



Rugged Robotics is the trusted layout partner for data center builders – accelerating installation and eliminating rework at hyperscale speed.

THE PROJECT



Hensel Phelps, a top-tier mission-critical general contractor was selected to build a hyperscale data center more than two hours outside a major metro. With a high-pressure schedule, a limited labor pool, and thousands of features supporting future GPU installations, they needed a full-service partner that could deliver speed, precision, and repeatability at scale.

Key Outcomes



Rugged freed up more than 750 hours of physically demanding layout work, allowing those resources to be reallocated.



Framers installed 15%+ faster due to Rugged printing additional detail compared to traditional methods (e.g. door ID, swing/frame, ceiling height)



Rugged helped streamline coordinated QA/QC process, including verification in minutes that 100% of slab penetrations were within the wall track

THE CHALLENGE



Hensel Phelps was concerned that the traditional layout methods would have stressed overextended trades that would have led to errors, rework, or worse, safety incidents, given the aggressive schedule.

While they knew automated layout would improve productivity, the project team didn't have the bandwidth to take on new responsibilities of leasing equipment, training staff to operate it, or managing execution onsite. They couldn't afford the distraction of troubleshooting or underutilized tech. What they needed was a plug-and-play solution that just worked and showed up when and where they needed it.



**The tech is self-sufficient, clean, easy,
and the team is a pleasure to work with**

Kevin Kindorf, Superintendent

THE SOLUTION



Hensel Phelps was drawn to Rugged's full-service approach combining robots, field support, and model processing all bundled into a white glove service. Rugged deployed multiple robots accompanied by seasoned operators **across 5 deployments** to lay out racking baseplates, anchor locations, wall track, HVAC passthroughs, and various other architectural and engineering features across **250K+ square feet**.

Layouts were validated by trades at every stage, streamlining QA/QC. For example, the project team was able to confirm within minutes that the MEP sleeves aligned perfectly with the wall layout and **100% of the slab penetrations** were within the wall track, a first for the project manager!

Rugged's impact was felt across the site: **over 750 hours** of strenuous (hands and knees) labor was reduced and repurposed, and framing installation sped up by more than 15%, both **reducing hard labor hours and the associated risk of injuries**. Looking ahead, Hensel Phelps is already exploring how to capture additional benefits from automated layout, including expanding Rugged's services to include the MEP layout on the next building.

