EXECUTIVE SUMMARY

The "Second Line Pellet Plant - FMO" is a Travelling Grate Machine – Rotary Kiln process to produce 3 MM Ton /year. It's feedstock is 100% iron fines, bentonite is used as a binding agent an dolomite as aggregate. Natural gas for drying, additional heating on the mobile grill and hardening in the rotatory furnace is the process to produce Acid pellets of 9 -16 mm size.

VEPICA is responsible to complete the procurement of miscellaneous equipment, procure all materials required and execute the construction and installation works of the plant up to Mechanical Completion plus Commissioning support to MCC "China Metallurgical Group Corporation", who has contracted VEPICA to carry out these works. MCC has provided the Detail Engineering and the Procurement of main process equipment.

Second Line Pellet Plant key metrics include 60.000 m3 of concrete, 11.000 tons of steel structures and 750 kms of cables, approximately 70% of process equipment already at site, an estimate of 6,5 million direct labor man hours are required. Project completion

THE CLIENT

Venezuela's state owned iron company Ferrominera Orinoco C.A. (FMO) is part of the iron ore´s value chain. Nearby mines and iron ore processing plants provide the feedstock of 100% iron fines that are needed to produce the iron pellets, a key primary material for steel and briquettes plants. FMO commercialize and sales its product to a steelmaker and five direct reduction plants in the Venezuelan territory. The company also exports to Europe, Asia and Latin America.

FMO has an installed capacity of 25Mt of ore and proven reserves totaling 4.18 Bt. It owns a transfer station that can store up to 180,000 t and handle 6.5 Mt/y of ore, and a 320-km rail network.

CHALLENGES

- Coordination and /or following up of several stakeholders from different countries and different cultures (FMO from Venezuela- BANDES (Venezuelan project financing entity), China found and MCC from China)
- Interpretation of engineering design by Asian standards and practices
- Lack of availability of some raw and construction materials in the area. For instance availability/reliability of concrete supply in the area
- Storage of high volume of process equipment early in the project
- Challenging schedule

SOLUTIONS

- Comprehensive and early review of engineering design drawings and specs supplied by client to minimize technical queries during preparation of material´s purchase orders and construction execution
- High qualified and experience personnel of Engineering and PMC organization, with presence at China and Venezuela, working with a very clear split of work each other
- Identification of cement and its aggregates, and concrete´s sources nationally and internationally to import if needed
- Plan to have own concrete plan at site
- Detailed plan of storage areas organize by project area and construction sequence
- Aggressive procurement plan to ensure early arrival of Steel Structures
- Alliance with major construction subcontractor to ensure availability of construction resources

Second Line Pellet Plant
Ferrominera Orinoco

2017- 2018 EPC Venezuela

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