

Project Title: Chlorine/Alkali Plant Project

Date: 1988 –1990

Scope of Work: EPC

To perform the Basic and Detail Engineering, Procurement Assistance, Construction and Start-Up Management, in accordance with international standards and practices, and generally accepted engineering and project management principles.

Executive Summary:

New membrane cell technology chlorine alkali plant, for 120.000 Mt/y of chlorine and 134.000 Mt/y of caustic soda (the largest, of its kind, in the world).

Location:

El Tablazo Petrochemical Complex Venezuela (Presently the Ana Maria Campos Complex), Los Puertos de Altigracia, Miranda, Zulia State, Venezuela

Client:

PETROQUÍMICA DE VENEZUELA, S.A. (PEQUIVEN).

Petroquímica de Venezuela S.A. (Pequiven) is a state owned Venezuelan company, associated with the Ministry of Popular Power for Petroleum and Mining, the shares of which are the exclusive property of the Bolivarian Republic of Venezuela.

The company promotes and develops petrochemical activities that are carried out along the North - Coastal Axis, specifically in the states of Zulia, Carabobo and Anzoátegui, where nitrogen and phosphate fertilizers, olefins and plastics are produced, as well as the chemical products destined to satisfy the requirements of these items for the national market; to guarantee food sovereignty and industrial and technological development.

Challenges:

Specifications for all types of special materials, from alloys to FRP, at that time requiring new design and constructions methods.

To carry out the plant's construction, taking special measures considering that all the work had to be conducted with the existing plant in operation. Permanent use of protective masks and performing constant monitoring for mercury contamination.

At the time of the project's execution, this was the biggest Chlorine plant using membrane processes in the world.

The unique Automatic Filling, Storage and Dispatching system for the Cylinders and Ton Containers.

Vepica Solutions:

A consortium was created with Oxytech Company, owner of the know-how to carry out this project.

To facilitate tasks, Work was carried out in multi-office modality. The Basic Engineering and Procurement Assistance for Long Lead Items was performed in Houston, Texas, U.S.A.; Detail Engineering and Procurement Assistance in Caracas, Venezuela; Construction and Start-Up Management at the construction site in El Tablazo Petrochemical Complex Venezuela (Presently the Ana Maria Campos Complex).

A plastic 3D model of the plant was built for use during the development of detailed engineering for optimization of the design, interference verification, constructability study, construction planning and subsequent support for the construction work.