

THE BR LOAD MEASURING WHEEL

A complete knowledge of the forces that occur between wheels and rails is essential to an understanding of the dynamics of a railway vehicle. They are also of fundamental importance to the life of the track beneath.

A load measuring wheel has been developed and used that measures these forces very near to the point of generation. It is probably unique in giving accurate and continuous signals of all three components of the contact force. An adequate calibration rig to measure outputs and all cross sensitivities is an essential item of equipment as is the processing equipment to rid the signals of impurities. These have been successfully commissioned.

Wheels of this type have been used successfully by BR for some 6 years on experiments including curve and turn-out negotiation, derailments at speeds up to 45 mile/h and stability investigations to 125 mile/h.

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