



India's Overseas Presence Getting Bigger

- Steelworld Research Team

Exploring global opportunities, leading steel producers from India have made massive investment through both Greenfield and brownfield routes in overseas markets. Apart from setting up steel mills, Indian producers have been eyeing mines for acquisition to support global operations in terms of raw material supplies.

According to the Minister of State in the Ministry of steel and Mines Vishnu Deo Sai, International Coal Ventures Limited (ICVL), which is a consortium of Steel Authority of India Limited (SAIL) and other promoter companies (i.e. Rashtriya Ispat Nigam Limited, NMDC Ltd., Coal India Limited and NTPC Ltd.), has acquired an operating coking coal mine and two other coal assets in Mozambique for US \$ 50 million as a strategic investment for ensuring long term security in supply of essential raw materials for the steel making promoter companies. NMDC has a Gold project in Tanzania, investments in Legacy Iron Ore Ltd., Australia and a joint venture company in South Africa. The total investment in these projects is around Rs. 207 crore.



Essar Steel in Canada

Essar Steel Algoma (formerly Algoma Steel) is an integrated primary steel producer located on the St. Marys River in Sault Ste. Marie, Ontario, Canada. It's products are sold in Canada and the United States as well as overseas. Algoma Steel was founded in 1902 by Francis Clergue, an American entrepreneur who had settled in Sault Ste. Marie. The company emerged from bankruptcy protection in 2004. In April 2007, Algoma Steel was purchased by India's Essar Group for US\$ 1.63 billion, continuing operations as a subsidiary known as Essar Steel Algoma Inc. It is a fully integrated steel producer based in Sault Ste. Marie (Ontario). With a current production capacity of 4 MTPA, the plant specializes in providing total steel solutions to North American flat roll customers.



The company considered making its third trip through bankruptcy protection in a quarter-century before reaching a preliminary deal with a group of creditors to restructure its debt. Instead of using the CCAA to restructure, Algoma has filed a restructuring proposal under the Canada Business Corporations Act (CBCA) and has been granted protection from creditors in the United States under chapter 15 of the U.S. bankruptcy code. Algoma said it lost \$396-million and \$305-million in the 2010 and 2011 fiscal years respectively, and although pricing for hot-rolled coil has nearly doubled since 2009 and plate prices have soared 50 per cent, the company has been challenged by a host of factors. The preliminary deal with creditors includes a \$300-million equity payment by Essar Global Fund and the potential contribution to debt holders of 100 per cent of the equity of New Trinity Coal Inc., a coal mining company also owned by Essar Global Fund.

PT Essar Indonesia

The Essar Group made its first foray outside India by setting up a cold rolled steel



plant in Indonesia more than a decade ago. PT Essar Indonesia currently has a cold rolling capacity of 400,000 tonnes and a galvanizing capacity of 150,000 tonnes. The plant also has a service centre that includes units like hot rolled and cold rolled slitters, four corrugation lines, floor deck, cut-to-length lines and truss making lines. Essar investment in Indonesia is not restricted to Steel alone. Essar has won oil & gas exploration rights at the South-East Tungkai block in Indonesia proven Central Sumatra basin.

PT Essar located in West Java (Jakarta), is Indonesia's largest private sector flat products company, with a domestic market share of 35 percent and a history of process and product innovation. PT Essar Indonesia commenced its commercial operations in 1997 and it is the largest producer of Cold Rolled Steel in the private sector in Indonesia. Equipped with state-of-the-art technology, the company caters to diverse market segments with exacting international quality standards of the domestic and international market and a wide customer base in Indonesia and other countries. With an Installed rolling capacity of 400,000 MT per annum including 150,000 MT per annum of galvanized products and 100,000 MT per annum of CR Soft products, PT Essar Indonesia plans to focus on value added soft CR products.

After acquiring the US-based Trinity Coal Company, which has 200 million tons of coal reserves, for USD 600 million, the Essar Group is scouting for mines across the world. Essar is also close to signing a coal mine acquisition deal in Indonesia where it currently operates a cold rolling steel plant and owns exploration rights in an exploration block. Trinity Coal, which is the latest addition to Essar global portfolio of mines, has reserves of 200 million tons of coal – split equally between metallurgical coal and steam coal – and is amongst the top 10 coal producers in the US. It currently produces approximately 7 million tons of coal annually and plans to ramp up production to 10 million tons per year. The

Minerals vertical of the Essar Group is on the lookout to acquire a global portfolio of mines in Asia, Africa and the America, with a focus on securing iron ore, coal and limestone resources that can fuel Essar captive needs in the steel, oil & gas and power businesses. Essar is keen on leveraging Indonesia vast mining resources and wants to contribute to the country industrial growth.

Essar Steel Minnesota LLC, USA

Essar Steel Minnesota a \$1.9-billion project is in the midst of construction on the Iron Range. Essar Steel is setting up a Greenfield 7 MTPA integrated pellet plant on the Mesabi iron range in north-east Minnesota, along with a concentration plant and direct reduced iron plant. The taconite mining company began construction in 2008 but halted in 2012 due to a lack of funding. Last October they started building again but it comes during a questionable time for the steel industry. Although the steel industry has hit a bump in the road, Director of Government and Public Relations with Essar Steel Minnesota Mitch Brunfelt says the company is optimistic by the time the plant is completed the price of steel will be on the rise. Essar Steel Minnesota sits on the outskirts of Nashauk.

JSW USA



JSW Steel Ltd India's fourth-biggest steelmaker by market value said it plans to spend \$900 million to buy mills in the U.S., its first acquisition in the world's biggest economy. The company based in Mumbai, will acquire a 90 percent stake in facilities in Texas producing plates, pipes and other steel products. JSW Steel aims to acquire stakes in Jindal Enterprises LLC, Jindal United Steel Corp. and SAW Pipes USA, said a company statement. With the purchase JSW would get an entry point into the growing and booming oil and gas sector in North America, which is driving up plate and pipe demand. All three will be merged into one single company in the U.S.

JSW Steel is more than doubling its slab-making capacity to 10 million metric tons by

2010. The company is also building a 3 million ton hot-strip mill to convert slabs into products used by makers of cars and appliances. Rising demand for steel in China and India, the world's fastest-growing economies, has lifted earnings at global steelmakers and fuelled \$132 billion of takeovers in the past 18 months. JSW Steel estimate prices may stay stable because of a slowdown in exports from China, the world's biggest producer, a construction boom in India and falling inventories in the U.S.

With one of the widest mills in North America, the JSW plate division mill rolls hot-rolled plate width up to 160 inches (4.1m) and thicknesses up to six inches (152.4mm). The company services to shipyards, oilfield fabricators, heavy equipment producers, machinery makers, and many other end users and distributors who need high quality carbon plate. Using quality plate from JSW and other suppliers, it's pipe division mill produces DSAW pipe to service energy and petrochemical markets, including large diameter line pipe for onshore and offshore use, heavy duty casing, and piling. Strategically located in Baytown, Texas, just 30 miles outside Houston, we're ideally sited to serve the needs of the global energy and petrochemicals industry.

JSPL in Oman



JSPL took over Shaded Iron & Steel LLC with effect from 02 July 2010. It is now known as Jindal Shaded Iron & Steel LLC. The plant is located in Sohar Industrial Port Area. JSIS has commissioned its DRI Furnace on December 5, 2010 within a five months short period of acquisition. The DRI Furnace is supplied by Midrex Technologies, USA. The capacity of the furnace is 1.5 MTPA for the production of HBI. The Furnace has unique HOT Linked Technology to charge Hot DRI directly in to Steel Making Furnace - EAF. Within a short Span, the plant has reached its maximum capacity (1.5 MTPA).

JSPL had acquired Shaded Iron and Steel 1.5 MTPA gas-based HBI plant at Sohar

Industrial Port area, Oman at a cost of US \$ 500 million in 2010. The facility is engineered by world-renowned Kobe Steel (Japan) and Midrex (USA), leaders in the field of direct iron technology. This facility supports the strong demand for steel in the Middle East and North African countries, which has a supply shortfall estimated at more than 12 MT. In April 2014, the company successfully commissioned its 2 MTPA Integrated Steel Plant (ISP) in Sohar, Oman. The facility, using state-of-art technology from M/s Danielli Italy, is Oman's first and largest steel melting shop (SMS), and also the third largest unit of Middle East & Gulf Region. Jindal Shadedee has invested over US \$ 800 million in this integrated facility. The SMS was commissioned 23 months in record from the date of commencement of the site work. Earlier, Jindal Shadedee had set up a 1.8 MTPA DRI plant, which has been operating to its full capacity for the last two years.

The new plant inter alia comprises of the following features:

Electric Arc Furnace (EAF)



With nominal capacity of 200 tonnes, this is the largest in Middle East. It has unique feature to directly charge Hot DRI at 6500 C into EAF by gravity and thereby facilitates substantial energy saving. This is the world's first gravity hot DRI feeding system. The furnace is modern and technically superior.

Ladle Furnace



Capacity of the furnace is 200 tonnes. This is one of its kind in Middle East. Liquid steel is treated in the furnace to get desired chemistry and temperature.



Continuous Casting Machine



This is a combination of high speed caster to produce billets and blooms in square and round sections. It has 8 strands and is the largest and first of its kind in the world. The nominal capacity of the machine is 2 MTPA. The machine is capable of casting the following range of sections.

- a) Square billets ranging from 100 mm to 220 mm.
- b) Square blooms up to 350 mm x 350 mm and rectangular blooms up to 350 mm x 380 mm
- c) Round sections from 180 mm to 406 mm
- d) **Vacuum Degassing Furnace** : Special steels are processed through the furnace to cater to specific customer needs

Tata Steel in Europe

Tata Steel is Europe's second largest steel producer, with steelmaking in the UK,

Netherlands, and manufacturing plants across Europe. The company supplies products and services to the most demanding markets, including construction automotive, packaging, rail, lifting and excavating, energy & power and aerospace. The company services many demanding markets worldwide, including aerospace, automotive, construction, consumer products, defence & security, energy & power, lifting & excavating, packaging, rail, and shipbuilding.

Tata Steel has three integrated (blast furnace-based) steelmaking sites:

- Ijmuiden in the Netherlands, producing slab, hot and cold rolled coil and coated strip products (galvanised coil and packaging steels).
- Port Talbot in south Wales, which produces slab, hot rolled, cold rolled and galvanised coil.
- Scunthorpe, in north-east England, making bloom, billet and slab; medium sections, rail, wire rod and plate.

Steel is also made at a scrap-fed mini-mill complex in Rotherham, South Yorkshire, in northern England. Alloy and special steels are made at this site. Ultra-pure re-melted steels are made at the nearby Stocks bridge works. In addition, Tata Steel operates rolling mills and coating lines across Europe and further afield.