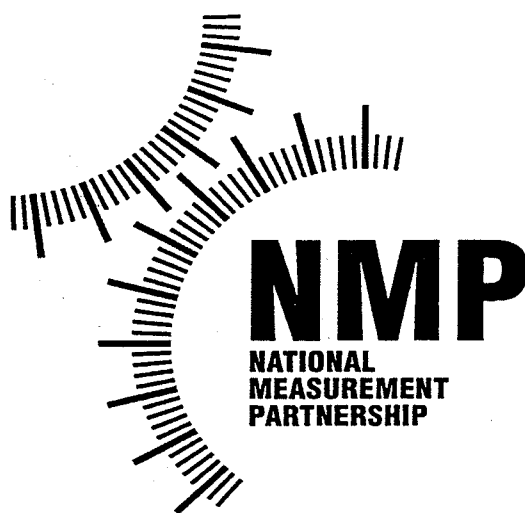


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A method for the verification of alignment of uniaxial test systems

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Lack of proper alignment of uniaxial (tension or compression) test systems can cause superimposed bending strains in the tested specimens and significant errors in the results. Recent developments have highlighted shortcomings in the current procedures for measuring specimen bending and verifying the alignment of the test systems. Such shortcomings can render the measurements useless or misleading.

NPL has developed a simplified procedure and associated software for measuring and classifying test machine alignment. The procedure separates and minimises the errors arising from imperfections in the strain-gauged device. It has been validated for round specimens and is applicable to all types of uniaxial test systems for cyclic as well as monotonic loading.

The presentation will summarise recent advances and discusses future needs.