転 載

下水道施設におけるシートライニング工法の耐震補強への適用性と施工事例

Applicability and Construction Example to the Seismic Strengthening of the Sheet Lining Method of Construction in Sewer Facilities

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要　旨

シートライニング工法をマンホールの補修･補強への適用するために，劣化を模擬した供試体を用いて本工法で補修した側方曲げ試験を実施した。その結果，標準仕様の供試体と比較して，ひび割れ発生荷重で約90%，破壊荷重で100%回復し，鉄筋の減少分をモルタルとシート材料が補えることが確認できた。また，防食被覆材料を引っ張り鉄筋量に換算し，専用ソフトで解析することにより，構造物の耐震評価が可能になった。

Summary:

For application to the repair/reinforcement method of old manholes by sheet lining method, bending tests using simulated deterioration specimens that have been repaired by this method were carried out. As a result, specimens repaired by this method were recovered at approximately 90% of cracking load and 100% of breaking load in comparison with the standard specimen. The strength of mortar and sheet material of this method has been confirmed to compensate or the loss of the reinforcing rods.

In addition, evaluation using dedicated software showed that earthquake-resistant concrete structures constructed according to this method would be able to resist the tension force and compensate for the lack of reinforcing rods.

［出典］根岸敦規：下水道施設におけるシートライニング工法の耐震補強への適用性と施工事例，土木建設技術発表会梗概集 2015，セッションⅣ pp.221-228，土木学会，2015.11

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