


Review Paper

Global Water Flow Measurement and Calibration Facilities: Review of Methods and Instrumentations

Shiv Kumar Jaiswal¹ , Sanjay Yadav¹, A. K. Bandyopadhyay¹ and Ravinder Agarwal²

(1) CSIR-National Physical Laboratory, India (CSIR-NPLI), New Delhi, 110012, India

(2) Thapar University, Patiala, 147004, India

 Shiv Kumar Jaiswal

Email: skjaiswal@mail.nplindia.org

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Abstract

Water Flow Calibration Facilities (WFCFs) are widely used for the calibration of water flowmeters all over the world. Last two decades have witnessed significant research contributions in the development of instrumentation and techniques with special emphasis on reducing the measurement errors and improving the measurement uncertainty in flow calibration. It is difficult to find a consolidated report/review of such developments for the new entrants/researchers/metrologists in this field. Therefore, authors considered that it is high time to review the literature and compile a concise report to this effect. Present paper is an attempt to publish terse review on the historical background, recent developments and current status of WFCF and related works. The work going on at National Physical Laboratory, India, in this direction is also briefly described.

Keywords

Water flow calibration facility (WFCF) – Weighing method – Volumetric method – Measurement error and uncertainty – Diverter – Calibration and measurement capability (CMC)