

DYNAMOMETER TEST RESULTS FOR THE APT-P TRAILER HYDROKINETIC BRAKE (DRIVING TRAILER CAR INSTALLATION) UP TO JANUARY 1978

In the continuing programme of testing and evaluation of the APT-P hydrokinetic (HK) brake, the trailer brake variant has been subjected to tests using a realistic mock-up of its control system for the first axle of the Driving Trailer Car (DVT). In addition to evaluating the system performance, the opportunity was taken to investigate one or two further aspects of the HK brake which are not totally system dependent. In most respects, the Driving Trailer mock-up performed satisfactorily.

The main purpose of the work reported has been to assess the performance of the DTC installation for the trailer brake as a whole i.e. HK and Auxiliary Friction Brake (AFB). However, the opportunity has been taken to look at areas of the brakes' behaviour which are almost independent of any particular control system from the train, such as wheelslip and the blending of the friction brake.

There are two methods of WSP control: one gives better protection to the wheel under long lengths of low adhesion but consumes more air; the other is less protective of the wheel, but economical in air-usage terms. There is little difference between the Maxam and Westinghouse control packs.

The torque characteristics are good. The droop in the blending in of the AFB still exists and work is being undertaken to try and improve this and also improve the slow speed stopping performance.