

"AutoCAD MEP design and documentation capabilities will definitely have a positive impact on our repeat business."

Doug Reinbold, PE
Principal
Reinbold Engineering Group

Win more business.

AutoCAD® MEP helps Reinbold Engineering Group significantly improve productivity and client relationships while reducing requests for information (RFIs).

Project Summary

Doug Reinbold is the founder of Reinbold Engineering Group (REG), a mechanical consulting engineering firm based in Calgary, Alberta. "We're a group of roughly twenty mechanical engineers, designers, and drafters," says Reinbold. "Our primary focus is state-of-the-art heating, ventilation, and air conditioning systems. But, we also design plumbing, drainage, fire protection, and sprinkler systems for a variety of markets." To help deliver a superior finished product on time and on budget, REG standardized on AutoCAD MEP, an AutoCAD®-based mechanical, electrical, and plumbing (MEP) engineering design and construction documentation software application. The firm has already completed five major projects with the new software and is in progress on another five. On all the projects, REG has seen impressive gains in productivity, accuracy, and coordination. As a result, AutoCAD MEP has become an important part of the firm's long-term, strategic growth plan.

The Challenge

Before moving to AutoCAD MEP, Reinbold noticed that many architects were adopting AutoCAD®

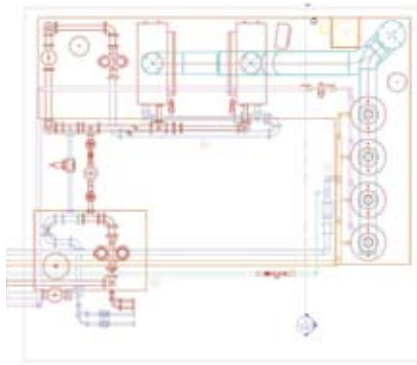
Architecture. To improve coordination and communication with these architects, as well as with other members of the extended team, REG made the switch to AutoCAD MEP.

High Expectations

"Once we had adopted AutoCAD MEP, we began looking for other ways that it could broaden the services we offer to our clients," says Reinbold. REG needed a solution that could help the engineers accurately and efficiently model the complex interior spaces found in hospitals, educational facilities, high-rise buildings, and other large institutions. The ideal solution would also streamline the production of complete and accurate construction documents.

Demanding Projects

One project earlier this year underscored those needs. "We recently completed a major boiler replacement at Canada Food and Agriculture in Calgary, Alberta," says Reinbold. "We removed several old boilers and installed new boilers, pumps, and piping."



AutoCAD MEP is an AutoCAD-based building design and construction documentation software application for mechanical, electrical, and plumbing engineering systems. It provides improved productivity, accuracy, and coordination. The engineers, designers, and drafters at Reinbold Engineering Group can use AutoCAD MEP to

- *Automatically produce construction documents directly from the object-based model*
- *Enhance communication and coordination with members of the extended design team, such as the architects and structural engineers*
- *Create a realistic representation of building systems for better communication of design intent*
- *Reduce RFIs and costly design changes in the field*
- *Get instant design feedback directly from the object-based model*

The Solution

“It’s in those types of situations that we see the greatest benefits of AutoCAD MEP,” says Reinbold. “AutoCAD MEP has really got us thinking about how we design in three dimensions.”

Show—Don’t Tell

Communicating complex mechanical rooms in 2D to clients is confusing. “Using AutoCAD MEP, we created a full-color rendering for the cover sheet,” says Reinbold. “It really helped the owner and building operator visualize exactly what we were doing—even in the middle of a very large mechanical room with a number of existing services.”

Get It Right the First Time

“The clarity of the final product blew the client away,” says Reinbold. “As a result, we significantly reduced the number of requests for information, both during the bidding process and onsite during construction.”

Keep Costs Down

“AutoCAD MEP helped us lift the information off the page and give it to the contractors in a form that they could understand—and price—properly,” says Reinbold. “In addition, it’s a perfect tool for helping the people who pay the bills grasp what we’re doing.”

Impress Your Clients

“Our ability to communicate the design intent has definitely improved our relationships with our clientele,” says Reinbold. “When the project manager saw our work, he immediately showed it to his counterparts back east. They were really impressed.”

Move from Design to Documentation—Faster

REG uses AutoCAD MEP to automatically produce construction documents. “On this project, we just started playing around with it, seeing what it could do,” says Reinbold. “We produced a number of quantity takeoffs, as well as some bills of materials, to compare to the contractors takeoffs and found them to be the same.” There is a real benefit to using AutoCAD MEP to prepare construction documentation.

The Result

“We’ve found that when we use AutoCAD MEP, the installation goes much smoother,” says Reinbold. “Everyone is much happier with the final product. And our employees are quite excited about the possibilities.”

To learn more about AutoCAD MEP, visit www.autodesk.com/autocadmep.