# **BUREAU OF INDIAN STANDARDS**

## DRAFT FOR COMMENTS ONLY

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## Draft Indian Standard

# HYDROMETRIC DETERMINATIONS — FLOW MEASUREMENTS IN OPEN CHANNELS USING STRUCTURES — GUIDELINES FOR SELECTION OF STRUCTURE

(Second Revision of IS 12752)

Hydrometry Sectional Committee,	Last date for comments:
WRD 01	8 February 2023

Hydrometry Sectional Committee, WRD 01

## **FOREWORD**

(Formal clauses to be added later)

This Indian Standard (*second revision*) which is identical with ISO 8368: 2019 'Hydrometric determinations — Flow measurements in open channels using structures — Guidelines for selection of structure' issued by the International Organization for Standardization (ISO) is being considered to adopt by the Bureau of Indian Standards on the recommendation of the Hydrometry Sectional Committee, WRD 01 and approval of the Water Resources Division Council.

This standard was originally published in 1989 based on ISO 8368: 1985. Subsequently, the first revision of the standard was undertaken to align it with the revised version of ISO 8368: 1999.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

International Standard	Corresponding Indian Standard	Degree of Equivalence
ISO 772 : 2011 <sup>(1)</sup> Hydrometric — Vocabulary and symbols	IS 1191 : 2016 <sup>(1)</sup> Hydrometric— Vocabulary and symbols	Technically Equivalent
ISO 1438: 2017 Hydrometry — Open channel flow measurement using thin-plate weirs	IS 9108 : 2020 Hydrometry — Open channel flow measurement using thin-plate weirs (second revision)	Identical
ISO 3846: 2008 Hydrometry — Open Channel Flow Measurement Using Rectangular Broad Crested Weirs	IS 14974: 2018 Hydrometry — Open Channel Flow Measurement Using Rectangular Broad Crested Weirs (first revision)	do
ISO 3847: 1977 Liquid flow measurement in open channels by weirs and flumes — End-depth method for estimation of flow in rectangular channels with a free overfall	IS 6330: 2012 Recommendation for liquid flow measurement in open channels by weirs and flumes — Enddepth method for estimation of flow in rectangular channels with a free overfall (approximate method) (first revision)	do
ISO 4359: 2013 Flow measurement in open channels — Rectangular, trapezoidal and U - shaped flumes	IS 14869: 2016 Flow Measurement Structures — Rectangular, Trapezoidal and U-Shaped Flumes (first revision)	do
ISO 4360: 2008 Hydrometry — Open Channel Flow Measurement Using Triangular Profile Weirs	IS 14673: 2014 Hydrometry — Open Channel Flow Measurement Using Triangular Profile Weirs (first revision)	Technical Equivalent
ISO 4362: 1999 Hydrometric determination — Flow measurement in open channels using structures — Trapezoidal broad-crested weirs	IS 15123: 2002 Hydrometric determination — Flow measurement in open channels using structures — Trapezoidal broad-crested weirs	Identical
ISO 4374: 1990 Liquid flow measurement in open channels — Round-nose horizontal broad-crested weirs	IS 13084: 1991 Liquid flow measurement in open channels  — Round-nose horizontal broad-crested weirs	do

International Standard	Corresponding Indian Standard	Degree of Equivalence
ISO 4377 : 2012 Hydrometry Determinations – Flow Measurement in Open Channels Using Structures – Flat – V Weirs	IS 13083 : 2017 Hydrometry Determinations – Flow Measurement in Open Channels Using Structures – Flat – V Weirs (first revision)	do
ISO 8333 : 1985 Liquid flow measurement in open channels by weirs and flumes — V-shaped broad - crested weirs	IS 15353 : 2003 Liquid flow measurement in open channels by weirs and flumes — V-shaped broad - crested weir	do
ISO 9826: 19822) Measurement of liquid flow in open channels — Parshall and SANIIRI flumes	IS 14371: 1996 Measurement of Liquid Flow in Open Channels — Parshall and SANIIRI Flumes ( First Revision )	Technical Equivalent
ISO 9827: 1994 Measurement of liquid flow in open channels by weirs and flumes — Streamlined triangular - profile weirs	IS 14975 : 2001 Measurement of liquid flow in open channels by weirs and flumes — Streamlined triangular - profile weirs	Identical
ISO 14139 : 2000 Hydrometric determinations — Flow measurements in open channels using structures — Compound gauging structures	IS 15362: 2003 Hydrometric determinations — Flow measurements in open channels using structures — Compound gauging structures	do

 $<sup>^{1)}</sup>$  IS 1191 : 2016 is in under revision to align it with ISO 772 : 2022