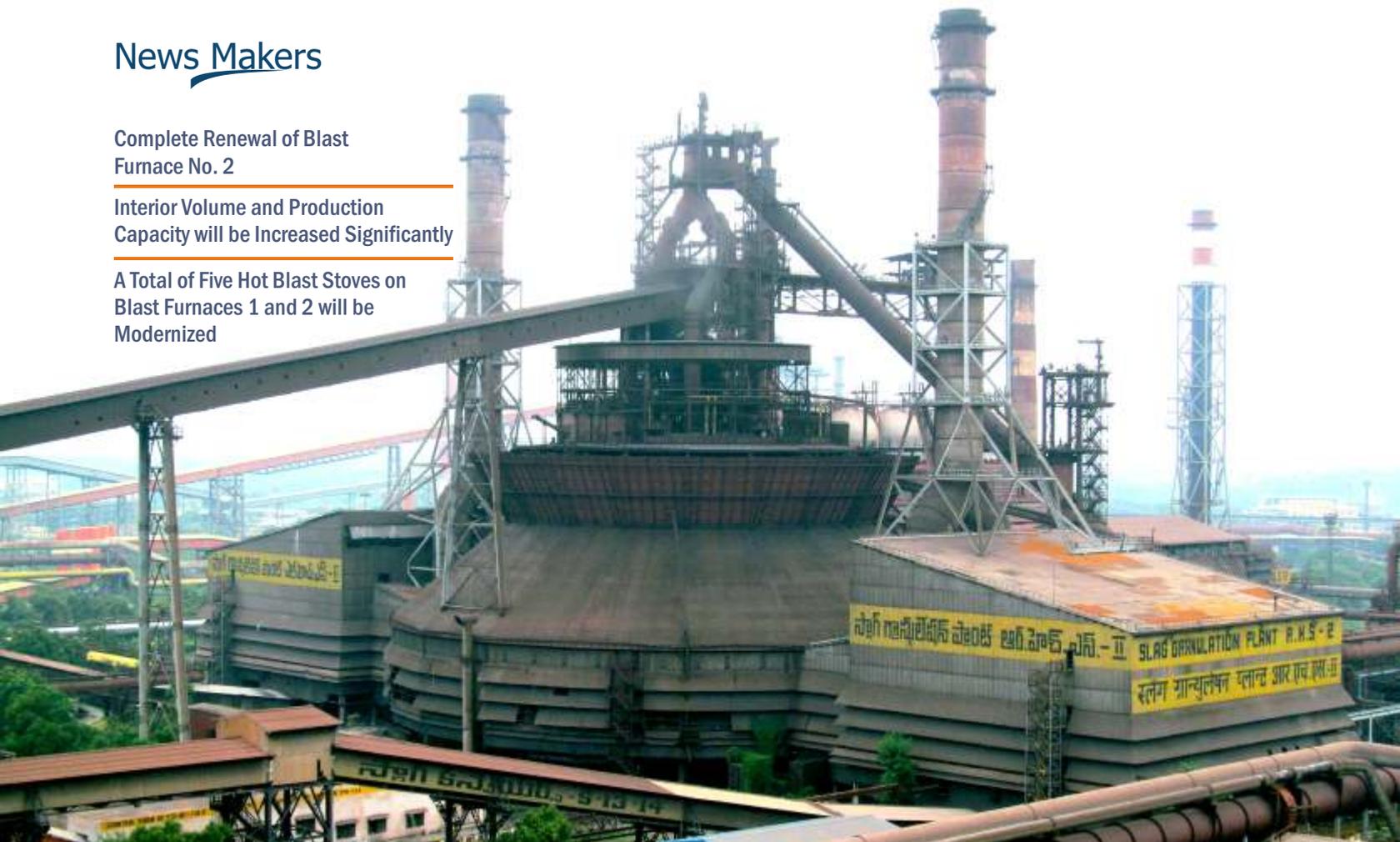


Complete Renewal of Blast
Furnace No. 2

Interior Volume and Production
Capacity will be Increased Significantly

A Total of Five Hot Blast Stoves on
Blast Furnaces 1 and 2 will be
Modernized



Siemens Modernizes Blast Furnace at Vizag Steel In India

Siemens Metals Technologies has received an order from Rashtriya Ispat Nigam Ltd. (RINL) to thoroughly modernize blast furnace No. 2 at Visakhapatnam Steel Plant (Vizag Steel). Interior volume will be boosted from 3,200 to 3,820 cubic meters. This will increase production capacity to 7,150 tons per day. Moreover, a total of five hot blast stoves will be upgraded on blast furnaces 1 and 2 to bring them in line with state-of-art technology. The order volume for Siemens amounts to around 50 million euros, a major portion of which will be accounted for by Siemens India. Capital repair of blast furnace No. 2 is to be completed in the third quarter of 2015, while modernization of the hot blast stoves will be concluded in 2016.

Visakhapatnam Steel Plant, which was founded in 1990 on the coast of the Indian federal state of Andhra Pradesh, is an integrated steel works with an annual capacity of around 6.3 million

tons of crude iron. Modernization of the blast furnaces is part of an expansion project which is intended to boost annual pig iron production to 7.3 million tons. Vizag Steel currently operates three blast furnaces, two with an inner volume of 3,200 cubic meters, one with inner volume of 3,800 cubic meters blast furnace No. 2, which was constructed in 1992, has a nominal annual capacity of 1.7 million tons of crude iron.

Siemens will be thoroughly modernizing blast furnace No. 2. Hearth and tuyere will be replaced and it will be equipped with new tuyaeres, a new bustle main and a new tuyere platform. The refractory lining and the stove cooling system will be completely renewed. Siemens will also be installing a new cooling circuit including a pump house and modernizing the water treatment system. The project also includes a new gas cleaning plant with a gas scrubber, and construction and

equipment of the new cast house. Modernization will boost the furnace's inner volume from 3,200 to 3,820 cubic meters and increase production to 2.5 million tons per year.

Siemens will also carry out patch repairs of shell on three hot blast stoves of blast furnace No. 2 and two hot blast stoves of blast furnace No. 1. Moreover, the refractory lining on all hot blast stoves will be completely renewed and the existing mechanical burner will be replaced with a ceramic one. The scope of delivery will also include all stove valves, new air and gas branches, the instrumentation and the complete automation.

The modernization of blast furnace No. 1 is also undertaken by Siemens. Engineering, supplies and pre-shutdown works are completed. The furnace is due for modernization starting in the first week of October and, after completion, is expected to produce 2.5 million tons per year.