

Development of Pre-packed Concrete Trackbed for Shinkansen

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For the ballast track of the Shinkansen, labor saving of the maintenance work and earthquake-resistant improvement are demanded. A ballastless track with concrete trackbed is one of the methods to solve these problems. To apply concrete trackbed to existing ballast track of Sinkansen, we decided to develop pre-packed concrete trackbed which is formed by filling cement grout into the void of ballast aggregate. As a result of material examinations and full-scale track model tests, we confirmed that pre-packed concrete trackbed had enough performance to support train load of Shinkansen.