

TRIBOMETER TRAIN ASSESSMENT OF SOUTHERN REGION WATER CANNON TRAIN

Following previous tests which showed that when heavily leaf contaminated rails were treated with water cannon devices some improvement in the adhesion levels resulted, further studies have been undertaken with a view to improving the cleaning efficiency of the water jets. For the 1975 season the Southern Region modified all 4 of their leaf clearing trains to include sand in the jet stream. In addition a further recommendation was incorporated, namely the flushing jet following the main jet.

During the Autumn of 1975 an exercise was undertaken to evaluate the adhesion improvement provided by the improved water cannon equipment now being used for leaf clearing. This evaluation was undertaken using the tribometer train, which accompanied the water cannon train upon some of its normal leaf clearing runs over the Oxted lines during October and November 1975.

In the main assessment of the water cannon device no improvement in adhesion levels was found, and a track inspection showed that leaf debris was not entirely removed from the track by the water cannon unit. It is considered that the water cannon would be more effective at removing leaf debris and raising adhesion levels travelling at a speed of 8km/h rather than the usual 16km/h.

It is concluded that it is doubtful whether the treatment by the water cannon trains is justifying itself financially on the basis of a reduction in the number of wheel flats experienced, largely due to the overriding concern in treating areas where lost time occurs.