

[ABSTRACT]

A sensor placement position selection device of embodiments includes an incidence matrix generator,, a complementary tree extractor, and a selector. The incidence matrix generator, generates an incidence matrix representing a graph structure of a water distribution pipeline network on the basis of information showing a connection configuration of pipelines configuring the water distribution pipeline network. The complementary tree extractor classifies the pipelines configuring the water distribution pipeline network into pipelines serving as a tree configuring an open pipeline and pipelines serving as a complementary tree configuring a closed pipeline along with the tree in the water distribution pipeline network on the basis of the incidence matrix, and extracts the pipelines serving as a complementary tree. The selector selects nodes at both ends of the extracted pipelines serving as a complementary tree as an placement position of water pressure sensors.