

Robotic Layout

What is it?

Robotic layout is the process of using a Robotic Total Station (RTS) to translate 3D points from a model to the field. The same tool can be used to collect data points from the field. Trade partners can precisely layout their work with fewer people and less time using these devices. A Quality Manager can adopt this process to verify layout points of a trade partner's work to confirm its accuracy. Surveyors set up monuments that are tied to control points in the model. The RTS is

set up and calibrated to these monuments. A model author places layout points in a model and sends it to the layout team. The layout team loads the model into the RTS and places points around the site. The person laying out the points carries a reflector pole and a tablet to control the RTS. A Quality Control Manager can take an RTS, collect various points and then load it into the model to compare the collected points to the layout points in the model.

How does it benefit stakeholders at the Airport?

- □ Increased accuracy
- ☐ Fewer people to lay out work
- □ Enhanced quality control process

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