Modular Power Solutions Standardizes Its Manufacturing Process with Autodesk Build

Modular Power Solutions (MPS) – a subsidiary of Rosendin Holdings – was founded in 2011 to bring end-to-end design, engineering, and construction services to large-scale data center projects. To become the go-to solution for offsite construction manufacturing, MPS wanted to consolidate its technology solutions to streamline the fabrication process and connect data across the project lifecycle. By adopting Autodesk Build within Autodesk Construction Cloud™, MPS increased project efficiencies, saving time and providing high-quality products to its customers.
Customer Snapshot

- FIRM SIZE: <500
- FIRM TYPE: SPECIALTY CONTRACTOR
- REVENUE: N/A
- FOCUS AREA: ELECTRICAL
- HQ: SHERMAN, TX, US

A Better Way to Build

MPS manufactures large-scale, fully integrated modular power systems, from standard skid-based solutions for interior buildings to fully weatherproof enclosures for exterior applications. A year ago, MPS overhauled its business to take a manufacturing approach to construction, making 80% of its design and construction repeatable – producing more than 800MW of power.

With gaps in their previous document management process, information was lost in the transition between departments. This created inefficiencies and a breakdown in communication, causing potential rework and schedule delays. And with exponential growth, MPS needed a holistic construction management solution to connect its designers, engineers, and electricians to streamline and improve how projects are planned, designed, and built.

“Each team was using a different solution to accomplish their work. And with the rate we are growing, we needed a scalable solution to improve communication and keep project teams connected,” says Alec Overn, Business Manager at Modular Power Solutions. “Autodesk Build was the solution to consolidate different software and offered a one-stop solution to streamline our business processes.”

MPS piloted Autodesk Build to centralize documentation – files, contracts, drawings, meeting minutes – in one location and standardize processes across departments. They quickly realized that Autodesk Build had multiple applications to support their teams, and as of January 2022, all projects are on Autodesk Build.

Creating Standardized Processes and Procedures to Ensure Adoption

MPS took a phased approach to product rollout to ensure adoption across its teams. The first step was gathering feedback from department leads to customize the solution. Once the teams were on board, MPS partnered with Autodesk to facilitate in-depth training sessions with each department.

“In the adoption of Autodesk Build, we made a conscious effort to show the value of the modules, invest in training for the team, and give them the tools needed to be successful in the transition,” says Overn. “And when we have people coming into our offices to

CAPABILITIES:
- Field Collaboration
- Project Management

OUTCOME:
- Cost
- Quality
- Schedule
tell us that Autodesk Build makes sense and they’re curious about what else it can do, we know we made the right decision.”

Each workstation in the integration facility is task-based, with the product moving in an assembly line across the shop floor. With standardized checklists, processes, and templates, MPS can control how information is documented to optimize its workflows and processes, saving time and driving further efficiencies. And with consistent data capture across the company, MPS can drive better value from its data for continuous process improvement.

“Schedule and risk are critical factors in the construction industry. With industrialized construction, we can shift scope offsite into a controlled environment, giving us greater schedule reliability and creating a safer environment,” says Tanner Rhea, Logistics Coordinator at Modular Power Solutions. “We can also keep most of the labor constant, eliminating ebbs and flows and ensuring longevity in our employees’ careers.”

**Streamlining RFIs and Submittals to Maximize Efficiency**

Autodesk Build supports the complete project lifecycle for MPS, allowing them to receive requests from the factory floor in a controlled way, conduct evaluations, and share revised drawings without losing information. And with the configurable project management workflows in Autodesk Build, MPS can increase efficiency by streamlining the review and approval cycles.

“As an offsite construction manufacturer, Autodesk Build allows us to streamline our RFI and submittal process to drive maximum efficiency and increase visibility, giving our teams immediate access to the information they need,” says Mike Sweet, Director of Product Development at Modular Power Solutions. “Together in one system, we can capture our RFIs and Submittals and link required information to speed up approval processes. Which is a departure from our previous workflow where we used Excel and manual processes to track information.”

Seeing the history of an Issue or RFI and any reference materials associated with it before it was closed allows MPS to show the owner how they maintain quality control. This functionality has been highly beneficial to MPS, they are required to pass audits on large-scale data center projects. Previously, dealing with information stored in different systems posed significant challenges and risks. With Autodesk Build, MPS can easily track engineering change requests and notices to ensure compliance.

The Meeting Tool in Autodesk Build is another feature the team found beneficial and has overhauled how MPS schedules and conducts meetings. Before Autodesk Build, each department took notes and assigned tasks differently. Now, MPS handles everything digitally and tracks meeting information – RFIs, submittals, issues – in one place, making everything traceable.

“One of the things we did in Autodesk Build was generating projects for recurring meetings to keep our meetings accessible and actionable. Previously we would have half of our staff in meetings waiting to hear one to two updates. With Autodesk Build, we can minimize meeting participants by 75% and circulate comprehensive notes and actions, tagging the relevant teams,” says Rhea.

This new process saves the teams time and allows them to focus on more value-added tasks across their projects.

With a solution to capture data consistently across projects and multiple departments, MPS can continue refining and optimizing its approach to improve performance and deliver the highest quality projects to its clients on time. And with a commitment to innovation and out-of-the-box thinking, MPS can be more agile, productive, and economical with its construction projects.