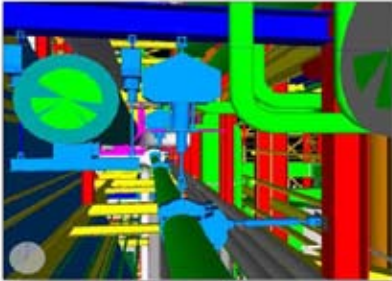


# CASE STUDY



# CADWorx & Analysis Solutions



"The advanced capabilities of this easy-to-use and proven solution provided fast project set up and a quick learning curve with almost immediate productivity."

Antonis Markogiannakis, CEO of  
PipeServe Engineering

## PRODUCT INDEX

Intergraph CADWorx®  
Intergraph CAESAR II®  
Intergraph PV Elite®

## INDUSTRIES SERVED

- Power - Non Nuclear

## Intergraph CAS

12777 Jones Road, Suite 480  
Houston, TX 77070 USA

Phone: +1 281-890-4566 • Fax: +1 281-890-3301

E-mail: sales.icas@intergraph.com

Web: www.coade.com

## PipeServe Engineering achieves success on Greek power project with Intergraph CADWorx, CAESAR II and PV Elite integration

Headquartered in Athens, Greece, PipeServ Engineering provides engineering services to the oil and gas industries, including petroleum refining, and for power generation and other heavy industries. TUV Austria Hellas chose PipeServ for the design of a series of combined cycle power plants in Greece that involved engineering and design for piping and supports within the plant facility and for auxiliary systems, large bore hot and cold pipelines involving 2,500 supports, 300 spring hangers, a pipe rack and steel structures. PipeServ performed stress analysis for small bore hot pipelines and finite element analysis for buried circulating water pipelines of 2.5m in diameter. They also provided mechanical design and construction drawings for three tanks and seven pressure vessels, including construction drawings.

### Achieving quick productivity with easy start up

Pipeserv achieved success on the project with Intergraph CADWorx Plant Professional and CADWorx P&ID Professional for plant design and process and instrumentation diagrams integrated with Intergraph CAESAR II and PV Elite for analyzing and designing piping and vessels. "The advanced capabilities of this easy-to-use and proven solution provided fast project set up and a quick learning curve with almost immediate productivity," explained Antonis Markogiannakis, CEO of PipeServ, "and we also benefited from the easy customization of databases and efficient coordination among specialties."

### Speeding review and completion with intelligent 3D modeling

The seamless integration between engineering and design improved productivity. They were able to provide CAESAR II pipe stress models instantly and reliably from the same model, and with the integration of PV Elite, they could analyze and complete the design of the pressure vessels with ease. The integration between 2D drawings and the 3D model expedited the work flow for all involved, and the 3D modeling capabilities improved the design quality by allowing better concept generation and easier reviews and checking between collaborators and the client. "We could easily share information that was always up-to-date by simply sharing the model," Markogiannakis added.

### Automating deliverables for quicker completion

Leveraging the capabilities and intelligence built into Intergraph CADWorx for design combined with CAESAR II and PV Elite for analysis, Pipeserv was able to automate the production of deliverables with speed and accuracy. They generated isometric drawings automatically with minimum post processing required, and the software's batch generation capabilities improved the quality of the drawings and reduced the amount of time required. They also produced instant bills of material that were accurate and complete, all from one model.

### Saving time through integration combined with automation

PipeServ provided the client with reliable, high quality and accurate deliverables in less time. That is possible because the CADWorx 3D model provides true intelligence and full integration with engineering analysis. The model and its associate data are always up-to-date and provide a complete and accurate depiction of the facility design at all times. Once the model was completed, PipeServ could then produce automatic isometric drawings and bills of materials with full confidence.