



It's 108 in Arizona

Flagstaff-based excavation contractor taps technology to up productivity



Company

108 Excavating
Flagstaff, Arizona

Project

Site prep for construction of a large
apartment complex
Flagstaff, Arizona

Topcon Solutions

MC-Max Dozer/Excavator

Topcon Dealer

Branco Equipment
Phoenix, Arizona

Despite being only in his '30s, Billy Todd, owner and president of 108 Excavating (the company name is a nod to Todd's number when he raced motorbikes) is no stranger to the construction world. Construction has been a way of life, having worked alongside his father — also an excavating company owner in Flagstaff, Arizona — since he was in high school. Today, he operates a full complement of Case machines, including an 850M dozer, CX245D excavator and 856C motor grader — all equipped with Topcon machine control.

"Our preference for machine control stems from a single project we did in 2018," he said. "At that time, we were working a site that had a massive amount of change in elevation — easily 100 feet or better. Given the staking

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that would have been needed — and the costs associated with it — I felt there had to be an alternative out there that could serve us better.”

That alternative, which the sales team at Branco Equipment, the area Topcon dealer, had already been talking to Todd about, was a GNSS-based machine control solution. “Based on what the sales rep told us, we felt it could pay for itself on that job alone,” said Todd. “Turns out, they were right, and I’ve been using the technology ever since.”

That fleet of Case equipment was recently at work on a 10-acre housing development project called the Aura Flagstaff Apartments, an eight-building, 190-unit apartment complex where, according to Todd, they once again tapped the benefits offered by the machine control (MC) solutions.

The dozer and excavator did the bulk of the site prep and utility work while Todd later brought the motor grader in for the parking lots and driveways once the rock was removed. He said that he has been particularly impressed with the added functionality the Topcon machine control solution brings to his Case 245 excavator.



“The ability to program utility lines into the excavator’s model has been huge for us,” he said. “We no longer have to wait for the surveyor to stake it out, then spend labor hours stringing out the points, painting out the ditch line, and utilizing a grade checker. Now, with me on the excavator my bucket is the rover. Plus, we can move seamlessly from one utility task to another without any downtime in between. It has also proven to be a valuable check for survey points. We have caught a number of errors that could have caused delays and possibly required the task to be redone if not caught prior to installation. As we continue to grow, I’m certain additional system purchases will be in our plans.”

While Todd will not dispute the fact that machine control is a straight-ahead cost saver, he adds that it goes much further than simply doing things faster.



“We are a much more efficient operation with machine control, there’s no denying that,” he said. “However, for me, it is about knowing where you are at on the project at all times. If I need to change my focus for some reason, I can immediately start digging a building pad without needing to have it staked out — I see it on the screen and get right to work. That is huge for a company like ours where time is definitely money.”

He added that projects in their area tend to be subject to numerous changes, modifications that ultimately end up costing their company in productivity. To alleviate bottlenecks in one facet of that workflow — the digital model which is at the heart of the machine control solution — he literally took matters into his own hands.

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"Up here, plans are modified so often that I got tired of relying on somebody to build our models, only to have to pay them every time a change order came in," he said. "So, I bought a subscription to a modeling package, worked to gain some real familiarity with their grade control modeling solution, and learned how to build good models. Now, not only are we saving those costs, we're no longer at somebody's mercy. I don't have to hear 'I can't do next week,' I get it done on our schedule. Given how intuitive the Topcon system is, learning how to create the model was, in fact, the biggest learning curve we encountered with GPS."

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