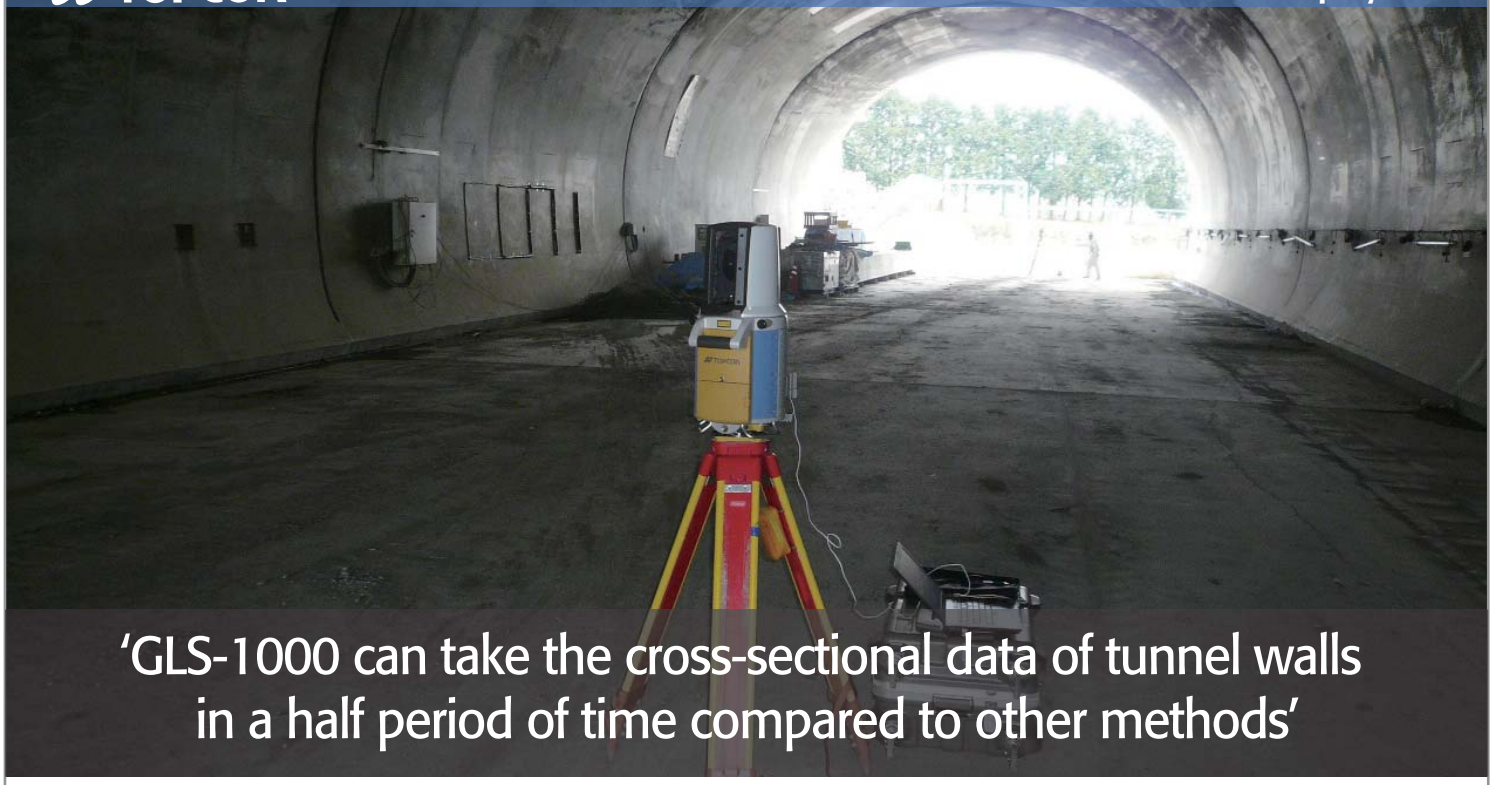
AT WORK

TOPCON

Keisoku Net Service Company Ltd.



'GLS-1000 can take the cross-sectional data of tunnel walls in a half period of time compared to other methods'

"Backsight observation capability assures highly accurate reproduction of coordinate systems for periodic monitoring"

Left: Tetsuro Sato, Keinet president
Right: Eiji Nagata, sales specialist at Keinet

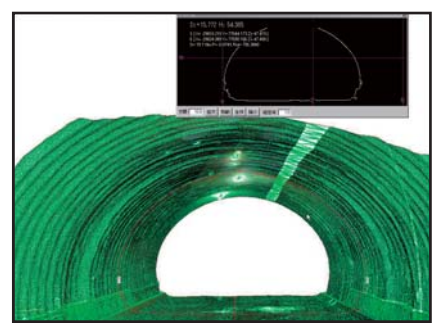
Keisoku Net Service Company Ltd. (Keinet) provides surveying and 3D measurement technologies and services for construction and engineering applications in Japan. A company with more than 11 years experience, Keinet is expanding its business portfolio by incorporating the Topcon GLS-1000 laser scanner.

"Topcon's laser scanner can provide accurate data of 'surfaces' using point clouds, which is one of the major advantages over the total stations that provide 'point' data," said Tetsuro Sato, Keinet president. "Point cloud data allow for more flexible analysis such as 3D measurement of desired cross sections. We are making the best of this feature for diverse applications."

Eiji Nagata, sales specialist at Keinet, said, "GLS-1000 can take the cross-sectional data of tunnel walls in a half period of time compared to other methods."

"The GLS-1000 has an optical plummet, high-precision tilt sensor, distance and angle measurement capabilities, as well as horizontal and vertical jog dials for fine motions. This allows for operations in a similar manner to the total station," said Sato. "For the periodic monitoring of slopes and other structures, we need to reproduce exactly the same coordinate system every time. The GLS-1000 has an ability to set the coordinates using backsight observation that assures highly accurate reproduction of coordinate systems. This feature significantly helps us to win the confidence of our clients in measurement results."

Keinet also utilizes the GLS-1000 for management of applied concrete thickness in tunnel construction. "If we can scan the tunnel walls immediately after excavation or blasting," Sato said, "it is possible to compare the as-build data with blueprint, and to calculate the volume of necessary concrete. The scanned data can be used to reduce volume of excessive concrete or other materials, significantly saving the costs."



Keinet has found that the GLS-1000 laser scanner expands the company's service applications. Boundary measurements in compliance with building regulations, as-built survey for construction management, disaster prevention planning, reform of building and facility, capturing 3D data of architectural structures are examples cited by the company.