



Refractory Industry in a Limbo Amidst Steel Boom

The boom in the Indian steel sector may see a boom in yet another industry, that of refractories. Though steel makers are yet to grant due recognition to this critical material, they have slowly begun to realise its importance. The cutting edge for refractories in steel making lies in the fact that it can make a huge difference in the cost of production. At the refractory manufacturers' end, the potential is enormous but concerns are serious. If they have to cash in on the boom, they have to work out an optimal strategy. Optimism, however, runs high. The industry is going through an exciting and complex phase. On one hand, refractory makers are adding capacities with the hope that demand from the steel sector will rise at a fast pace. On the other hand, none of the major announced greenfield projects are yet to get off the ground. So an obvious question hovering around everyone's mind is: What lies ahead for the Indian refractory makers? A popular notion that prevails about the installed capacity is the fact that India has excess installed refractory capacity.

According to available reports, installed production capacity as on December 2006 is roughly around 20 lakh tons per annum. Conservatives estimate that it has gone up by around 5 to 10 percent in 2007. Similarly, the production capacity that stood at 10 lakh tons per annum is estimated to have grown by at least 10 percent in 2007. But it is expected that by 2010, along with the increase in steel production in the country, the demand for refractories will touch 12 lakh tons per annum. Industry experts, however, draw a different picture. Pradeep Bajoria, director and chief executive of IFGL Refractories Ltd, one of the major players in this sector, said that the existing excess capacity is for unwanted products. But items, which are enjoying good demand, do not have excess capacity. Makers of these refractories, he said, are operating at 80 percent capacity utilisation. He apprehended that there would be a shortage in the market once the expansions plans by Indian steel producers start rolling at the expected pace.

So, the growth of the Indian steel sector is

extremely crucial to analyse the future status of Indian refractory makers. Therefore, the refractory makers are trying hard to make the best prediction regarding the realisation of the plans. Tanmay Ganguly, managing director, Vesuvius India Ltd, had his own view on the probable developments in the steel industry. "The next five years can be clearly divided into two phases. During the next three years, steel output is likely to grow at an annual rate of 9 to 10 percent. But there would be a significant change after that, from 2011-12 onwards. Then we might see a high double digit growth in the Indian steel sector. Market dynamics would surely change for the refractory makers as well," Ganguly said.

Refractory makers are setting up new plants and are augmenting production capacities. Steel makers, on the other hand, are not being able to go ahead with their expansion plans. This might lead to significant mismatch. "It will create some problem for the brick (a type of refractory) makers, as orders have been placed but steel makers are not picking up the goods,"

an industry source said. But if expansion plans are realised, it will be all together. "It is more related to government policies. Once it gets cleared, expansions will all happen together and then you might find a shortage in refractory capacity," Bajoria explained.

However, refractory demand from other sectors is rising, according to Prosenjit Das Gupta, executive director, Indian Refractory Makers Association (IRMA). Apart from steel, demand is rising from sponge iron and cement units too, which has resulted in a sales growth of around 7 percent this year. In 2006-07, annual refractory sales was worth around Rs 2300 crore. The rise in sales, however, did not translate into rise in prices and it remained a sore point for all refractory manufacturers, who are pinning their hopes on the expected rise in domestic steel production.

Indian Scenario

The average specific consumption of refractories in the steel industry is 12 to 13 kg per ton of steel. About a decade ago, it was 30 kg for every ton of liquid steel. Some of the leading players have achieved higher efficiency. Their average specific consumption has improved to around 7 to 8 kg per ton of crude steel. Given the current technology, the current benchmark average specific consumption level of 7 to 8 kg per ton of crude steel will be achievable for a handful of good producers. For others, the average specific consumption level will come down to around 10 to 10.5 kg per ton as against the current average of 12 to 13 kg per ton.

Rising Input Cost & China

The tremendous raw material cost, including crude oil, has further squeezed the margins of refractory makers. "Oil prices have gone up significantly. So is the case with other raw materials. In such a scenario, refractory makers cannot survive without price hike. Since 2004, cost of inputs from China has nearly doubled," Bajoria said. Confirming the same, IRMA's Das Gupta said that prices of calcine bauxite, brown fused alumina, fused magnesia and dead burn magnesia

have gone up significantly. "During 1994 to 2004, China went on reducing input price and virtually drove out several players out of the market and then onwards they have started jacking up the price," he said.

Scarcity of raw materials is a problem for refractory makers across the globe, barring China. In addition, China is getting stricter with pollution. "Wherever there is an issue of pollution, the government is shutting down units. So things might actually get worse in terms of raw materials availability," warned Bajoria. However, things might change after the Olympics, he expected. "China is surely a threat for domestic refractory makers. A lot depends on China's export integrated pricing strategy. If they want to continue the price bleeding game, it would severely hurt the domestic refractory makers. But when it comes to the higher end of the product chain, China is surely not a threat for leading Indian refractory makers," Ganguly said.

Indians Gaining Reputation in Global Market

There is a good opportunity for Indian refractory makers to augment their export as China has stopped refund of Value Added Tax (VAT) on refractory exports, which is almost 17 percent. Indian refractories are thus becoming more and more competitive. There is increasing scope for exports, Bajoria said. Currently, India exports around 10 percent of its production. But in the existing scenario, this could double in the next three years.

Indian products are sailing all across the globe, primarily to EU, Middle East, South Africa and Far East including Malaysia and Indonesia. However, Indian products are yet to enter the American markets in large volumes because high freight cost is making it uncompetitive.

It is worth mentioning, that these markets are very particular about the consistency of the quality and their renewed confidence is a

signal that assures the quality of Indian products. India is having superior engineering skill, high quality technology and equipment from Germany and Italy, access to superior quality raw materials and all these factors is resulting in superior quality refractory output. However, overseas producers of automotive steel and other high quality steel are slow in accepting Indian refractories. Otherwise, acceptance of Indian products is high, he confirmed.

"At this juncture, Indian refractory manufacturers can respond in two ways. They can either opt for a price war with the Chinese manufacturers in which case they would bleed severely as margins are already thin. Second strategy is to become export oriented," explained an eminent industry expert. And this is exactly what some of the eminent players have been doing. Some of the manufacturers are exporting as much as 60 percent of their entire production. At a national level, India currently exports around 10 percent of its entire refractory production.

Price Hike

After facing a significant pressure on profit margins, Indian refractory makers are at last heading towards some price hike this year. "We will witness some price rise. It will vary with the products but it is likely to be in range of 5 to 15 percent," Bajoria added. There is a scenario of monopsony in the market today, claimed Das Gupta. He noted that more stress should be given on vendor rating. Purchase decisions by steel makers should be based on vendor rating and consistent supply of quality products, among others, and not only price. Despite the price of several raw materials going up significantly, refractory makers were, till recently, left with little choice but to absorb the shock, resulting in erosion of bottomlines. But the brighter side of the story is increasing



credibility of Indians in the global market, where price realisation is relatively better.

Fragmented Indian Refractory Industry

The industry is fragmented with more than 150 players. Out of the lot, there are around 15 to 16 major players while the remaining are small players. On the other hand, there are only a few big customers. This has provided a major bargaining power to the consumers. At the same time, severe competition within the country as well with global players, mainly the Chinese manufacturers, have forced the Indian players to operate on thin margins. But consolidation may not be a solution in the Indian refractory industry, feel experts.

Challenges Ahead

The cheap production cost in China is one of the major challenges. China has access to cheap but quality raw materials required in manufacturing of refractories. Interestingly enough, several Chinese units that produce refractories are joint ventures between Chinese and European parties. It is understood that most of the plants get tax benefits as several of them are located in special economic zones. Ganguly of Vesuvius India explained that the Indian refractory manufacturers are

squeezed between the raw material suppliers and steel makers. The negotiating power of refractories makers is very poor, mainly due to its size, as it is catering to an industry far bigger in size, primarily steel.

"Raw material prices are on fire. But unlike steel makers, it is difficult for refractory manufacturers to pass on the burden of increasing raw material prices. Even for us, who operate in high end technology segments, the real price rise in the last two years has been actually negative. Margins are under severe pressure," he said. Another major challenge is marketing and packaging. "Indian players must focus on better, competitive and customised or tailor-made products for their clients. India is gaining significant reputation in the international market, mainly Europe and the US, but there is still a long way to go,"

explained an eminent industry representative. "Refractory manufacturers should realise that there is no unique refractory solution

in steel production. Different types of steel production require different type of refractories. Moreover, wearing rate of refractory depends on several factors including time of exposure, temperature, degree and fluctuation of temperature. All these need to be kept in mind while supplying refractory for optimal utilisation," explained an analyst. In addition, like several other manufacturing sectors in India, the domestic refractory sector is also facing severe crunch in quality man power. As Ganguly puts it, "A major area of concern is availability of adequately qualified and competent workforce. In the emerging new trend, customers are looking for a complete solution wherein refractory makers need to source trained manpower to service their products."

Courtesy: Steel Insights

