

Research and application of lifting and rectifying technology for double block ballastless track structure

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ABSTRACT

This paper proposed a new method to address the subgrade settlement and line deviation in double-block ballastless track of high-speed railway. The method considered to minimize the damage of track structure when lifting and rectifying the double-block ballastless track in the short-length subgrade section. The key techniques and parameters were discussed for the method. In addition, the wireless LVDT (Linear Variable Displacement Transducer) monitoring technology was used to monitor the dynamic displacement monitoring of track structure after repairing the deformation issues. The proposed new method was used in Beijing-Guangzhou railway and the results shew that the technology successfully solved the problems of subgrade settlement and line deviation of double-block ballastless track in the maintenance time. The track smoothness were restored and meet the requirements of speed-up operation of the train.

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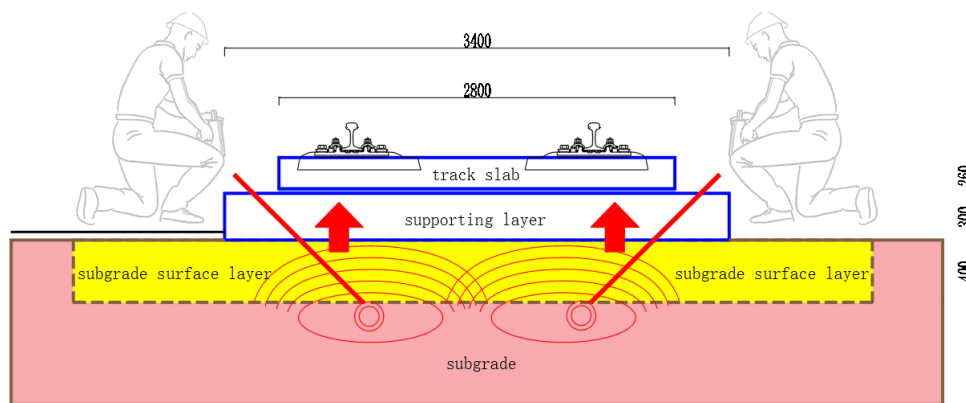


Fig. 1 Schematic diagram for Grouting uplifting

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