



CASE STUDY

C.S. Impianti achieved increased efficiency and cost-effective engineering & design operations

Key facts:

Company: C.S. Impianti

Website:
www.csimpianti.it

Industry: Oil & gas

Country: Italy

Octave products used:
Forte 3D (*Intergraph Smart 3D*), Facets
Instrumentation
(*Intergraph Instrumentation*),
Octave Cloud

Key benefits:

- Boosted team productivity through streamlined collaboration efforts
- Enhanced output quality and time savings from improved design and engineering efficiency
- Optimized costs and adapted to project requirements with the scalable and adaptable Software-as-a-Service model

C.S. Impianti provides plant engineering services and basic and detailed design to industrial companies.

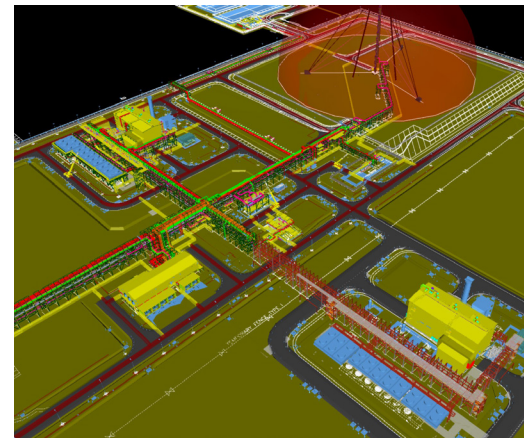
Always focused on innovation and quality, C.S. Impianti, in 1995, introduced 3D intelligent computer-aided design in Italy. Following this approach over the years, it has grown, introducing procurement and construction services to become a medium size engineering, procurement & construction (EPC) contractor in the areas of oil & gas, petrochemical, chemical and power plants with over 100 projects executed.

Identifying goals

C.S. Impianti embarked on an engineering project with the primary objective of designing and building two gas compressor stations that could effectively and consistently compress natural gas for transportation through pipelines. The engineering team's aim was to attain maximum efficiency in gas compression, while concurrently maintaining the highest standards of safety and environmental considerations.

Specifically, the project had the following goals:

- Design and construct two gas compressor stations that met the technical specifications and requirements of the client, including the gas flow rate, pressure and temperature.



- Develop a comprehensive engineering plan for the construction of the compressor stations, including civil, mechanical, electrical and instrumentation works.
- Optimize the design and operation of the compressor stations to ensure maximum efficiency, reliability and availability, while minimizing energy consumption and operating costs.
- Ensure the safety and environmental compliance of the compressor stations, including the use of high-quality materials and equipment and adherence to relevant regulations and standards.

“Working with the Octave team on this project has been great. From day one, they were supportive, proactive and always acted in the spirit of partnership. Our team was already skilled in using Intergraph Forte 3D and Facets Instrumentation solutions. Still, when we encountered a few critical issues, the Octave team reacted promptly and effectively to prevent any negative impact on the project’s overall schedule.”

Fabio Aiello
System Manager,
C.S. Impianti



Overcoming challenges

C.S. Impianti encountered numerous challenges during the execution of the engineering project, and a primary concern was the urgent need to establish the required infrastructure. To meet this requirement, the company had to leverage its customer’s previous already available plant 3D model. However, using the existing 3D model came with its own challenges, including ensuring compatibility with the latest technologies and tools.

To overcome these challenges, the company was looking for a better solution that would allow them to quickly start up the environment and help them easily scale up and down the infrastructure as required.

The company was also looking for a solution that would allow them to focus on engineering and administrative tasks rather than spending time managing the infrastructure.

Realizing results

C.S. Impianti conducted a comprehensive evaluation of various alternatives before settling on an engineering and design solution that catered to its requirements. Following a thorough assessment, the company chose a Software-as-a-Service (SaaS) solution that offered both flexibility and scalability. After conducting a detailed analysis, C.S. Impianti chose to implement Forte 3D and Facets Instrumentation as its preferred engineering and design solutions.

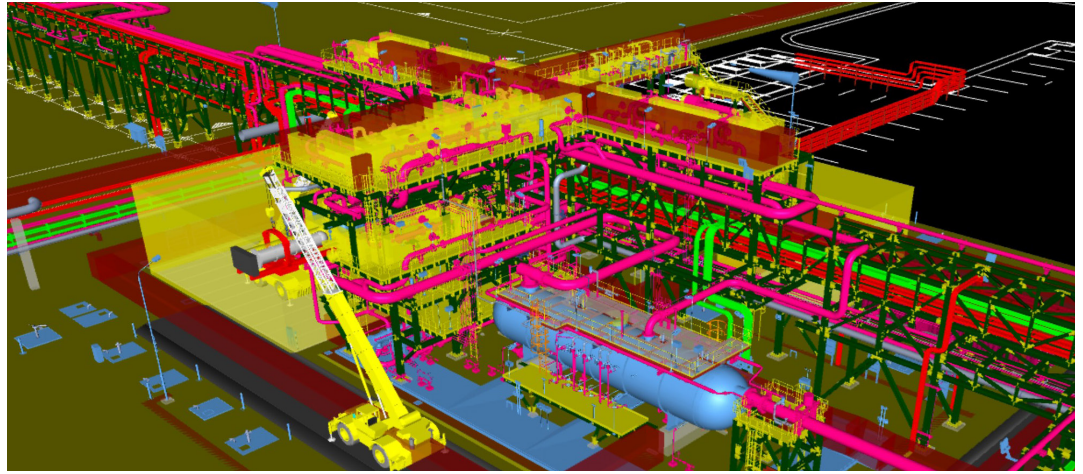
These solutions were used to manage 3D models, plant deliverables (such as bills of materials, drawings and reports) and instrument documentation, including data sheets and drawings.

In addition, C.S. Impianti was able to quickly set up the environment in just three weeks from the date of the purchase order. As a result, the company has leveraged the following benefits:

- **Streamlined collaboration:** Facilitated smoother communication and coordination among team members, resulting in improved teamwork and productivity.
- **Heightened design and engineering efficiency:** Enabled faster and more effective completion of design and engineering tasks, leading to time savings and increased output quality.
- **Minimized errors:** Decreased the occurrence of mistakes and inaccuracies in design and engineering activities, resulting in higher precision and reduced rework.
- **Rapid and effortless implementation:** The system was fully operational within two weeks of implementation, ensuring a quick start-up and minimal disruption to ongoing operations.
- **Scalability and adaptability:** The SaaS model allowed for easy scaling up or down of resources based on project requirements, providing flexibility and cost optimization.

“The Octave team was instrumental in setting up our environment and they provided us with valuable assistance in upgrading our 3D software to the latest version. Additionally, their team successfully migrated our 3D model data, which was a significant undertaking, but they handled it with ease.”

Fabio Aiello



- **Cost-effective solution:** By opting for the SaaS model, significant upfront IT expenses for hardware and database licenses were avoided, along with lengthy procurement processes, resulting in cost savings.
- **Unified interface:** Octave's SaaS model provided a single interface for Hosting, Infrastructure and Software, allowing C.S. Impianti to focus on project execution without the complexity of managing multiple systems.

Overall, using Octave's solutions has significantly improved the company's operations and increased its competitiveness in the marketplace.

Moving forward

C.S. Impianti has a longstanding partnership with Octave and has successfully used our design solutions for the management of 3D models, plant deliverables and instrument documentation. The recent project collaboration was exceptionally positive, with the Octave team providing outstanding support and promptly resolving critical issues to ensure the project stayed on schedule. Overall, C.S. Impianti has been highly satisfied with their ongoing collaboration with Octave.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

©2026 Intergraph Corporation and/or its affiliates. All rights reserved.