



EMPRESAS Y&V, COLOMBIA

Key Facts

Company: Empresas Y&V

Website: www.yvsite.com

Industry: Petrochemical, Construction

Country: Colombia

Products Used:

- CAESAR II®
- CADWorx® Plant Professional

EMPRESAS Y&V ACHIEVES FAST COMPLETION AND DESIGN PRECISION WITH CADWORX® AND CAESAR II®

A leading general contractor with offices in the Americas, Empresas Y&V (Y&V) provides comprehensive engineering, procurement and construction services to clients engaged in production and oil refining, gas production and petrochemical processing. With more than 1,500 highly qualified employees, comprehensive technological knowledge and proven project management expertise, Y&V solves all project-related challenges from the development phase through successful completion.

Pacific Rubiales Energy Corporation awarded Y&V Group a US\$35 million project for six water treatment plants (units 15 through 20) at the Central Processing Facility 2 (CPF2) for crude oil treatment at the Rubiales field in Colombia. On the fuel performance catalyst 2 (FPC2), the recovery of oily water cream takes place in water treatment plants (WTPs).

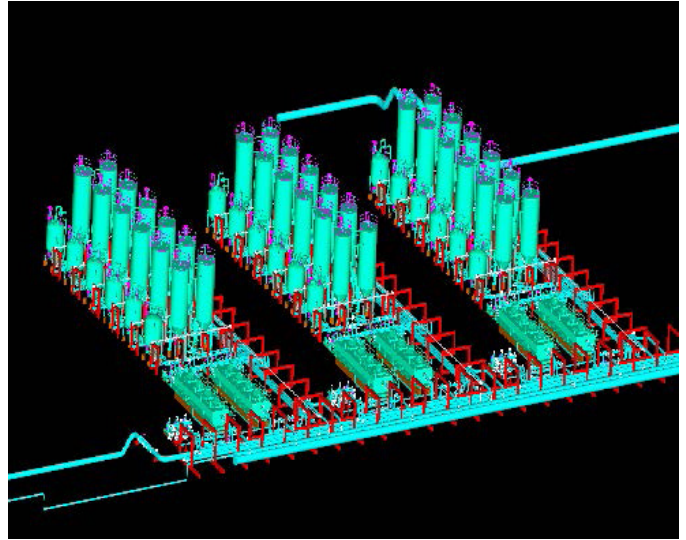
Currently, the plants distribute the flow of water from the skimming tanks with oil content between 600 and 800 parts per million (ppm) equally between the water treatment plant packages to reduce the oil content to 1 ppm. The treated water at the outlet of the WTP, with an oil content of less than 1 ppm, goes to a pool of water that is treated before being injected into the well.

The project involved 20 pieces of equipment for each plant such as pumps, filters, decanters, flotation cells, pipes with diameters ranging from small bores of one-half inch to 2-inch up to large 42-inch bores. Y&V's assignment included all of the basic and detail engineering for the six water treatment plant units.



SOLVING PROJECT CHALLENGES WITH CADWORX AND CAESAR II

Y&V used CADWorx Plant Professional to develop the 3D models, ortho-graphic drawings, isometric drawings and bills of material interfaced with CAESAR II for analyzing and generating reports on flexibility of the piping systems. Focusing on knowledge management, it implemented CADWorx within the company for equipment and piping designs to address projects that required both short deadlines in the deliverables and precise and efficient execution. “With CADWorx we were able meet the client’s fast delivery schedules as well as the required precision in the design, bill of materials and other deliverables,” said Nicola Continelli, Piping Leader at Y&V. “We managed to reduce the times of flexibility analysis by extracting CAESAR II files directly from CADWorx for analysis in CAESAR II.”



REDUCING DELIVERY TIME THROUGH CADWORX DESIGN REVIEW

CADWorx helped Y&V speed the delivery times for isometric drawings and CADWorx Design Review helped them identify and address interference issues in the 3D model. It also reduced the amount of time for configuration and learning.

EXCEEDING EXPECTATIONS WITH CADWORX

“As a Venezuelan engineering company operating in Colombia, we emphasize knowledge management and chose CADWorx Plant for the design of equipment and piping even though our experience had been with AutoPLANT® and PDS®, and the results were beyond all expectations,” Continelli concluded.

ABOUT HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon’s PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at [hexagon.com](https://www.hexagon.com) and follow us @HexagonAB.