PipeServ Engineering Achieves Success on Greek Power Project with 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 to 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 2.5 meters in diameter. They also provided mechanical design and construction drawings for three tanks and seven pressure vessels, including construction drawings.

Achieving Quick Productivity with Ease

PipeServ achieved success on the project with 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 setup 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 workflow 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, and we produced the greatest amount and quality of piping drawings and calculations in the company’s history,” Markogiannakis said.

**Automating Deliverable for Quicker Completion**

Leveraging the capabilities and intelligence built into 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 associated 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.

**About Hexagon**

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, 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.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 21,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.