(PREVIEW)

Indian Standard

METHOD OF MEASUREMENT OF FLOW OF WATER IN OPEN CHANNELS USING STA.NDING WAVE FLUME

(*First Revision*)

1 SCOPE

1.1 This standard covers the use of standing wave flumes, as described subsequently, for the measurement of flow of water in open channels. Flow conditions considered are limited to steady flows which are uniquely dependent on the upstream head. The submerged flows beyond modular limits which depend on downstream as well as upstream water levels are not considered herein.

1.2 An example is given in Appendix A to provide guidelines for the designer.

FORWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 16 March 1971, after the draft finalized by the Fluid Flow Measurement Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 Standing wave flumes have their application in the measurement of discharge in artificial channels, such as irrigation canals. The standing wave flume may be depended upon to perform satisfactorily as a useful flow measuring device. Its chief merit lies in having only one gauge observation on the upstream as compared to venturi flumes which require two gauge observations, and also in their constancy of modularity relationship even with the sediment deposition in the upstream side.

0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.