

Braving the elements for a new steelplant

Comprehensive Greenfield Project between Sinobras (Brazil) and BSE

“SINOBRAS – Siderúrgica Norte Brasil S.A.” (former Simara) intended to invest into a new steelmaking facility in order to produce about 280.000 tons per year of rebars at their premises located at the industrial district of Maraba, Para State, Brazil. Since the steelmaking facility should be close to the iron ore mining and there had been almost no infrastructure in this area, Sinobras had to build up the steelplant from the scratch – with all the challenges and dangers resulting of this isolated location in the rainforest.

BSE was awarded with the Greenfield project and – after evaluation of the situation at site in Brazil – started immediately with the basic layout of the entire steelmaking complex including the logistics of the surrounding infrastructure. Besides this layout design, engineering and supply of some major EAF components the project also comprised continuous training and coaching of Sinobras personnel in Brazil as well as in Germany at BSE/BSW facilities.

BSE SERVICES

- ⊙ Layout and engineering for scrap system and slag system
- ⊙ EAF layout and engineering
- ⊙ Supply of electrode columns with roller guidings and current conducting electrode arms
- ⊙ Supply of hydraulic system with cylinders
- ⊙ Supply of high current system and electrode regulating system
- ⊙ Transformer layout and basic data
- ⊙ Basic Engineering for auxiliaries (e.g. pneumatics, oxygen and cooling water supply)
- ⊙ Installation of BSE Chemical Energy System:
Oxygen & carbon injection from the EBT area with Virtual Lance Burner as well as from the slag door with a Lance Manipulator
- ⊙ Layout and engineering of ladle car and ladle furnace with its main components
- ⊙ Off-gas layout and engineering including supply of high temperature quenching system (HTQ)
- ⊙ Production & maintenance seminars at BSE/BSW facilities in Germany
- ⊙ Technical Assistance and Process Optimization at site



RESULTS/SUCCESS

The commissioning and start-up was made under the supervision of BSE. A stable operation has been achieved already after the first couple of days. These good results indicate that the production figures initially planned by Sinobras are definitely within reach.

The smooth operation and keeping of the budget have shown that Sinobras and BSE mutually braved the challenges and dangers of designing, building and operating a highly efficient steelmaking facility in the middle of the Brazilian rainforest.

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