

CONTACT STRIP FORCE TRANSDUCER FOR A PANTOGRAPH

The report describes a proposal by Beadle that a transducer could be designed to measure high frequency forces. This was felt necessary due to limitations in the present method of measuring the force between the contact strip and contact wire.

It was found that the development of the contact strip force transducer increased the frequency range of the contact force measurements from the previous limit of 10-20Hz to around 400Hz. However, the transducer has only been used on un-energised overhead line and is not designed to carry current. It is possible that it could be used on an energised line with a pantograph not taking current but it seems unlikely that it could be modified to carry normal traction current.