CASE STUDY

Mercury enhances semiconductor project efficiency and processes using Octave's OnSite Visualize Max

Key facts:

Company: Mercury Engineering

Website: www.mercuryeng.com

Employees: 10,000

Industry: Construction

Country: Operations throughout Europe

Octave products used: OnSite Visualize Max *(iConstruct™ MAX),* OnSite Visualize *(iConstruct™ PRO)*

Key benefits:

- Elimination of the manual processes
- Time and cost savings
- Increased project efficiency

Identifying goals

Mercury has delivered semiconductor facilities for 30+ years, and has worked with some of the worlds largest manufacturers in this sector, offering a wide spectrum of specialist services throughout Europe.

As an esteemed European contractor, Mercury has been utilizing OnSite Visualize for over seven years, and has gradually upgraded and evolved its usage as a long-term user of OnSite Visualize, harnessing more of our powerful tools. Throughout the years, Mercury has successfully employed OnSite Visualize on various projects. However, with its most recent endeavor, a semiconductor project in a new greenfield facility on an existing campus in Ireland, it began contemplating how to leverage the capabilities of OnSite Visualize further.

This project involved executing the base build, mechanical and electrical installation, as well as the installation of fabrication equipment. Recognizing the project's size and scope, Mercury sought a solution that could adapt to different projects and seamlessly integrate with its existing systems. It also aimed to align the product roadmap with its goals and objectives.

To this end, Mercury was determined to use a solution that would enable the team to efficiently manage the project and ensure it was completed on time and within budget. The company understood that the project's success relied on its ability to harness cutting-edge technology and tools, streamlining its operations and enhancing productivity.

"Before we started using OnSite Visualize, our data was located across different silos, and we couldn't efficiently link up the required information. OnSite Visualize helped us to bring all our data together and contain it within the model, which allowed us to use it as a driver for generating reportable data. We brought data from various sources and used the model as our source of data for reporting. These changes were significant for us."

Ciaran McCreary
Life Science and Technology - BIM Manager, Mercury

Overcoming challenges

Mercury faced significant challenges in the previous projects due to limitations in its data extraction and clash management tools. These tools lacked automation capabilities, hindering the full potential of automation in Mercury's projects. The absence of reporting functionality also impeded its ability to effectively analyze and communicate project data. Additionally, the ongoing semiconductor project involving multiple data sources made integrating and managing the data within its models increasingly complex.

Mercury recognized the need to adopt an Advanced Work Packaging (AWP) approach to overcome these hurdles but required a solution that seamlessly integrates AWP data into its existing tools.

To address the limitations of its current tools, Mercury conducted a thorough evaluation of available solutions, aiming to find a comprehensive tool that would effectively tackle its challenges and meet the specific requirements. During the evaluation process, it prioritized the following considerations:

1. Robust automation capabilities:

- Streamlining processes
- Eliminating manual inefficiencies

2. Advanced reporting functionality:

- Driving actionable insights from project data
- Facilitating effective communication among stakeholders

3. Seamless integration with diverse data sources:

- Consolidating information from various origins
- Creating a unified and manageable platform

4. Compatibility with AWP workflow:

- Seamless integration with Mercury's chosen approach
- Optimization of project management practices

By emphasizing these key considerations, Mercury aimed to find a solution to address its current challenges and provide long-term support for its projects.

Realizing results

After a thorough evaluation, Mercury successfully identified an optimal solution that catered to its specific requirements and aligned seamlessly with the project objectives.

Considering its pre-existing association, Mercury strategically decided to adopt Octave's OnSite Visualize platform, recognizing the immense potential offered by the suite of products it had previously utilized.

One of the key factors that drove Mercury's selection was OnSite Visualize MAX cutting-edge Building Information Modeling (BIM) technology and its customization capabilities. Leveraging its advanced capabilities, Mercury was able to drive several notable advantages in terms of safety, cost management and scheduling. The robust BIM functionality OnSite Visualize provided was pivotal in enhancing safety protocols, streamlining cost-related processes and optimizing project timelines.

Furthermore, the combination of OnSite Visualize's reporting capabilities and the integration of the automation tool BIMflow proved to be a game-changer for Mercury during its model validation procedures. By harnessing the power of these tools, Mercury effectively eliminated the need for manual work, ultimately saving countless hours of labor. This synergy between OnSite Visualize's reporting features and BIMflow en-sured accuracy and reliability, strengthening the project's overall efficiency.

"OnSite Visualize View Report tool, combined with BIMflow, has been invaluable for our model validation processes. Its ability to quickly generate reports based on specific project requirements has saved us countless hours of manual work."

David Murphy
Senior BIM Specialist, Mercury

Moving forward

Mercury now considers OnSite Visualize Max an invaluable asset to its business. The effectiveness of this solution has allowed the company to streamline its processes and achieve successful project outcomes. Exciting future development plans are underway, and Mercury is eager to explore further collaborations with Octave's – OnSite Visualize tools. It is already extensively utilizing Octave's solutions, such as Forte 3D and Forte 3DWorx, in the pipeline industry.

With OnSite Visualize and other Octave solutions, Mercury is confident in their ability to tackle future projects with heightened efficiency, precision, and confidence.

"We're excited to continue building upon the success of our current project and use it as a guiding blueprint for future endeavors. OnSite Visualize has been an invaluable tool in streamlining our processes, and we can't imagine operating without it."

Ciaran McCreary

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.