market in the world and Almatris' China sales are growing as rapidly. With this new state-of-the-art plant, Almatris is capable of producing and supplying its refractory products to customers in mainland China and South East Asia even faster and more efficiently in the quantity and quality needed. Besides its regional Chinese headquarters in Qingdao, Almatris opened a sales office in Shanghai in 2004 to respond to rising market demand in the Southern part of China. Since then, an additional location in Kaifeng – Hennan province - has been established. Qingdao Almatris Co. Ltd. employs a total of 140 people. The Asian sales structure includes offices in Japan and India.

### Market Environment

According to the OECD assessment taken from the Economic Survey of China published at the end of 2005, the scope of private ownership has

become substantial, producing well over half of the GDP in China and an overwhelming share of exports. Private companies generate most new jobs and are improving the productivity and profitability of the whole economy. The government has restructured the state-owned business sector, resulting in a massive loss of jobs. Nevertheless, a large part of the state sector remains to be restructured; policies to facilitate this process have been identified and are being expanded. The OECD assessment indicates that the business sector performance could be further strengthened by ongoing modernization of the business framework and better enforcement of laws in the economic sphere, especially those concerning intellectual property rights.

These general findings of the OECD apply also to Almatix's most important market sector in China – the refractories industry. The technical ceramics sector is also developing well (e.g. rollers, substrates) but its contribution to the business of Qingdao Almatix is still modest compared to the refractories business.

Like everywhere else in the world, the refractories industry is driven by the steel industry. Crude steel production in China easily topped the 400-mill.-t mark back in 2006 (2004: approx. 275 mill. t – 25 % of world steel production, 2002: approx. 210 mill. t, 2000: approx. 160 mill. t). Technical advances in the steel production minimized the specific consumption of refractories per tonne of crude steel (China 2002: approx. 43 kg/t crude steel, China 2005: approx 30 kg/t crude steel compared to world average 2005: approx 25 kg/t crude steel, Japan 2005: approx 9 kg/t crude steel) [1].

These figures confirm the trend towards high-quality refractory products in China, which are increasingly demanding premium quality of dense tabular alumina aggregates.

## Market Approach

Almatix has to serve both the state-owned and private sector in the refractories industry. In the private sector they meet partners who are very open towards the introduction of innovative products. But this requires a lot of work in technical sales – including customer seminars and technical after-sales services. The private sector is mature enough to base its production on performance rather than just volume, as, owing to overcapacities installed to meet the high refractory consumption per tonne crude steel in the nineties, there is now fierce competition in the market. The Almatix strategy of enlarging its Chinese manufacturing base came right in time to meet the increasing demand for high-quality, reliable products. For the future, stronger demand from the ceramics sector is also forecast as investors are gearing up for a partial relocation of their production to China. With its long-term presence in the Chinese market, Almatix can implement its in-depth knowledge of the Chinese culture, market needs and developments. On a global scale Almatix is now also prepared to support its customers from international groups who are planning to get established in China in future, and to supply them with premium alumina qualities. This local service ensures short response times and savings of 5...6 % import tax as well as favourable logistics costs. KS

## Literature

- (1) Tadashi Yoshimura, "Situation of the Refractories Production in China", Journal of the Technical Association of Refractories, Japan 26 (2006) [1]