

HAND HELD STONEBLOWING DEVELOPMENT – EFFECT OF SMALL SIZE CHIPPINGS

Specialised tamping machines are not suitable for the maintenance of points and crossings (P&C) due to the durability of the work being unsatisfactory. Whilst the durability of track maintained with the hand-held stoneblower (HHSB) is better, it leaves inferior track geometry immediately after treatment.

This study looks at further development of HHSB equipment and the procedure for its operation. It also considers the effectiveness of an alternative method of HHSB, and the use of smaller sized chippings (6mm and 10mm).

The study concludes that:

- Lifting the track to the design level and stoneblowing with 6mm chippings is a viable alternative to the current method of HHSB.
- 6mm chippings will have a detrimental effect on ballast drainage, and should only be used where ballast contamination is advanced.

To validate these conclusions, site trials involving the maintenance of P&C units and monitoring their performance, would be necessary.