

# Title: **Continuous Casting Machine (CCM) Plant**

**Date:** 2015-2018

**Scope:** EPC

**Location:** Venezuela

## **About Sidor:**

Venezuela's state-owned steel company Siderúrgica del Orinoco Alfredo Maneiro, Sidor, is focused on the production of steel products for the domestic and international markets. It sells semi-finished products (ingots, billets and plating), flat products (tinplate, flat rolled steel and chromium-coated steel), and long products (wire rod and bars). Sidor, the biggest steelmaker in Venezuela, has production capacity of nearly 4Mt/y liquid steel. The company, located in Bolívar state's Ciudad Guayana,

## **Executive Summary:**

During 2015, Vepica started the engineering, procurement, construction and start up process for a new continuous casting machine, as part of the “Technological Recovery of the Alfredo Maneiro Steel Mill (SIDOR) and Downstream Developments” in Venezuela. These new installations, which will be adjacent to SIDOR’s existing sheet steel mill, will have a yearly output of 800,000 tons of round and square steel bloom, which is key input for the manufacture of seamless piping and structural profiles.

Vepica is carrying out the Overall project management, Procurements of minor equipment and bulk materials and the construction of the new steel milling facility, as well as the infrastructure needed for the installation of the new continuous casting machine, supplied by Italian manufacturer DANIELI. The project will be completed in early 2018, with an investments of 4.5 million man hours.

## **Challenges:**

- Coordination of several stakeholders from different countries and different *cultures* (SIDOR from Venezuela- BANDES (Venezuelan project financing entity), China found , Minmetals from China, Danieli from Italy,)
- Complex Interfaces with the existing and in operation facilities.
- Lack of availability of some raw and construction materials in the area. Procurement of equipment and bulk material, coming mainly from china

## **Vepica Solutions:**

To face the project challenges, VEPICA implement the following strategy:

- High qualified and experience personnel of Engineering and PMC organization, with presence at China, Italy and Venezuela, working with a very clear split of work each other
- Integration of the client in most of the execution areas in order to facilitate the approval of deliverables, PO and to facilitate the construction interfaces with the existing operating plant.
- Early procurement of equipment, bulk materials and some construction raw materials as rebar's, concrete, wires, paint, etc. in order to avoid delays in the construction.
- Early mobilization to site for in advance work and to develop a very detailed construction strategy with the participation of all stakeholders.
- Activation of our China offices to expedite and for the inspection of all equipment and material purchased at China.