

MEASUREMENTS OF DYNAMIC LOADS AT A DIPPED RAIL JOINT, CHEDDINGTON 1972

Measurements were made at specially installed glued insulated rail joints to compare the results of the CM &EE's load measuring wheel with summed sleeper baseplate loads. At the same time the dynamic load applied by the following vehicles were compared: Standard Class 86, Class 86/2, Class 86 with Flexicoil Suspension and SAB Wheels, Class 47, Class 55 'Deltic' and 100T Tanker.

The comparison between baseplate loads and the load-measuring wheel is not straightforward, but results indicate that the wheelset loads are less than the track loads at higher speeds. In addition, the use of Class 87 bogies on a Class 86 locomotive produces a 10% reduction in dynamic loads, although the addition of SAB wheels to the Class 86 reduces the value by 50%