

A CRITICAL COMPARISON OF MASS CALIBRATION METHODS

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Abstract

At the National Research Council Canada Institute for National Measurement Standards mass comparisons were made on a commonly available top loading balance of the decade 10 g to 100 g. Three calibration methods were used: one-on-one weighing, least squares solution and an orthogonal design. This paper discusses the uncertainties obtained and the time required for each method to determine the most effective type of calibration.