TOPCON

Machine control system enables even compaction throughout the construction area

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Yame-Hodo Company Limited, located in Yame-city, Fukuoka, Japan, specializes in pavement construction. The company recently utilized a Topcon compaction machine control system for asphalt pavement work in a road construction project. This system employs the GPT-9000MC robotic total station as a core sensor.

Yuzuru Yoshikai, representative director of Yame-Hodo, said, "When we were looking for a new technology to differentiate ourselves from peers, MLIT[*] released the preliminary guideline for ICT-aided construction management in earth compaction utilizing GPS/TS. We exploited that

Yuzuru Yoshikai, Representative Director

opportunity and chose the Topcon system."
He said, "The GPT-9000MC system has greatly improved all aspects of our pavement work. We used to check the earth conditions with an eye from time to time, and it was difficult to check the entire construction area without omission. But with this system, a display in the cab allows the operator to check the trajectory of the roller, with which we can easily give even compaction throughout the construction area. We can now manage the project with surface information instead of points. This dramatically increased the quality of compaction work."
Yoshikai also said, "Previously only an expert operator could precisely control the roller. But now the operators with 2-3 years experience can drive the roller very well with the clear guidance

of this system. Therefore, for example, we can form two crews at the same time, one of which does not include an expert roller operator, and carry out two projects in parallel. It means we can double the productivity.
"A robotic total station is an ideal instrument for us," said Yoshikai. "Our projects include forest road and tunnel construction in mountainous regions. A total station can operate even in tight spaces or under tree canopy where GPS signals are not fully available. The GPT-9000MC constantly tracks the moving prism, which significantly increases work efficiency."
Yoshikai said, "It's a fantastic system, for anybody can ride the roller."

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

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It's time.