

EQUIPMENT FOR THE MEASUREMENT OF TRACK PROFILES

Development work in the field of track geometry measuring systems has resulted in new equipment for obtaining vertical and lateral profiles.

The new equipment employs the same principles as that currently used in the High Speed Track Recording Coach (HSTRC) operated by the Civil Engineering Department BRB, and in the Track Recording Multiple Unit (TRMU) operated by the Research & Development Division, but has improved performance and substantially reduced cost and volume with increased reliability and ease of maintenance.

The design has the virtue of simplicity with the use of non-critical components, and is thus low cost. Apart from the financial savings this has important consequences from the point of view of track recording systems. It now becomes feasible to install duplicate measuring systems with duplicate transducers (although the line-scan cameras would not be duplicated), and to add equipment that continuously compares the difference in measured profile. When this difference exceeds some pre-set level – say 0.5mm – an immediate warning can be sounded to the operator who can then take action as required.

The equipment described has reached a sufficiently developed state to be used in new designs of track recording vehicles and could be used to replace obsolete equipment in the HSTRC when the need arises for this action.