



**CONVE CORP &  
CONVE CORPORATION  
SA DE CV**

**CONVE CORP, FL / USA  
CONVE CORPARTION SA DE CV, MEX**

Skid Mounted Chlor-Alkali Plants

# PRELUDE

- A medium sized Engineering & Construction Company servicing the Chlor-Alkali Industry
- Started activities in 1993 in Mexico and Argentina and incorporated in the USA in 2000 leaded actually by four experienced Chemical & Mechanical Engineering Experts

Heinz Mezgolits  
Ada Velez Delgadillo  
Alex Arias Jaramillo  
Manuel Mera Ovando

- Successfully Supplied and Commissioned several Chlor-Alkali Plants in USA, Mexico, South-America, Australia and Europe
- Offices in Miami, Mexico City, Rio do Janeiro, Buenos Aires

## TECHNICAL DIRECTORS / MANAGERS

**Heinz Mezgolits:** Chemical Engineer having over 40 years experience in Chlor Alkali. He has wide experience in project execution, installation and commissioning

**Manuel Mera Ovando:** Chemical Engineer having over 35 years experience leading and managing new process developments in Chlor Alkali.

**Ada Velez Delgadillo:** Chemical Engineer having over 20 years industrial experience in Chlor Alkali design and operation. She has world wide experience in project execution, installation, commissioning and operation.

**Alex Arias Jaramillo:** Mechanical Engineer having over 25 years experience in leading plant design, supervision of erection and commissioning.

# OFFICE OVERVIEW

## Project Team in Argentina



## Engineering Capacity

- 15,000 hrs/year Process/ Project Engineering
- 6,000 hrs/year Mechanical Engineering
- 20,000 hrs/year Piping & Structural Engineering
- 4,000 hrs/year Electrical Engineering
- 5,000 hrs/year Civil Engineering
- 8,000 hrs/year Instrumentation Engineering
- 10,000 hrs/year Procurement & Logistics

## Services Offered

- Pre-investment Studies
- Basic Engineering
- Detailed Engineering
- Project Management
- Procurement & Logistics Services
- Supply Skid Mounted Modules
- Construction and Commissioning Services
- Turnkey supply of systems

# Know-How & Proven Technologies Available for...

- Complete Chlor-Alkali plants integrating INEOS BiChlor, UHDE, Asahi-Kasei, Chlorine Engineers and Bluestar Electrolyser Membrane cell process and design
- Hypochlorite Units
- Hydrochloric Acid Units
- PAC and FeCl<sub>3</sub> Units
- CaCl<sub>2</sub> Units (77% Flake and 98% Anhydrous)
- Chlorine Drying , Liquefaction Unit.
- Calcium Biphosphate - Anhydrous: Ca(H<sub>2</sub>PO<sub>4</sub>)<sub>2</sub> Units
- Calcium Hypochlorite Plants: Ca(OCl)<sub>2</sub> 70%

# Process Engineering



- Preparation of process description for the plant.
- Developing Material and energy balance for the processing unit.
- Developing process and instruments diagrams (P & ID's) for Process & Utility Sections.
- Developing quantity of utilities required for the plant
- Pipe line sizing.
- Preparation of line list, valve list, equipment list etc.
- Submission of Plant Operating Manual.
- Assistance during Pre-commissioning & Commissioning
- Carrying out Hazop Study for addressing safety related issues of the plant.

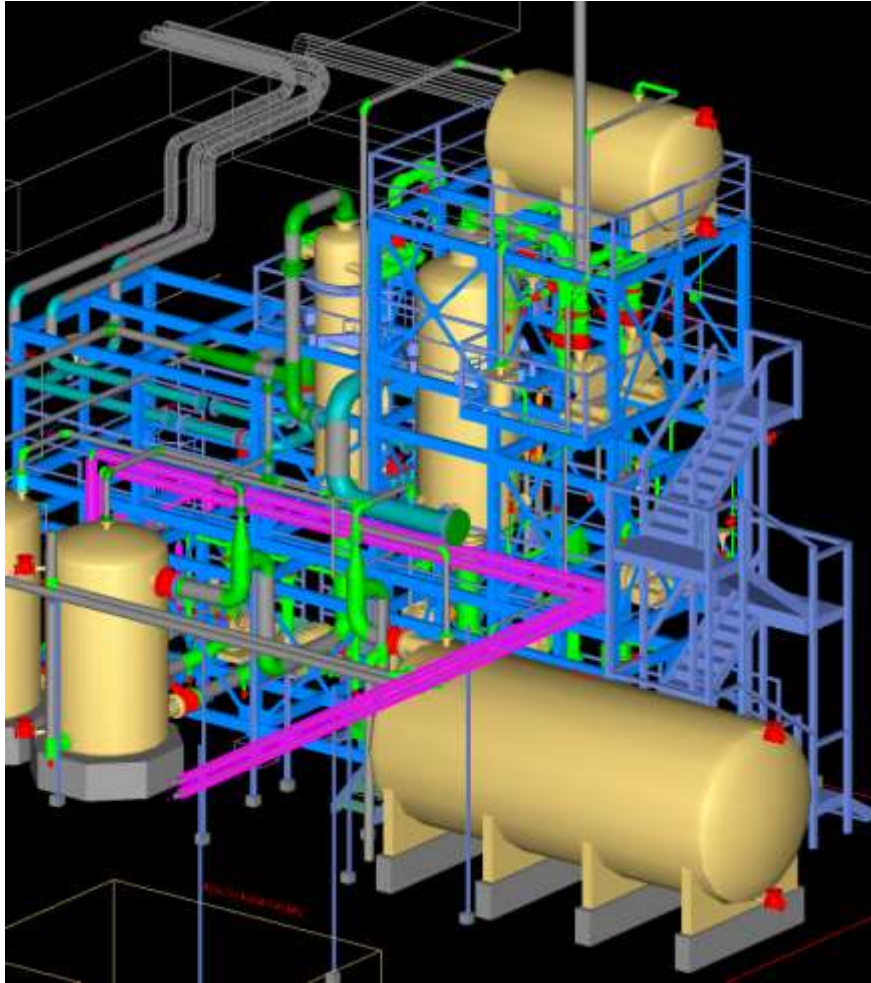
# Mechanical Engineering

- Preparation of Data sheets, Enquiry specification sheets for fabricated equipment including detailed sketches.
- Preparation of Enquiry specification sheets for bought-out items like pumps, blowers, filters, etc.,
- Preparation of Enquiry specification sheets for package items like boilers, compressors, chillers etc.
- Plot plan.
- Equipment layouts (plan and sections).
- Scrutiny, checking and approval of fabrication drawings for fabricated items prepared by vendors and Inspection.
- Preparation of load data drawing including foundation and pocket details for carrying out the civil work.
- Review of vendor documents / drawings for the bought - out items.
- Preparation of Enquiry specification for equipment/piping erection work, insulation and painting work etc.
- Preparation of drawings for submission to government bodies.
- Supervision of Mechanical erection





# Piping Engineering



- Piping specification.
- Piping drawings - plan and elevation.
- Pipe support layouts with details.
- Stress analysis of piping.
- Isometric drawings with BOM.
- Bulk / Final Bills of Quantities for procurement.
- Supervision of Piping Erection



# Civil Engineering



- Architectural drawings for all the buildings.
- Detailed civil drawing for all plant buildings, utility area, adjoining roads, drains, equipment foundations, pipe/cable racks etc.
- Preparation of bill of quantities, technical specifications, piling design and layout.
- Preparation of Civil tender.
- Floating of civil tender to various vendors, including terms & conditions.
- Preparation of Bid analysis for the civil construction work.
- Supervision of civil construction.

# Electrical Engineering



- Single line diagrams.
- Preparation of Cable & Cable Tray Routing drawing and selecting location of Push Button Stations.
- Enquiry specification sheets for the electrical equipment including Transformer, MCC, Cables, Switches, Lighting etc.
- Power / Earthing / Lighting Layouts for the process and utility buildings.
- Bill of material for electrical items like cable, cable tray etc.
- Enquiry specification for electrical erection.
- Supervision of electrical erection

# Instrumentation Engineering

- Instrument Summary.
- Enquiry specification sheets for all instruments.
- Process control and interlock description.
- Preparation of I/O list for analog and digital signal for DCS.
- Preparation of control loop schematic diagrams, wiring diagrams, process graphic diagrams for DCS graphics, interlock/ladder logic diagram
- Instrument Cable & Cable Tray Routing Drawing
- Instrument layout.
- Specifications for air headers, instrument cables, junction boxes and cable trays.
- Instrument cable schedule.
- Loop Diagrams & Hook up diagrams.
- Enquiry specification for instrument erection along with instrument erection MTO.
- Supervision of Instrument Erection.

# Project Management

- Collate Basic Data
- Bar / Pert Chart
- Coordination with client
- Review of data provided by client and arrange to obtain missing information
- Procurement Services
- Prepare Activity Schedule and Highlight Client on the critical activities and steps that need immediate execution, to achieve target schedule
- Conduct review meetings amongst
  - Client
  - Lead Engineers
  - Vendors and Contractors
- Pre-assess the activities which are likely to be delayed and assist client in taking necessary steps in advance to take care of any slippage.
- Prepare progress report highlighting the activities completed, activities to be planned & completed
- Arrange for meetings with all vendors for the Techno-Commercial meetings and assist client in finalizing the orders.