

AN ANALYSIS OF ACTUAL ENERGY CONSUMPTION FOR DIFFERENT DRIVING STYLES

If a journey time is greater than the minimum time then there is a variety of ways in which the train can be driven to satisfy the journey time. This report summarises some tests carried out on test train Gemini at Mickleover during summer 1977 to establish the relative merits of three different driving styles so far as energy consumption is concerned. The three styles were:

- Reduced Traction
- Constant Speed
- Coasting

It would appear that both the coasting and constant speed styles are worthy of consideration. The reduced traction style has nothing to commend it (other than the fact it uses less energy than for minimum time.) Although the coasting style used less energy than the constant speed style, it is not possible to state a general rule due to the uniqueness of Gemini on British Rail.

Aside from the energy question, the coasting style has the advantage of reduced switchings between traction states which could lead to less wear and hence lower maintenance costs. The constant speed style, on the other hand, has the advantage of controllability.