

# COMPARISON OF LATERAL H FORCE AND RIDE DATA ON THE MIDLAND MAIN LINE (CRICKLEWOOD TO LEICESTER) BETWEEN TRESTROL VEHICLE (LAB 24) FITTED WITH EXPERIMENTAL H2X BOGIES, AND APT-E POWER CAR FITTED WITH E1 BOGIES

This report compares lateral H forces and ride data between Trestrol and experimental Advanced Passenger Train power car, over the Midland Main Line at line speed (144km/h) and above. Results are presented for straight track sites, and for continuous running between mileposts 11 - 97. Cant deficiencies were limited to 4.25° for both vehicle types.

For comparable main line speeds measured peak lateral H forces were similar for both Trestrol and APT-E. Generally, these forces did not exceed 0.85 (10 + P/3) kN, but two incidences above this limit were measured on Trestrol. The lateral ride of APT-E comparing trailing ends was better than Trestrol, although for leading end positions the RMS response for the latter vehicle was better.