

# Mechanical Firm Implements Trimble AutoBid



## Mechanical Contractor Realizes 4x Process Improvement Through Trimble AutoBid Adoption

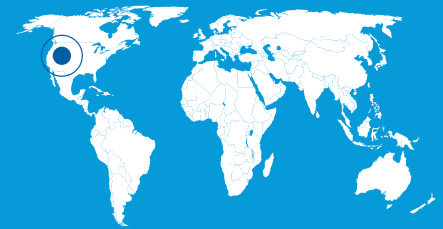
“With AutoBid, our bids are so much more accurate. No matter the building style, whether concrete or steel, the tool automatically generates the correct number of components we need. No more guesswork,” says Tyke Read, of Brown & Read Engineering.

### Highlights

- ▶ Accurate bids no matter the building style
- ▶ Flexibility in bids and estimates

# introduction

Brown & Read Engineering, first established in 2003, is firmly established and highly respected in the Reno and surrounding Nevada and Northern California region for its quality engineered solutions, emphasis on high efficiency and sustainable energy solutions and quality installations.



Location  
Nevada, USA

Over the course of a dozen years, the HVAC and plumbing contractor has moved from the design and installation of custom home systems to complex higher education and public buildings—and until recently, they’ve done it with little more than pencil, paper and CAD.

As the company, founded and managed by President Charles (Chuck) R. Brown and Secretary Lynwood M. (Tyke) Read Jr., M.E., continued to build an extensive and varied client base, which includes Saint Mary’s Regional Medical Center, the Washoe School District and the University of Nevada, Reno, they also needed to make some business and operational adjustments.

Specifically, Brown & Read looked to technology to support continued growth and efficiency.

## EXPONENTIAL SPEED

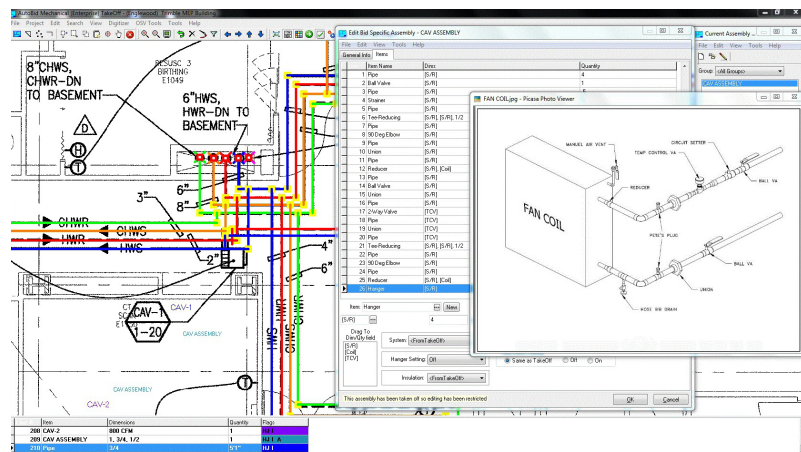
In recalling the founding of the company, Read says, “For a number of years, it was just Chuck, me and one other guy. We didn’t have a lot of money to invest in technology, but we had a lot of experience and perseverance. Our first job was a custom house and then, as we built our reputation, we were able to bid on and win larger projects. Our first major project was an apartment complex.”

They used AutoCAD for design and an engineering tool for sizing equipment and estimated with a roller wheel to scale off drawings and Excel to accumulate an audit trail.

Read explains, “About a year ago, we had so much work coming in, and much of it included larger and more complex projects, that we knew it was time to upgrade our processes. We needed a system that allowed us to build more detailed, more accurate and more current estimates—and definitely more automation. We wanted better AutoCAD connections and the ability to do take offs from the screen and also wanted a little more connectivity with vendors.”

After an extensive evaluation, Brown & Read moved to Trimble’s AutoBid® Mechanical and AutoBid® SheetMetal for takeoff, bid creation and vendor submittal.

“What a difference,” Read emphasizes. “With AutoBid, our bids are so much more accurate. No matter the building style, whether concrete or steel, the tool automatically generates the correct number of components we need. No more guesswork. We’re able to pass information automatically to vendors for pricing.”







Beyond the improved bid accuracy and having a detailed material list, Read says, “I would say I’m 4x as fast as before—and getting faster.”

Read believes he will continue to improve the time and quality of his bids over time by taking advantage of AutoBid’s historical database, which will allow him to automatically create bids based on previous jobs of similar scope and scale.

## THE BEST FIT

On every bid, Read depends on AutoBid’s flexibility to match the uniqueness of every project. This functionality comes in particularly handy when Read’s company is hired to perform renovations.

Read says, “The correction factor functionality is invaluable. A year ago, if I had to adjust my design and material sizes to accommodate conditions on different floors, ceiling heights, etc., I’d just throw a fudge factor on the bid. AutoBid has a drop down menu of common correction factors that I select.”

He also relies on the tool’s ability to adjust materials sizes per site logistics—such as small elevators.

That functionality was very useful on the remodel of the University of Nevada, Reno business building. The existing elevator could only hold 10-ft pipe and 7-ft spiral duct. Read says, “We specified these access limits in the AutoBid program and it generated the couplings to put that together.”

He’s also taken advantage of the value engineering feature to help owners save money while maintaining system integrity. As an example, Read recalls one project where another engineer specified a certain material for a piping system. “But I knew code wise, that we could use an approved alternative that is cheaper, lighter and/or easier to work. With AutoBid Mechanical, I can show the owner the options – with just a click of a button.”

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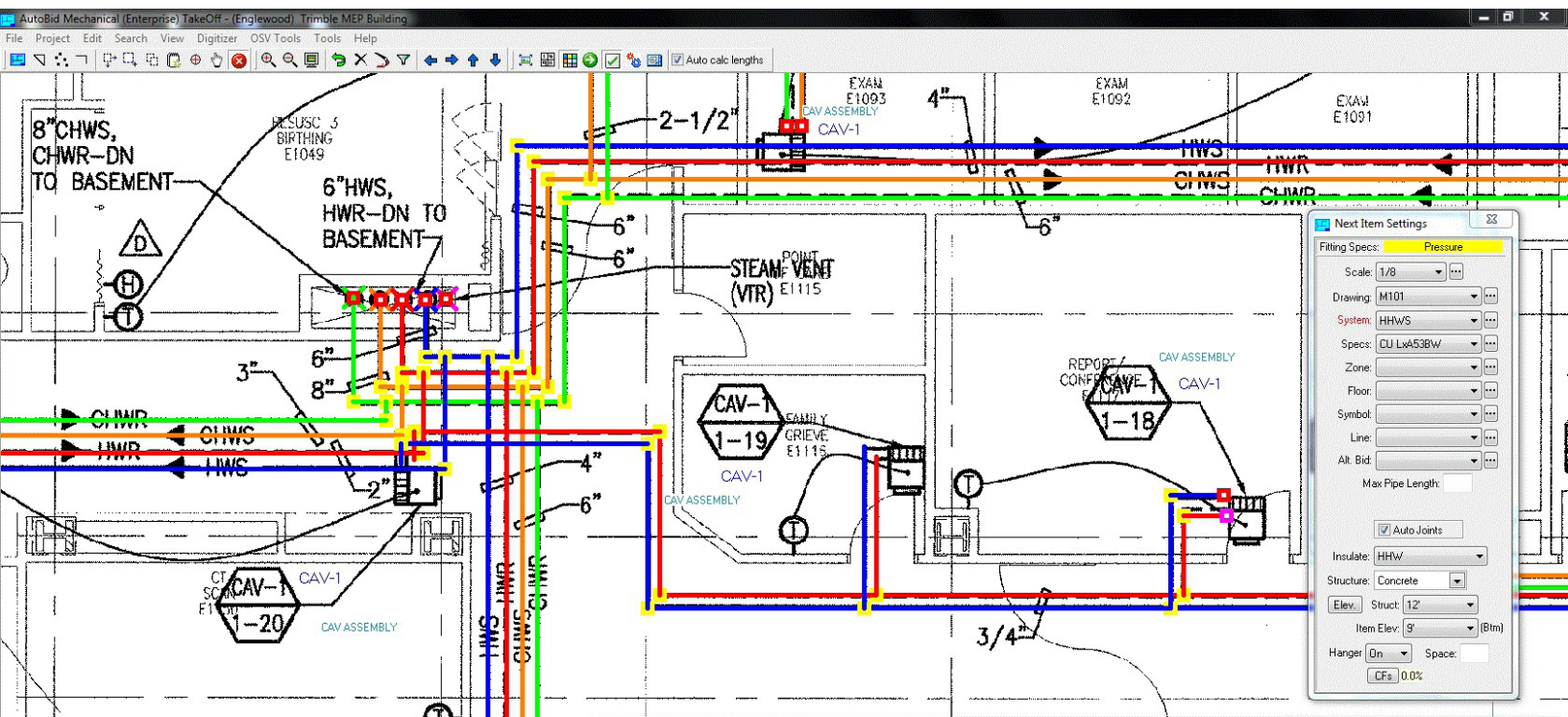
*Tyke Read, JR., M.E., Secretary, Brown & Read Engineering*

The company has already put the tools to work on a number of high profile projects including the complete energy retrofit of the Carson City Federal Building and the upgrade of the Carson City Server Room.

"On the Server Room project, the refrigeration piping was located on the third floor and had to be connected to the roof system on the fourth floor. That required us to wrap around the access area. We used AutoBid Mechanical to takeoff the piping requirements from the model. The tool automatically ensured that had accurate lengths to fit the existing T-bar ceiling in the hall that we had to traverse."

Looking ahead, Read believes his company will invest in a few more tools, such as Trimble PipeDesigner 3D® and Trimble DuctDesigner 3D®, based on the success of AutoBid Mechanical and AutoBid SheetMetal this past year.

He concludes, "The two tools, AutoBid Mechanical and AutoBid SheetMetal have already paid for themselves. As we grow, I believe we'll rely on these tools even more as a way to continue to provide quality solutions to our customers with greater efficiency."



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