Demonstration study of deterioration diagnosis and equipment inspection technology by sensor monitoring and data aggregated cloud server

Project Implementer

Swing Corporation and Sendai City

Demonstration Field

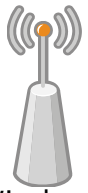
Sendai City: Hirosegawa SWTP, Miyagi-Nakayama PS, Kasuminome PS, Kunimi-1 PS

Demonstration Overview

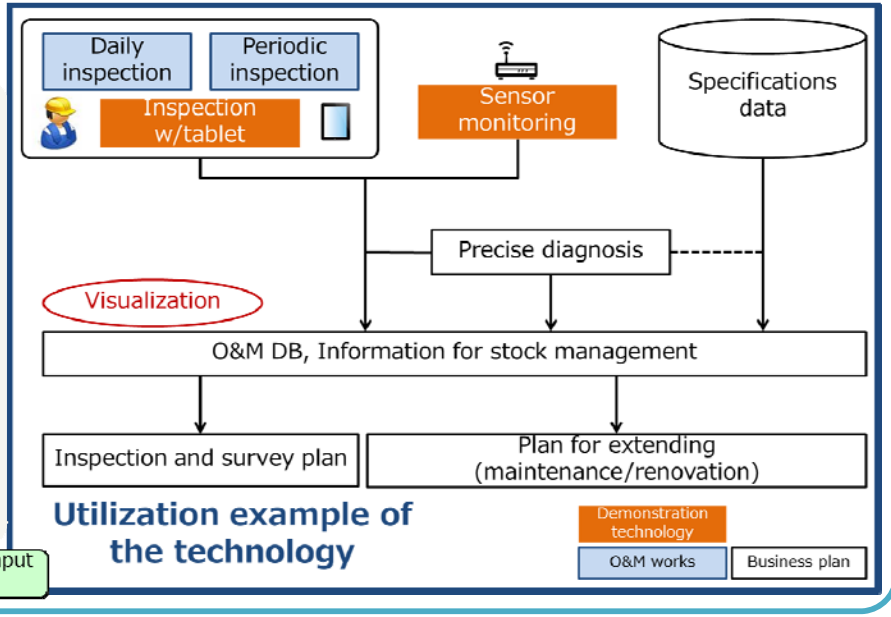
It demonstrates the technology of facilities deterioration diagnosis and prediction by 24-hour monitoring data of vibration sensors and inputting daily inspection data with a tablet terminal, accumulated in a cloud server. And it develops to improve efficiency and to reduce O&M costs for facilities maintenance and renovation.

☆Technology-1 Condition monitoring by sensors

☆Techonology-2 Inspection works optimization by tablet terminals



Wireless transmission



Expected effect and innovativeness

- Making planning works efficient
- Inspection works optimization
- 24-hour monitoring of facilities condition
- Visualization of inspection data
- Reduction costs for facilities maintenance and renovation

☆Technology-1

Efficient planning works for maintenance and renovation will be available by analyzing vibration data from sensors set on pumps and blowers, that makes early detection of facilities deterioration easier.

☆Technology-2

Early detection of abnormal values and prompt information sharing will be available by daily inspection data input with a tablet terminal and accumulated in a cloud server.