

A Development on Large Section Repair Method for Filling Layer of Slab Track

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In some slab tracks laid in cold regions, deterioration due to frost damage of CA mortar filling layer is observed. These slabs have been repaired on the basis of periodic inspection. However, there is a possibility that the deterioration proceeds to a wide range depending on the environment. Therefore, field survey by the impact penetration tests were performed on the CA mortar in cold region to obtain the deterioration range. Furthermore, we developed a large section repair method that assumed a deterioration range to the depth of 600mm from the side. To confirm the availability of proposed repair method, we carried out full scale cyclicloading test. The test result showed that the repair method effectively reduced the deformation of slab track. Finally, we confirmed the improvement effect of the repair method by measurement of dynamic displacement of slab under train load before and after the repairmen.