

DOBASHI LAB.

[Realizing a Sustainable Society]

International Centre for Urban Safety Engineering

<http://icus.iis.u-tokyo.ac.jp>

Urban Infrastructure Management Engineering

Realizing a Sustainable Society

Developing the strategic management system of urban infrastructures

For deterioration of the urban infrastructure and a large-scale disaster, appropriate operation and maintenance is required in addition to development of infrastructures. We developed the advanced technologies for construction of the infrastructure by effective utilization of underground space in urban area, and disaster prevention and safety measures of the underground facilities. We are also investigating a strategic management system by developing the advanced technologies of an inspection and deterioration diagnosis such as nondestructive testing and the monitoring, by evaluating the performance of the structure with the deterioration and by carrying out repair, reinforcement and renewal of the infrastructure appropriately.

Development of shield tunnel enlargement method

Installation of disaster prevention and safety measures employing

detection system of extraordinary traffic movements by image processing

Newly development of nondestructive testing and monitoring technologies

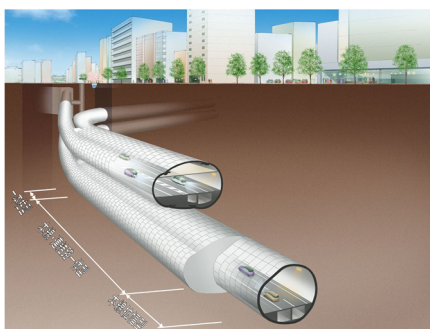


Fig.1 Shield enlargement method

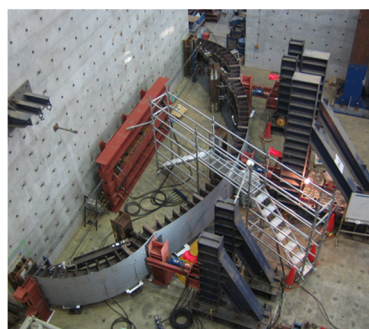


Fig.2 Test with a 1/2-scale specimen

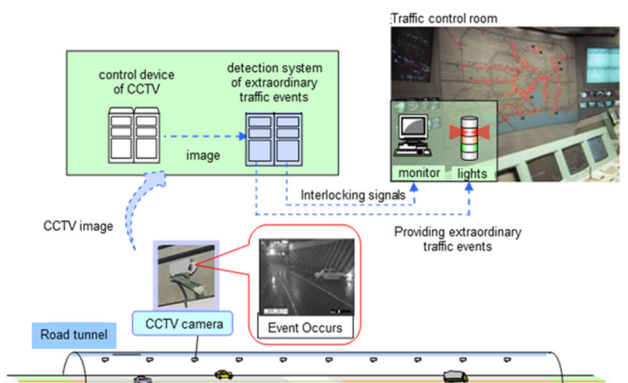


Fig.3 Detection system of extraordinary traffic movements by image processing

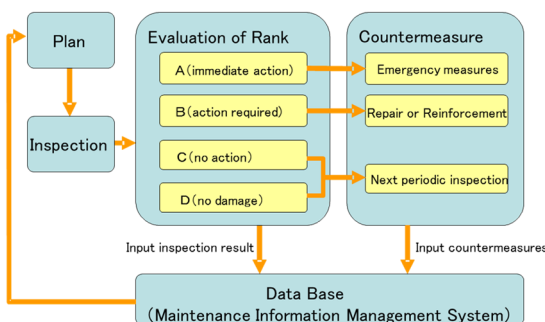


Fig.4 PDCA of inspection and repair works

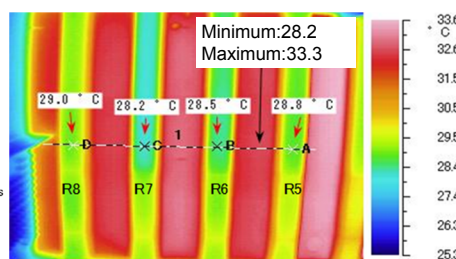


Fig.5 Temperature of orthotropic steel plate deck by infrared method



Fig.6 Reinforcement of RC slab with Carbon Fiber Sheet