Adding shine to steel

Tata Steel KZN has, in the short span of 21 months, set up a thriving ferrochrome business in South Africa, and in the true Tata spirit, launched several initiatives for the communities living around its plant

It is one of the youngest members of the 100-year-old Tata Steel group of companies and the group's first greenfield project overseas: Tata Steel KZN (TSKZN), which launched operations in South Africa in April 2008, is now gearing up to meet the growing demands for ferrochrome worldwide.

Steel or stainless steel has now become a lifestyle product, entering households as elegant cutlery, tableware and decorative items; the average consumption of stainless steel has grown at around 4.5 per cent in the last few years. What gives steel the 'stainless' edge is chromite ore. The processed ore is used to make high carbon ferrochrome which makes steel rust resistant and adds the shine and lustre that makes these items must-haves in homes across the world.

The genesis

Tata Steel, the sixth largest steel producer globally, is also India's largest fully-integrated player of chrome. "Tata Steel is a recognised, credible and quality-conscious supplier across the globe and is the only Asian company to receive the 'main producer' status for supplying ferrochrome to customers in Japan and Europe," says Somdeb Banerjee, MD, TSKZN, with pride.

It was in 2000 that the first seeds of what would be TSKZN were sown. Tata Steel began exploring the possibility of setting up a greenfield ferrochrome venture outside India. It was a logical decision: "In spite of having high quality ferrochrome and a strong customer base, Tata Steel was losing its competitive advantage due to the high and rising cost of power," says Mr Banerjee. The production of ferrochrome requires huge amounts of power and the power bills were accounting for nearly 50 per cent of the production cost.

Tata Steel started scouting for locations outside India and in 2002 zeroed in on Richards Bay in South Africa. The benefits were two-fold: cheap power and the highly competitive freight rates (almost 2 million tonnes of ferrochrome is exported annually from the port of Richards Bay). TSKZN came into being in 2003 as a subsidiary of Tata Steel and Tata Africa Holdings. The first furnace was commissioned in April 2008 and the second in July. The two furnaces are expected to produce about 150,000 tonnes per annum of high quality charge chrome. TSKZN plans to add two more furnaces in phase two, which will double the production capacity.

Green chrome

True to the Tata group's tradition of concern for the environment, TSKZN modified several processes to

develop the most environment-friendly ferrochrome plant. "We ensured that our environmental standards would meet the emission norms and air quality standards, likely to be required in the next five years," says Mr Banerjee. What this also means is that TSKZN will not have to retro-fit pollution control equipment in future (retro-fitting is usually less effective than original incorporation). "The cost for doing this has been significant but the company would not have done it any other way," he adds.

TSKZN is also working to reduce CO_2 emissions (in keeping with Tata Steel's objective to reduce emissions from 1.8 to 1.5 tonnes per tonne of liquid steel, by 2012). It also has several other projects in the pipeline for making the company carbon-neutral and is trying to ensure there is no waste generation.

Building the business

The company had originally envisaged shipping the raw material (chrome ore and chrome concentrate) from its mines in India. However the Indian government's decision to levy a high export tax made that an uneconomical plan and TSKZN started sourcing the required ore and concentrate locally.

Commercial production began at the plant in August 2008 and a month later the first shipment of ferrochrome (1506.735 metric tonnes) sailed to customers in China. Since then TSKZN has exported ferrochrome worth approximately $60 million to customers in Japan, China, Taiwan and Korea. The customers include Lianzhong Stainless Steel Corporation, China; POSCO (South Korea); NKK, Japan; Yeah United Steel Corporation, Taiwan; and Tsingshan Holding Group, China.

In October 2008, TSKZN commissioned a briquette plant. Briquetting, a process of agglomeration of chromite fines for charging into the furnace is an alternative technology to pelletisation (used by all charge chrome producers in South Africa) and more environment-friendly. With an existing capacity of 400,000 tonnes of briquettes per annum, the plant can produce upto 600,000 tonnes per annum with the addition of one more machine.

Creating value

TSKZN's success has established Tata Steel's credibility in South Africa and hopefully, facilitated its venture into other areas of minerals and ferro alloys. The company is also a valued contributor to the South African economy. It has invested about ZAR 850 million ($85 million) in the charge chrome / high-carbon ferrochrome project. Its Richards Bay plant has provided employment to more than 200 local people. It has exceeded its target of having a female to male ratio of 1:3 among its permanent employees and achieved its aim of having two thirds of its employees from HDSA (Historically Disadvantaged South Africans)

Tata Steel's vision of creating a viable business in South Africa, which not only creates value for the company but also delivers value to customers and stakeholders in South Africa, has undoubtedly been realised. ●

Sujata Agrawal

Community care

Tata Steel KZN is deeply involved with the community at Richards Bay, South Africa, and its surrounding areas in the fields of education, skill development and the empowerment of women.

Recognising that lack of technical skills is the biggest challenge facing South Africa, TSKZN has set up a learnership programme for training local maths- and science-matriculates. Since 2006, it has trained 91 young men and women as operators and apprentices. Some of them are now working in the plant as trainees and it is hoped that quite a few of them will be inducted as permanent employees in the future.

Enterprise development is another area which the company has been addressing systematically. It has supported ventures by groups of historically disadvantaged women, given them training in the basics of business, created opportunities for learning, and helped them set up companies which have been awarded contracts on a competitive basis. The women, who had never been exposed to business, have risen to the challenge and are doing very well.

The company also supports three schools situated close to the plant and gives scholarships to needy students.