



CEDO, South Africa

Key Facts

Company: Collaborated Engineering Design Office Ltd. (CEDO)

Website: www.cedotech.co.za

Industry: Building Services, Electrical, Fabricators, Mining, Pipelines

Country: South Africa

Products Used:

- CADWorx® Plant
- CADWorx Equipment
- CAESAR II®

Featured Reseller:

Chempute
South Africa

CEDO Succeeds on a Fast-Track Design Project Using CADWorx® and CAESAR II®

First Uranium Corporation in Stilfontein, North West Province, South Africa, has been investing in the reclamation of old gold slime dumps to extract and process gold and uranium, a process that requires performing a number of chemical operations to extract either gold or uranium. The facility must handle a high capacity in order to make the plant viable for the investors.

Selecting CEDO for Piping Design

First Uranium selected Collaborated Engineering Design Office Ltd. (CEDO) for the piping design of the entire uranium portion of the Chemwes gold and uranium project. CEDO was responsible for the modeling of the plant equipment, pipe routing, and for clash detection. Because CEDO had extensive design and engineering experience, ranging from petrochemical facilities to mining process plants, this experience proved itself valuable for the task. MDM Engineering managed this \$200 million project with its extremely tight timeline.

With a plant capacity of approximately 8,300 tonnes p.a. (around 950 t/h), the uranium piping totaled approximately 16 kilometers in length, with 350 pieces of equipment and around 500 pipe lines ranging from DN25 to DN350 (1" to 14") diameter. Piping materials used included; carbon steel, stainless steel, HDPE (High Density Polyethylene), Polypro and rubber lined materials, used for slurry, acid, potable water, fire water, steam, instrumentation air and other purposes.

Choosing CADWorx and CAESAR II

Because of CEDO's past successes with Hexagon products, and its commitment to the fast-track design on the project, the company chose CADWorx® Plant for the plant piping design and CAESAR II® for pipe stress analysis.

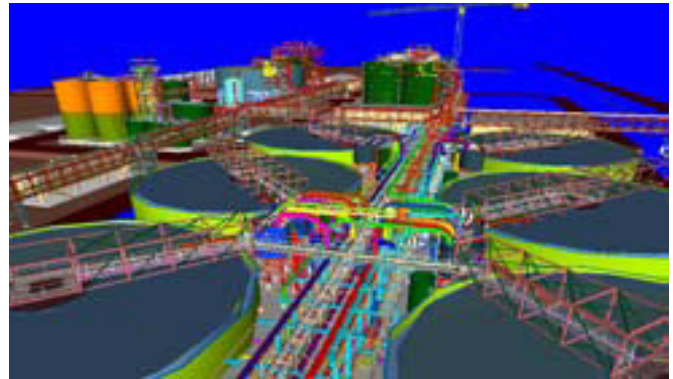
“We produced over 1,500 piping isometric drawings and generated over 80 piping drawings that included nozzle positions, pump foundations and other data,” explained Boro Radovanovic, CEDO’s production and marketing manager. “If we came across any clashes, we would inform the client immediately and assist them in correcting the mistakes, which allowed us to supply accurate drawings quickly and with minimal changes.”

Ensuring Accurate Deliverables

“CADWorx Plant allowed us to provide accurate bills of material, automatically generate piping isometric drawings and produce 2D arrangements from the 3D model,” Radovanovic said. “The client was able to review everything in real time through our 3D walkthroughs, which meant they could easily diagnose and rectify complicated processes by combining all disciplines in the plant model,” he added.

Saving Time and Money with CADWorx and CAESAR II

CAESAR II and CADWorx allowed CEDO to deliver the client’s exact requirements while minimizing expensive site modifications. This saved the client significant time and money, as did eliminating unnecessary pipe runs. “We completed the entire job in less than nine months with just a few people assigned to the project,” explained Radovanovic. “And, we kept the client’s project on track the entire time.”



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.

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.

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