

AT WORK

MUTUMI CONSTRUCTION Company Limited



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MUTUMI CONSTRUCTION Company Limited, located in Chiba, Japan, has been using Topcon GPT-9000A robotic total station for their construction works of urban water supplies, public draining trenches and residential land preparations. When they first introduced it in July 2008, their goal was to improve job efficiency and save labor so that they could increase productivity and get more work done with the same staff.

Hayato Ishii, director of the company, said, “Thanks to its full-robotic capability, one person can perform as-built survey, the same person can draw a plan back in the office even on the same day. This gave our personnel a lot more freedom because they do not always have to have multiple workers assigned to a specific task. The amount of hours worked were significantly reduced which means on-site productivity was considerably increased.”

“Most of our construction sites are 50 to 500 meters (160 to 1,600 ft.) in length,” Ishii said, “In such areas, we want to do an entire survey with

one instrument position to get the job done quickly. The GPT-9000A made it possible in most of the cases. We evaluated the indirect leveling capability and confirmed the GPT-9000A provided the same level of accuracy as direct leveling while drastically reduced the measurement time. Prism search is very quick and accurate.”

MLIT* recommends the use of as-built survey data acquired by total stations for project management. While the new technology is still being evaluated by companies in the region, Ishii said, “We are always paying attention to the latest surveying and



Hayato Ishii, Director of MUTUMI CONSTRUCTION Co.Ltd. construction technologies. Now we are ready to propose new survey and construction methods to the city government. We have not been able to compete in size with giant construction companies. We have elected to incorporate the newest technologies in our specialized field. Every effort we make to improve productivity and quality will give us advantages over the competitors in a variety of jobs.”

* MLIT: The Ministry of Land, Infrastructure Transport and Tourism

ROBOTIC TOTAL STATION GPT-9000A