

## Metallurgical Industries

Gulf Ispat is planning a 1.2 MTPA iron ore pelletisation plant, a 3 MTPA iron ore beneficiation plant and a 2x25,000 Nm<sup>3</sup>/hr producer gas plant at Village Ghughra, dist. Jabalpur, Madhya Pradesh. The project cost is estimated to be Rs. 6,500 million. The project is waiting for environmental clearance. Land acquisition is in progress. The entire project is planned for completion in 6 months from zero date.

•

JSW Steel, belonging to the JSW Group, is planning an expansion of its integrated steel unit at Village (s) M. Kallipatti & Pottaneri, dist. Salem, Tamil Nadu from 1 MTPA to 1.3 MTPA. The unit produces steel for automotive purposes. The expansion will come up in the existing land area of 586.09 acres. The estimated cost of the project is Rs. 10 billion. Equipment suppliers are under negotiation. The project is waiting for environmental clearance. The project is planned for completion for completion in 16 months from zero date. According to MoEF sources, to enhance the capacity from 1 to 1.3 MTPA, the following units - namely, additional sinter plant of 90 sq. mtrs, blast furnace 1 & 2 will be enhanced, energy optimization furnace 1 will be enhanced, new bloom caster will be installed by enhancing the capacity of BRM from 0.4 MTPA to 0.48 MTPA and blooming mill from 0.36 to 0.48 MTPA respectively. Installation of new annealing furnace of 0.06 MT, additional oxygen plant of 250 TPD and additional 30 MW power plant are also planned. (i) Existing plant is operating two sinter plants with machine size 20 sq.mtrs and 90 sq.mtrs respectively. After commissioning and stabilization of sinter plant-3, sinter plant-1 will be decommissioned. (ii) The plant is presently operating with two blast furnaces with capacities of 402 cu.mtrs and 550 cu.mtrs respectively. It is proposed to augment the capacities of both the furnaces to 650 cu.mtrs each. (iii) The steel melting shop is having two numbers of Energy Optimizing Furnaces (EOF), out of which one will be augmented to higher capacity and thereby ensuring increase in operating capacity of steel melting shop from 0.86 MT to 1.3 MT. Existing secondary steel refining is having four LRF and two vacuum degaussing units. Three LRFs are having capacity of 65 T each where as LRF1 is of 45 Ton which will be augmented to 65 Tons. (iv) Existing casters plant comprises of each three stand billet and bloom caster. In expansion additional bloom caster is envisaged, so as to increase the operating capacity from 1.0 to 1.3 MTPA. Bar and rod mill producing mild steel and alloy steel products will be augmented from 0.4 MTPA to 0.48 MTPA. (v) Blooming mill producing heavy rounds, Round Cornered Square (RCS) is to be augmented from 0.36 MTPA to 0.48 MTPA by installing additional 2 stands. (vi) Existing oxygen plant is having two units of 150 TPD and 390 TPD. In expansion additional pressure swing absorber oxygen plant of a capacity of 250 TPD is envisaged to cater oxygen enrichment in blast furnace and oxygen requirement of steel. (vii) Existing captive power plant comprises of 1x7 MW using BF gas fired, 1x30 MW using WHR boilers of COP sensible heat and BF gas, 1x30 MW using WHR boilers of COF and supported AFBC boiler. In expansion, additional 1x30 MW using the WHR boilers of COP and BF gas is planned. The requirement of 210 MW for 1.3 MTPA is met with the above captive generation and the grid support of 40 MW from TANGEDCO. The unit will employ STP, ETP and green belt development. BF slag will be utilized in cement plant.

•

Visa Steel, a flagship company of the VISA Group, is planning modification-cum-expansion of its integrated steel plant at Kalinganagar Industrial Complex, dist. Jajpur, Odisha. The project is likely to be funded through internal accruals & debt. Modification will involve addition of auxiliary units like sinter plant, a 2x150 MW coal-based CPP & a 300 TPD lime plant. The power plant will use Circulating Fluidised Bed Combustion (CFBC) boiler. The existing units include a blast furnace, ferro chrome plant, SMS, rolling mill & a 75 MW CPP (50 MW WHR-based & 25 MW coal-based (using CFBC boiler)). The project is in paper stage. The project is waiting for environmental clearance and is planned for completion in 3 years from zero date.

•

Tata Metaliks proposes an expansion of its pig iron plant into hot metal plant at Gokulpur, dist. West Midnapore, West Bengal under 2 phases. The estimated cost of the project is Rs. 1.26 billion. The current status of the project could not be ascertained. According to MoEF sources, Vimta Labs is the consultant. Public hearing was held on 12th December, 2014. The proposed expansion will be carried out within the existing plant area of 162 acres and no additional land is required. Phase-I consists of 345,000 TPA pig iron plant by installation of 215 cu.mtrs MBF-1, 215 cu.mtrs MBF-2, 2.76 MW CPP1, 4 MW CPP2, 40.5 sq.mtrs sinter plant. Phase-II will consist of 500,000 TPA hot metal plant by expansion of MBF-1 from 215 cu.mtrs to 259 cu.mtrs (working volume), MBF-2 from 215 cu.mtrs to 259 cu.mtrs (working volume) & a 10 MW WHRB power plant. 10 MW power plant will use gas generated from the coke plant and it will be an integral part of the coke oven plant. WHRB can operate only using hot flue gases produced from the coke oven plant which is being set up as a separate entity by another company namely, GSA Commercial, West Bengal in the same location. The greenbelt has already been developed in an area of 54 acres. The raw materials are sinter (sourced from in-house (from own sinter plant) through conveyor belt), coke (sourced from Japanese, Chinese, Domestic (KSPL, Bengal Energy) through rail/ road), iron ore (sourced from TSL Noamundi, Joda mines through rail), flux, coke breeze (sourced from own generation, Ennore, Bengal Energy through road) & iron ore fines (sourced from own generation, Nomundi, Khanband through rail). Three rain water harvesting systems are already in place. Two more RWH projects are planned to be constructed. Granulated slag is being sent to cement plant. Iron ore fine and coke fine are reused in the sinter plant.

### **Railways**

Government of Andhra Pradesh is planning the Vijayawada Metro Rail Project at Vijayawada, dist. Krishna, Andhra Pradesh. The project is in planning stage. According to media reports, the project cost is Rs. 75,000 million in the first phase at nearly Rs. 2,880 million per km according to project estimates. The Delhi Metro Rail Corporation (DMRC) has prepared a Detailed Project Report (DPR) for the project, and it will be submitted to the Government by the end of March 2015. The DMRC is also conducting a feasibility study on connecting Vijayawada with Thullur, the proposed Capital area, through Metro Rail. It is also planning to construct a bridge on Krishna, connecting Vijayawada and Guntur in the first phase. The authorities are planning another corridor near the Kanaka Durga temple. The Capital Region Development Authority (CRDA) will spend Rs. 250 million on the preparation of DPR. Special Purpose Vehicles (SPVs) have been formed for Vijayawada and Visakhapatnam Metro Rail projects.

## **Mining**

Steel Authority of India proposes the 'Jitpur Colliery' with production of coal (ROM from mine at nominal 0.6 MTPA/peak 0.7 MTPA) at Noonudih & Jitpur Villages, dist. Dhanbad, Jharkhand on 163.69 hectares leased land. The current status of the project could not be ascertained. According to the pre-feasibility report submitted to MoEF, the mining operations shall be carried out by underground method. The life of mine is presently proposed to be 23 years. Power is supplied to the Jitpur colliery through 33kV o/head line from Putki Grid s/station via BSEB Bulihari s/station of DVC. Overall max demand for the project works out to 4.8 MVA for a targeted prod of at nominal 0.6 MTPA/ peak 0.7 MTPA. Existing 33 kV Jamadoba s/station with additional power requirement of 1x 6MVA, 33/11kV transformer is proposed for this project. The present production from Jitpur Colliery is about 300 TPD. It has been proposed to upgrade the capacity of existing colliery to at nominal 0.6 MTPA/ peak 0.7 MTPA. As per the project report prepared by Singareni Collieries Company (SCCL) to extract the XII and XVA seam at rate of 2000 TPD, a mining plan of a total colliery capacity of @ Nominal 0.6 MTPA/ Peak 0.7 MTPA is under preparation. Jitpur Colliery is the captive mine of SAIL & for the captive use for their steel plants. Beneficiation of coal is carried out at an existing washery combinedly for Jitpur and Chasnalla colliery, the washery is located at Chasnalla (ML area). SAIL also plans to establish a new proposed washery with a capacity of 1.2 MTPA. There will not be any export from the mine. The coal from the bunker is transported by aerial ropeway to the washery located at Chasnalla colliery. Coal transportation from the surface coal bunker to Chasnalla Washery will continue to be done by bi-cable aerial ropeway.

*Source: Recorder of New Projects; Vol. 21 No. 7 / April 1st, 2015*