

ADHESION REMEDIES - A SUMMARY OF RECENT DEVELOPMENT WORK ON LINESIDE FLUID APPLICATORS

During 1974, a number of liquid systems were tested for their ability to increase wheel-rail adhesion when applied to the railhead by trackside applicators. Only 'Syton', which is an aqueous colloidal suspension of silica, consistently increased the wheel rail adhesion under the test conditions. It was decided therefore that a more extensive test of Syton should be carried out a site where wheelslip is known to take place, resulting in wheel-burnt rails.

The gravity-fed applicator appears to be considerably more reliable than existing alternatives, mainly because the operating mechanism is based on a treadle switch which has been proved in service. The device is not specific to any particular liquid, and incorporates jets that can readily be aligned. There is still scope for development and refinement of this prototype, for instance the substitution of more robust components.

It is too early to comment on the efficiency of the devices in maintaining adequate adhesion.