



## Strong demand for synthetic speciality aluminas set to continue

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**Taco Gerbranda, new chief executive officer at Almatris GmbH, talked to IM after his first 100 days on the outlook for speciality alumina products for the refractory, ceramics and polishing markets**

**Coming to Almatris after the 2009 global crisis, how do you see the market of speciality alumina?**

**TG:** The market is recovering well from the global recession. For Europe and North America, we have seen a recovery of more than 40% in 2010 compared to 2009 with our core products for refractory and ceramic applications. Other market participants supplying raw materials for steel refractories reported similar rates.

For 2011, so far, we have seen stable conditions in North America and a growth slightly above the steel market in Europe and China. Based on our customers' feedback, we expect similar rates for the rest of the year. The current forecast for steel projects a global growth of 6% for 2012, which will be driving the consumption of our speciality alumina products in the refractory industry.

On top of that we anticipate some further growth for our speciality alumina products in the refractory market owing to a technology shift and the fact that other less pure alumina aggregates, such as BFA, will remain at higher price levels. As a result, reformulations will happen to the benefit of the higher performing synthetic alumina products.



**What are the main challenges for a speciality alumina producer?**

**TG:**

The main challenges are the rising raw material costs and the ability to secure competitive feedstock sources for the growing market demand. Non-metallurgical alumina feedstock for speciality alumina producers is largely sourced from smelter grade alumina producers. The prices tend to be higher than smelter grade prices, though, as additional processing costs are involved. Prices have been rising significantly since the start of the year and further price increases are expected for 2012 and beyond.

It is observed that in recent years, especially due to the major recession in 2009, the price increases that occurred in the speciality alumina markets were not compensating for the feedstock cost increases. Our long-term focus on cost savings has allowed prices to be held relatively stable over many years compared to other competing materials.

As the biggest global consumer of NMGA feedstock for speciality alumina production, we clearly face the challenge to continue to grow profitably. Margin levels must allow for re-investment activities, innovations and future growth. We need to continue such expansions to support our customers' growth.

**What are your plans for Almatris?**

**TG:**

**“We are making a move from contract durations of one year to six months.” Taco Gerbranda, new chief executive officer at Almatris GmbH.**

Our teams are working on a number of expansion projects.

We realise that global demand for speciality synthetic aluminas is growing at a faster pace than current capacity can keep up. Investments in new capacity are capital intensive and require sustainable margin levels. We have returned to very high capacity utilisation and are close to sold out at current levels in all of our plants. So we have to invest in new capacity.

The expansion in Qingdao, China, for example, includes a state-of-the-art calcined alumina facility in addition to new processing capabilities and a R&D centre. Our decision in September 2010 to go forward with this project following a two-year worldwide industry recession demonstrates our commitment to the business and the Asian region. We are on track for a Q1/2012 start-up and will slowly ramp up production.

### **China is a market with overcapacity: why invest there?**

**TG:**

China is globally the biggest market for speciality alumina and continues to grow at a higher rate than the other major regions. Already 47% of the world's steel production is in China, requiring huge volumes of speciality alumina product. Also the share of the ceramics market in China is anticipated to grow in the next decade.

The supply and demand balance in the speciality alumina market requires a very thorough market understanding and tracking of available capacities globally. This is becoming more complex as China and other developing countries like India, Russia and Brazil add production capacity for steel refractories.

However, producing high performance materials requires speciality processing know-how and a tight control of quality. For many new companies in the steel business this is a real challenge. That's why so much of the new capacity in China is idled or operated at low utilisations.

Our growth strategy is somewhat selective and differentiated by region, focusing on speciality products in order to support high value and grow profitably—not necessarily following the mass volume growth driven by the general market growth rates.

### **Explain selective/differentiated growth in speciality products?**

**TG:**

Since our capacity is limited and we need to grow profitably, it is important for us to align with customers' needs and ensure that we continue to provide highly consistent products that add value to their business. This is one reason why we continuously work on product innovations and new higher performance products that are needed in the industry.

In addition to our established product portfolio for refractories, opportunities for our new calcium hexa-aluminates and the high-temperature resistant lightweight aggregates (Bonite and SLA 92) are developing. This is especially interesting due to the environmental legislations with respect to CO<sub>2</sub> and the energy saving efforts within the steel plants. In order to secure the growth in innovative specialty products, we invest in capacity expansions focusing on growth with higher performance and value-added products.

### **Do you have any further investment projects in the pipeline?**

**TG:**

Yes, we do. Tabular expansion projects targeting the emerging markets are in the evaluation stage and we anticipate making a decision by the year-end. In Europe, we have invested in an additional aggregate crushing/sizing line to support the high growth of tabular, spinel and our new alumina aggregate (BSA 96). Scheduled start-up will be late Q4/2011. Additional new milling units are also in the pipeline to support further growth in the polishing, ceramics and refractory markets. And, although it is not a capacity expansion *per se*, we are setting up new refractories laboratories in China and India and a new ceramics application laboratory in North

America. This will complement our selective growth strategy of providing additional high performance products to the customer base.

### **What is the key driver for your tabular expansions?**

**TG:**

Owing to the strong recovery and the strong steel growth projection on the back of the emerging markets, availability of good and consistent quality natural minerals is an issue. There is an uncertain supply situation, especially in Europe and the Americas, for natural minerals coming from China. Uncertainty of supply and varying qualities encourages refractory producers to look for better value alternatives. Synthetic alumina-based materials, such as tabular and spinel, are an option for them to become more independent. This strong growing demand supported by the shift from natural minerals to synthetic alumina-based materials is the key driver in our evaluations.

### **In conclusion, what is your view on the speciality alumina market overall?**

**TG:**

After the strong recovery from recession, more capacity for higher quality products is essential. The speciality alumina industry needs a healthier margin level to allow for further investment and to ensure that any price increases in the speciality alumina markets can compensate for raw material cost increases, our long term focus on cost savings can only partly compensate for that.

Healthier margins will then guarantee a reliable supply of premium products and allow even stronger innovation to support the refractories and ceramics end markets in their future growth. One important step we are making is a move from contract durations of one year to six months.

In addition, we will have to recover past feedstock and inflationary cost increases that haven't been passed on to customers.

More importantly, we are continuously working on our value offering to reflect the speciality nature of our business.

### **Alumina market capsule**

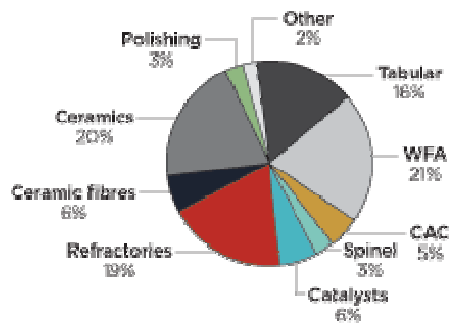
**The non-metallurgical grade alumina (NMGA) market is estimated to total about 5.5-5.8m. tpa, with about 2.8m. tpa of this defined as "speciality" or "premium" alumina grades.**

**The remainder (and bulk) of the market is termed "commodity hydrate" and includes products such as ground Bayer and hydrate for aluminium sulphate production.**

**Of the premium section, the main product is calcined alumina, which is largely consumed in the refractories and ceramics industries.**

**Alumina aggregates such as tabular alumina and white fused alumina are the second largest product group of the specialty grades, with end markets in refractories and abrasives. The third major specialty product line is precipitated hydrates for flame retardants and fillers.**

**Calcined alumina demand 2009 (1.6m. tonnes)**



Source: Ted Dickson

### Taco Gerbranda

, CEO of Almatis since May 2011, spent over 25 years with the Philips Group, where he held several different management positions in various countries, including Singapore, Brazil, Germany, Belgium and the Netherlands. He worked in technical and commercial roles across the consumer electronics, car systems, components and Grundig divisions. In 2001, he joined Heraeus Holding as CEO of the division Heraeus Electro-Nite, which he led from 2001 until the end of 2009. Heraeus Electro-Nite group is a global market leader for disposable sensors for the steel, iron and aluminium industry.