Example of using the structural safety management monitoring system (NET1AXII)



Changwon Gyeongryun Corporation Introduces SOKKIA Monitoring System

Purpose of introduction

As part of the facility environment improvement project in 2014, the Changwon Racing Authority conducted the "DOME Monitoring System Construction Project" to prevent disasters due to collapse of stadium structures in advance, make decisions for post-maintenance management, and ensure the safety of use of structures. It was introduced to ensure smooth racing operation and facility management.

System configuration

This system is configured to precisely measure the displacement of the DOME structure using the automatic tracking Total Station NET1AXII, and then receive, correct, and analyze the measurement data in the central control room through communication (optical cable).

In addition, it is linked to the warning server, so when abnormal data is measured, warning messages can be confirmed through a horn, text message, or e-mail through wired or wireless functions.

Horn : Sound through PC speakers

Text/E-mail: Short text notification

and e-mail transmission using web hosting



system efficiency



This time, we asked Manager Choi Hyun-seok of DongA Surveying Instruments, who delivered the system, about the differences from conventional monitoring systems. "Instead of measuring sensors (strain gauge, deflection gauge, thermometer) and measuring equipment (static data logger) to be installed in each steel, we installed two automatic tracking measuring instruments and prisms (72) at the existing measuring locations to manage measurement. and we were able to significantly reduce costs" In addition, "I heard from a corporation representative that structural deformation

and deflection phenomena can be monitored at all times and then collected and transmitted as spatial coordinate data, making management more convenient and efficient than the existing manual measurement method." do. In addition, it is possible to periodically measure the deflection of the space frame supporting the structure, so it can be used as data to predict the behavior of the structure and confirm and judge the structural stability of the DOME structure from external weather changes and external forces."

Benefit

- Strengthening disaster prevention due to climate change and external forces
- Prevent disasters caused by DOME deformation in advance
- Decision-making for facility maintenance and ensuring the stability of use of the DOME structure





SOKKIA KOREA Co,. Ltd www.sokkia.co.kr