

How VEC, Inc. boosts efficiency and documentation from design to turnover

Industrial | VEC, Inc. | Case Study



🖸 PlanGrid

Founded in 1968, VEC, Inc. started as a local electrical contractor and has grown into a total solutions provider that specializes in industrial, oil and gas, and low voltage work in the midwestern United States. With expertise in mechanical, electrical, fabrication, and other services, VEC trusts PlanGrid on all major projects for collaboration, information sharing, and successful turnover to owners.

Ensuring teams have the right information, and streamlining documentation

For years now, technology has played a foundational role in how VEC does business. It not only helps the company bring projects to completion faster but in doing so, it has become a major selling point and differentiator for VEC when pitching and bidding on new business. The benefits are considerable and two-fold: increased productivity by having the most up-to-date information accessible anywhere in the field, and confidence that all of the right data and documentation is being captured for an efficient project turnover. But it wasn't always that way.

The company knows from experience the risks that come with having outdated information in the field: missed communication between teams, time wasted, and money lost on mistakes that should have been avoided. VEC's head document controller Dominique Fuentes shares, "even missing one sheet revision can cause a several hundred thousand dollar mistake that has to be redone."

Documentation and inspections can be particularly challenging in mechanical work and oil and gas projects because of the precision and level of detail that must be captured. For VEC, documenting work efficiently and correctly is important not only from a time savings perspective, but it strengthens their relationship with project owners, who in the future will need access to precise as-built information for quality control and emergencies.



PlanGrid Project Highlights:

- Transco Pipeline: compressor station 605
- Rover Pipeline: meter stations
- Hollywood Gaming at Mahoning Valley Race Course

"PlanGrid empowers our projects to become digital and connected, resulting in increased efficiency, collaboration, and profitability on the jobsite. It keeps our project team on the same page, moving in the same direction."

- Dominic R. Spelich, Executive Vice President, VEC, Inc.

Centralized project information and consistent field documentation

VEC distributes information via PlanGrid even during pre-construction, which makes it easier for teams to access plans and understand the scope of work. Fuentes explains that, "we'll get 13 or more revisions during the bidding phase alone. In PlanGrid we save a ridiculous amount of time by being able to easily compare revisions, especially for estimators doing takeoffs." VEC also attaches photos to sheets in PlanGrid to, for example, help estimators see the thickness of a wooded area that will need to be cleared for construction, or capture progress photos of welds before they are buried underground.

With PlanGrid, field documentation and as-builts at VEC have become extremely efficient and reliable. VEC owns a four million dollar prefabrication facility where the team welds pipes and prepares other materials before they get shipped out to the jobsite.

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-Kalen Wallace, Mechanical Engineer, VEC, Inc.





Kalen Wallace, Mechanical Engineer and Integration Manager at VEC, explains, "85 percent of the welding work and documentation is done in pre-fab, and it all lives in PlanGrid. Once the field team gets the materials, it's easy for them to log details and photos right there in the plans from anywhere, even with their winter gloves on in the blistering cold." The team uses layers in PlanGrid to keep plans easy to read as more information gets added; for example, text descriptions, welds, or materials markups are identified as different layers so that they can be viewed or hidden easily from the screen.

When unexpected conditions arise or plans need to change on the fly, PlanGrid enables the VEC team to be dynamic, and communicate and document changes properly. "Maybe the grade turns out to be slightly different than planned, or there's an unexpected gas line in the way," Dager explains. "With PlanGrid we can recommend a workaround from the field, quickly take a snapshot and get an RFI out, and have all of this documented and available as part of our turnover package at the end of the project."

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- Chad Dager, Project Manager, VEC, Inc.







Results: Increased productivity and more data at turnover

For VEC, the increase in productivity driven by PlanGrid is apparent in a number of ways. Chad Dager, QA and Project Manager at VEC, explains, "an inspector can now work with 12 or more welders at a time because of how streamlined the process is; before, I could manage three or four maximum." Kalen Wallace notes an equally dramatic impact on productivity in prefabrication work. "I used to work on only a portion of a project at any given time; with PlanGrid I now work on four to five projects simultaneously."

Turning over projects is now infinitely easier, too. Because all of the work that the team does is managed and communicated in PlanGrid, there's no second guessing how up-to-date information is, or chasing down weld numbers from weeks or months ago. Wallace explains, "it used to take four to five people at least a week or more to get all final redlines and as-builts put together at turnover. With PlanGrid it only takes a couple of hours for us to ship our turnover package, but equally important is the fact that we're confident in the quantity and quality of the data we're sharing."

VEC has used PlanGrid for years now, and highlights PlanGrid as part of its "Innovation" package to partners, where the company touts its use of technology on projects. Summarizing PlanGrid's impact on the entire organization, VEC's Executive Vice President, Dominic R. Spelich concludes that, "PlanGrid empowers our projects to become digital and connected, resulting in increased efficiency, collaboration, and profitability on the jobsite. It keeps our project team on the same page, moving in the same direction."