

Hydrocarbons and Petrochemical

Resources from the past used for development

CESEL S.A. is a consulting company with more than 40 years of experience in developing engineering with several integrated disciplines. Its headquarters are located in Peru and it has branches and offices in several Latin American countries. CESEL develops studies, designs and engineering projects; studies, works and assembly supervision; factory inspection; environmental studies and comprehensive management of engineering and construction projects through its twelve operating divisions and six technical departments. The Hydrocarbons and Petrochemical Division is described as follows:

Services

- Materials balance.
- Energy balance.
- Project referential schedule.
- Preliminary equipment design.
- Conceptual design.
- Preliminary program and estimation.
- Preliminary estimation.
- Basic engineering, basic extended engineering (FEED).
- Pre-feasibility.
- Feasibility.
- Risk studies and assessment.
- Detail engineering.
- Procurement-purchase and logistics.
- QA/QC services.
- Project management (EPCM).

Software

- Aveva PDMS.
- Intergraph CAESAR II.
- Intergraph TANK.
- Tekla structures 18.
- KYPIPE Gas.
- Surge.
- Breeze Incident Analyst.
- SideWinder.
- Primavera/Hard Dollar.
- S10.

Areas

Storage plants

- Fixed or floating roof storage tanks, water and foam fire fighting system, dispatch pumps and bays, automation and control systems.

Submarine lines

- Bathymetry, currents study, land and sea pipes, specifications, launching procedures and control, pumps, cathodic protection, automation and control.

Process piping

- Pipe stress and flexibility analysis, hydraulic studies, vibrational analysis, pipe supports.

Oil and gas pipelines

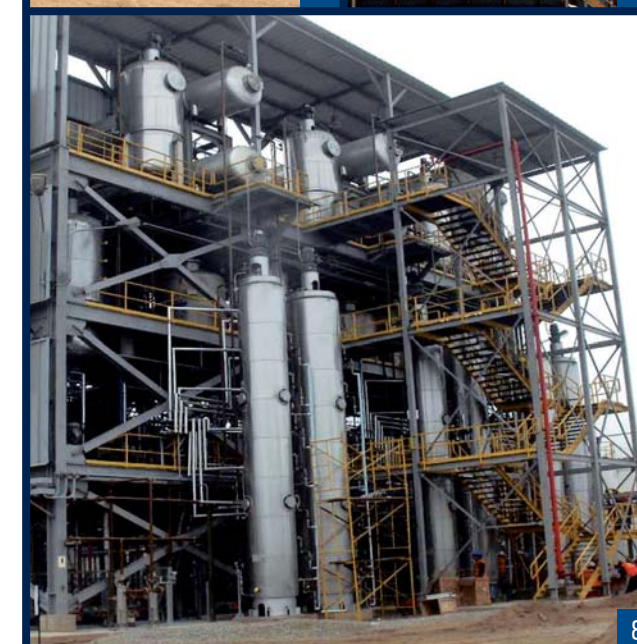
- Definition of routes, diameters, flows, launching trap and tube cleaners, scada systems, ducts inspection and integrity.

Pumping and compression stations

- Pumps and compressors, fire fighting systems, automation and control systems selection, installation and assembly.

Production batteries and processing plants

- Raw materials production lines, field manifolds, two-phase and three-phase spacers, production tanks, pressure vessels (vertical columns, horizontal drums), heat exchangers (shell-and-tube, dry coolers), utilities (water, steam, air), fire fighting systems, instrumentation, automation and control.



- 1 Talara Refinery. Oil storage tank. Piura, Peru.
- 2 Talara Refinery. Liquid load dock. Piura, Peru.
- 3 Petroperú's solvents plant - Talara. Piura, Peru.
- 4 Lot 8. Loreto, Peru.
- 5 Biofuel refinery. Pure Biofuels. Callao, Lima; Peru.
- 6 Oil wells Lot X, Taimán and Peña Negra section. Piura, Peru.
- 7 Talara Refinery. Liquid load dock. Piura, Peru.
- 8 Biofuel refinery. Pure Biofuels. Callao, Lima; Peru.
- 9 Dock N° 3, Iquitos Refinery. Loreto, Peru.

Projects

- Talara Refinery. Designs revision and works supervision, installation in the liquid load dock for Petroperú's refinery in Talara. Piura, Peru.
- La Pampilla Refinery. Diesel No. 2 oil supply system to the Ventanilla 200 MW thermal power plant. Lima, Peru.
- Liquid hydrocarbons recovering, Lot 8. Final study and work supervision. Loreto, Peru.
- Biodiesel Refinery. Comprehensive project management, including the design revision and complementation and the construction and assembly management. Lima, Peru.
- Oil well in Talara. Work and assembly supervision. Replace from gas motors to electric motors. Piura, Peru.
- Ammonium nitrate plant. OBL facilities basic engineering, phase FEL 3. Moquegua, Peru.
- New Ninacaca supply plant. Basic extended engineering (FEED). Risk assessment and ITF procedure for construction. Pasco, Peru.
- Exploitation platform, Lot 76. Base camp construction engineering, supervision and management. Madre de Dios, Peru.
- Dock N° 3, Iquitos Refinery. Basic engineering for changing the service from solid load to liquid load. Loreto, Peru.
- Curaray Terminal. Fluvial terminal port facilities detail engineering for the diluent reception and produced raw material unloading. Loreto, Peru.
- New Ilo terminal. Basic engineering, risk studies, ITF procedure for construction. Moquegua, Peru.