

MAINTAINING THE VERTICAL GEOMETRY OF SWITCHES AND CROSSINGS: A COMPARISON OF MANUAL METHODS

The report considers three alternative methods of maintaining switches and crossings (S&C): machine tamping, Kango packing and hand-held stone blowing (HHSB). In order to decide which of these is most cost effective, it is necessary to know the quality and durability of track geometry that each can achieve.

A comprehensive programme of tests was arranged to compare the performance of manual and machine methods of maintaining S&C. The tests included monitoring of the track geometry of S&C units maintained by tamping, HHSB and Kango packing. This work was complemented by a direct comparison of the durability of the three methods using British Rail Research's Rolling Load Rig facility.

This report is confined to a comparison of the manual maintenance methods, and recommends Kango packing as the preferred manual method of maintaining S&C.