

Advanced Technology for Road Planning & Tunnel Maintenance

도로 계획 및 터널 정비를 위한 첨단 기술

We provide various solutions to construct a sustainable infrastructure by utilizing advanced technology and know-how gained in our more than 60 year history. We offer the best solution for a safe, secure and vibrant community.

● Micro Traffic Simulation, VISSIM

Idea of Micro Traffic Simulation

Micro traffic simulation is used to study traffic phenomenon with driving behavior of each vehicle including accelerations and decelerations in a virtual space. It enables us to estimate the speed, travel time, traffic capacity etc. under various traffic and road conditions. It can be used for planning and designing traffic-efficient roads.

Micro Traffic Simulation, VISSIM

Using VISSIM can offer not only behavior of vehicles but also pedestrians and bicycles in various conditions of road. Conflicts between them can be reproduced in the simulation. VISSIM provides simulations very much like the real world.

VISSIM for the Evacuation Behavior Analysis

The VISSIM can be used for the analysis of evacuation behavior, by car or pedestrian, in a case of emergency.



Image of Traffic micro simulation using VISSIM

● Cycling Simulator, C-Tips

C-Tips is a high-tech cycling simulator designed to help cyclists. It is used for safety education, evaluating bicycle facilities and accident analysis.

360-degree view and checking

The head mounted display provides a full 360-degree view and it enables to check both sides and back.

Experience a 3D bicycle road

The texture of the road surfaces and buildings are virtualized for the realistic bicycling experience.

Situation of idling

C-Tips can measure the pressure on the pedals, so when there is no pedaling, the idling image is displayed.

Riding on a real bicycle

C-Tips uses a real bicycle for simulation.



Visual image of 3D bicycle road

● Tunnel Surveying Vehicle, MIMM-R

MIMM-R is a surveying vehicle which has functions as follows ;

- High-precision topographical surveys <Fig.1>
 - capture cracks with 0.2mm in width at speed of 70km/h
- Laser tunnel surveys and deformation analysis <Fig.2>
- Tunnel image surveys and degree of damage assessment
- Radar tunnel surveys and cavity evaluation

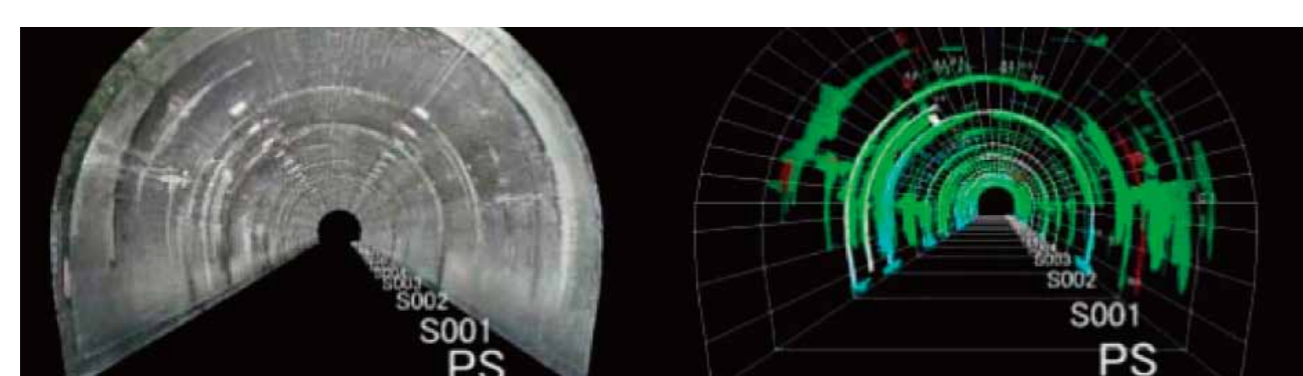


Fig.1 Damage map

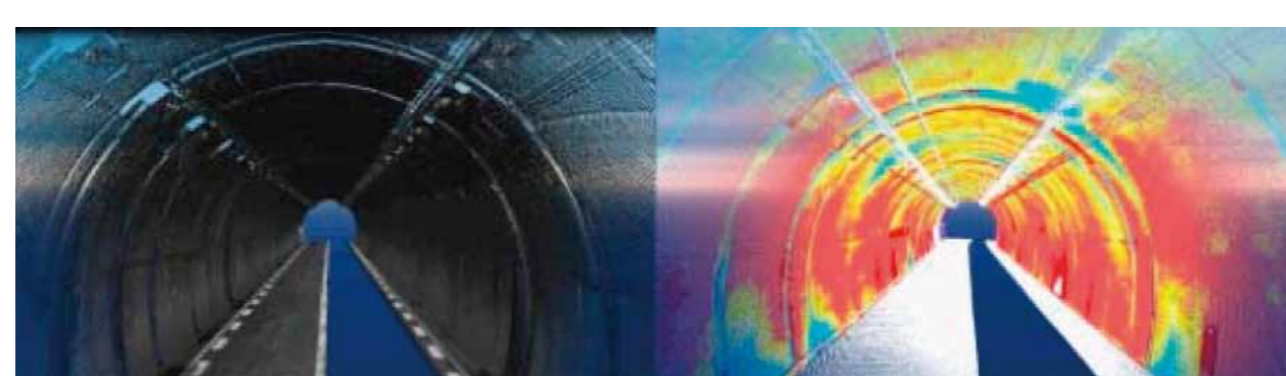


Fig.2 Laser survey plot data



MIMM-R